

biolab
FOR SPLENDID ISOLATION

Manual
14th edition

Certificate

Standard **ISO 9001:2008**

Certificate Registr. No. **75 100 10307**

TÜV Rheinland InterCert Kft. certifies:


Certificate Holder: **BIOLAB Diagnosztikai Laboratórium Zrt.**
Öv utca 43.
H - 1141 Budapest
Hungary

Scope: production and distribution of microbiological culture media and microbiological plastic disposables.

An audit was performed. Proof has been furnished that the requirements according to MSZ EN ISO 9001:2009 (ISO 9001:2008) are fulfilled.

Validity: The certificate is valid from **2015.06.11** until **2018.06.10**.
First certification: 2009.

Budapest, 2015.06.11.


TÜV Rheinland InterCert Kft.
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www.tuv.hu



MIR TANÚSÍTÓ
NAT-4-0054/2011



TÜVRheinland®
Precisely Right.

Dear Inquirer,

You are holding the Dehydrated Culture Media Manual of BIOLAB Inc., the leading Hungarian manufacturer and distributor of microbiological products. As a result of our 25 years of continuous development, you can find over 500 products on the following pages. We hope that you will find all necessary information for preparing media.

Our products are manufactured under ISO 9001:2008 quality assurance system and CE marked.

Culture media of Biolab Inc. are manufactured by the newest technology. The extreme stability of the products is assured by the careful choice of top quality raw materials and the multi-level quality control procedures.

This manual is divided into three parts:



RAW MATERIALS



DEHYDRATED CULTURE MEDIA

Alphabetical list of media



SUPPLEMENTS

Budapest, 2015



**I. RAW
MATERIALS**

I. RAW MATERIALS

BACTERIOLOGICAL AGAR

Bacteriological agar is a gelling agent used in the preparation of culture media and other bacteriological applications. Its main advantage is the absence of inhibitors that could hinder optimal development of microorganisms. In addition, bacteriological agar also possesses other attributes such as transparency, high hysteresis and very reliable reproducibility.

Code Number:	500 g: BAA10500, 1000 g: BAA11000
Colour:	Cream
Appearance:	Fine powder

Physico-chemical characteristics

Parameter	Specification
Particle size	80 – 150 mesh
Gel strength (Nikkan) after autoclaving	800 – 950 g/cm ²
Loss on drying	< 12 %
Water absorption	> 45 ml
Total ashes	< 5 %
pH (1,5% solution) gel after autoclaving	6 – 7,5
Clarity	< 10 NTU
Viscosity	> 10 cps
Gelling point	33–37 °C
Melting point	85–95 °C
Ca	< 1500 ppm
Mg	< 500 ppm
Total heavy metals	< 20 ppm

Microbiological characteristics

Parameter	Specification
Total aerobic microbial count	≤ 5 000/g
Coliforms	absent
<i>Escherichia coli</i>	absent
<i>Salmonella</i> spp.	absent
Yeasts and moulds	≤ 100/g

Storage conditions: Protected from light, at room temperature.

Warning!

Hygroscopic product. Avoid heat and moisture.

In vitro diagnostic raw material – for professional use only!

Microbiological characteristics

Parameter	Specification
Total aerobic microbial count	≤ 10 000/g
Coliforms	≤ 10/g
Yeasts and moulds	≤ 20/g
<i>Escherichia coli</i>	Absent
<i>Salmonella</i> spp.	Absent

Storage conditions: Protected from light, at room temperature.

Warning!

Hygroscopic product. Avoid heat and moisture.

In vitro diagnostic raw material – for professional use only!

BILE SALT No.3

Bile salt No.3 is prepared by refinement of bile salt in order to meet the demand for use as a selective agent.

Code Number:	100 g: BBS10100, 500 g: BBS10500
Colour:	White
Appearance:	Fine powder, easily soluble in water

Physico-chemical characteristics

Parameter	Specification
Solubility in water 2%	Complete
pH (2% autoclaved solution)	7,5 – 9,0
Loss on drying	≤ 5 %
Residue on ignition	≤ 15 %
Sodium cholate	45 – 55 %
Sodium deoxycholate	45 – 55 %

Storage conditions: Protected from light, at room temperature.

Warning!

Hygroscopic product. Avoid heat and moisture.

In vitro diagnostic raw material – for professional use only!

BACTERIOLOGICAL PEPTONE

It is obtained through the enzymatic digestion of animal proteins and has a wide applications as ingredient of routine media.

Code Number:	500 g: BAP10500, 1000 g: BAP11000
Colour:	Cream
Appearance:	Fine powder, easily soluble in water

Physico-chemical characteristics

Parameter	Specification
Solubility in water 2%	Complete
pH (5% solution)	6,2 – 7,3
Loss on drying	≤ 6 %
Residue on ignition	≤ 16 %
Total nitrogen TN	12,0–13,5 %
α-amino nitrogen AN	3,0 – 4,5 %
AN/TNx100	22 – 38

CASEIN PEPTONE

It is obtained by prolonged pancreatic digestion of the casein, in order to provide a large content of free amino-acids and small peptides.

Code Number:	500 g: CAP10500, 1000 g: CAP11000
Colour:	Cream
Appearance:	Fine powder, easily soluble in water

Physico-chemical characteristics

Parameter	Specification
Solubility in water (5% solution)	Complete
pH (5% solution)	6,5 – 7,5
Loss on drying	≤ 6 %
Residue on ignition	≤ 16 %
Total nitrogen TN	12,5 – 13,5 %
α-amino nitrogen AN	3,0 – 4,0 %
AN/TNx100	22 – 33

I. RAW MATERIALS

Microbiological characteristics

Parameter	Specification
Total aerobic microbial count	≤ 10 000/g
Coliforms	≤ 10/g
Yeasts and moulds	≤ 20/g
<i>Escherichia coli</i>	Absent
<i>Salmonella</i> spp.	Absent

Storage conditions: Protected from light, at room temperature.

Warning!

Hygroscopic product. Avoid heat and moisture.

In vitro diagnostic raw material – for professional use only!

GELATINE PEPTONE

Gelatine peptone is manufactured by pancreatic digestion from pork gelatine. Due to the amino-acid composition of the gelatine, the peptone provides high level of proline and hydroxyproline but does not contain tryptophan. Gelatine peptone shows relatively low growth promotion properties and it is designed for non fastidious bacteria. It is compatible with phosphates and it is often used in combination with other peptones in the media formulation.

Code Number:	500 g: GEP10500, 1000 g: GEP11000
Colour:	Cream
Appearance:	Fine powder, easily soluble in water

Physico-chemical characteristics

Parameter	Specification
Solubility in water 2%	Complete
pH (2% solution)	6.6 – 7.3
Loss on drying	≤ 5 %
Residue on ignition	≤ 12 %
Total nitrogen TN	13,0 – 17,0 %
α-amino nitrogen AN	2.0 – 3.5 %
AN/TNx100	12 – 27

Microbiological characteristics

Parameter	Specification
Total aerobic microbial count	≤ 10 000/g
Coliforms	≤ 10/g
Yeasts and moulds	≤ 100/g
<i>Escherichia coli</i>	Absent
<i>Salmonella</i> spp.	Absent
<i>Staphylococcus aureus</i>	Absent

Storage conditions: Protected from light, at room temperature.

Warning!

Hygroscopic product. Avoid heat and moisture.

In vitro diagnostic raw material – for professional use only!

MALT EXTRACT

Malt extract is prepared by means of purification steps in order to achieve a product showing clear solution. It is rich in carbohydrates, mainly maltose. It is intended for the culture of yeasts and moulds.

Code Number:	500 g: MAE10500, 1000 g: MAE11000
Colour:	Pale-yellow
Appearance:	Fine powder, easily soluble in water

Physico-chemical characteristics

Parameter	Specification
Solubility in water 2%	Complete
pH (2% solution)	5,0 – 6,0
Loss on drying	≤ 5 %
Residue on ignition	≤ 5 %
Reducing sugars	75 – 95 %

Microbiological characteristics

Parameter	Specification
Total aerobic microbial count	≤ 5 000/g
Coliforms	≤ 10/g
Yeasts and moulds	≤ 100/g
<i>Escherichia coli</i>	Absent
<i>Salmonella</i> spp.	Absent
<i>Staphylococcus aureus</i>	Absent

Storage conditions: Protected from light, at room temperature.

Warning!

Hygroscopic product. Avoid heat and moisture.

In vitro diagnostic raw material – for professional use only!

MEAT EXTRACT

Meat extract is manufactured by a controlled enzymatic hydrolysis of beef with low fat and sinew content and can be considered as complementing the nutritive properties of peptone by contributing minerals, phosphates, energy sources and those essential factors missing from peptone.

Code Number:	500 g: MEE10500, 1000 g: MEE11000
Colour:	Pale-yellow
Appearance:	Fine powder, easily soluble in water

Physico-chemical characteristics

Parameter	Specification
Solubility in water 2%	Complete
pH (5% solution)	5 – 7
Loss on drying	≤ 7 %
Residue on ignition	≤ 7 %
Total nitrogen TN	12,0 – 14,4 %

Microbiological characteristics

Parameter	Specification
Total aerobic microbial count	≤ 5 000/g
Coliforms	≤ 10/g
Yeasts and moulds	≤ 100/g
<i>Escherichia coli</i>	Absent
<i>Salmonella</i> spp.	Absent
<i>Staphylococcus aureus</i>	Absent

Storage conditions: Protected from light, at room temperature.

Warning!

Hygroscopic product. Avoid heat and moisture.

In vitro diagnostic raw material – for professional use only!

I. RAW MATERIALS

MEAT PEPTONE

Meat peptone (pepsin digested) is manufactured by enzymatic hydrolysis of selected fresh meat. Its good promotion properties make it suitable for the cultures of aerobic and anaerobic bacteria. It is commonly used for production of toxins from organisms such as *Corynebacterium* and *Clostridium* spp.

Code Number:	500 g: MPE10500, 1000 g: MPE11000
Colour:	Beige
Appearance:	Fine powder, easily soluble in water

Physico-chemical characteristics

Parameter	Specification
Solubility in water 2%	Complete
pH (5% solution)	6.0 – 7.5
Loss on drying	≤ 5 %
Residue on ignition	≤ 15 %
Total nitrogen TN	12.0 – 13.0 %
α-amino nitrogen AN	3.5 – 4.5 %
AN/TNx100	27 – 38

Microbiological characteristics

Parameter	Specification
Total aerobic microbial count	≤ 5 000/g
Coliforms	Absent
Yeasts and moulds	≤ 100/g
<i>Escherichia coli</i>	Absent
<i>Salmonella</i> spp.	Absent

Storage conditions: Protected from light, at room temperature.

Warning!

Hygroscopic product. Avoid heat and moisture.

In vitro diagnostic raw material – for professional use only!

MYCOLOGICAL PEPTONE

Mycological peptone was developed especially for the culturing and isolation of pathogenic and non pathogenic fungi. This product gives rapidly a luxuriant growth with typical morphology and pigmentation.

Code Number:	500 g: FUP10500, 1000 g: FUP11000
Colour:	Beige
Appearance:	Fine powder, easily soluble in water

Physico-chemical characteristics

Parameter	Specification
Solubility in water 2%	Complete
pH (5% solution)	6.0 – 7.0
Loss on drying	≤ 5 %
Residue on ignition	≤ 15 %
Total nitrogen TN	10.0 – 12.5 %
α-amino nitrogen AN	3.8 – 5.0 %
AN/TNx100	30 – 50

Microbiological characteristics

Parameter	Specification
Total aerobic microbial count	≤ 10 000/g
Coliforms	≤ 10/g
Yeasts and moulds	≤ 20/g
<i>Escherichia coli</i>	Absent
<i>Salmonella</i> spp.	Absent

Storage conditions: Protected from light, at room temperature.

Warning!

Hygroscopic product. Avoid heat and moisture.

In vitro diagnostic raw material – for professional use only!

PROTEOSE PEPTONE

Proteose peptone is manufactured from selected fresh meat and animal tissue by enzymatic hydrolysis. Its special formulation enhances the growth properties and makes it very suitable ingredient in the media intended for the productions of bacterial toxins (*Corynebacterium diphtheriae*) as well as in the media for the cultivation of a variety of bacteria having different nutritive needs (gonococci, pneumococci, streptococci, staphylococci).

Code Number:	500 g: PRP10500, 1000 g: PRP11000
Colour:	Beige
Appearance:	Fine powder, easily soluble in water

Physico-chemical characteristics

Parameter	Specification
Solubility in water 2%	Complete
pH (5% solution)	6.0 – 7.0
Loss on drying	≤ 5 %
Residue on ignition	≤ 18 %
Total nitrogen TN	12.1 – 13.2 %
α-amino nitrogen AN	3.5 – 4.5 %
AN/TNx100	29 – 37

Microbiological characteristics

Parameter	Specification
Total aerobic microbial count	≤ 10 000/g
Coliforms	≤ 10/g
Yeasts and moulds	≤ 20/g
<i>Escherichia coli</i>	Absent
<i>Salmonella</i> spp.	Absent

Storage conditions: Protected from light, at room temperature.

Warning!

Hygroscopic product. Avoid heat and moisture.

In vitro diagnostic raw material – for professional use only!

SOYA PEPTONE

Soya peptone is manufactured by papain hydrolysis of defatted soya flour. It shows very high nutritive properties, providing rapid vigorous growth of usual micro-organisms, including yeasts and moulds. It contains high content of carbohydrates, therefore it is not suitable for studying sugar fermentation.

Code Number:	500 g: SOP10500, 1000 g: SOP11000
Colour:	Beige
Appearance:	Fine powder, easily soluble in water

Physico-chemical characteristics

Parameter	Specification
Solubility in water 2%	Complete
pH (2% solution)	6.7 – 7.5
Loss on drying	≤ 5 %
Residue on ignition	≤ 14 %
Total nitrogen TN	8.0 – 11.0 %
α-amino nitrogen AN	2.0 – 3.5 %
AN/TNx100	18 – 44

I. RAW MATERIALS

Microbiological characteristics

Parameter	Specification
Total aerobic microbial count	≤ 10 000/g
Coliforms	≤ 10/g
Yeasts and moulds	≤ 20/g
<i>Escherichia coli</i>	Absent
<i>Salmonella</i> spp.	Absent

Storage conditions: Protected from light, at room temperature.

Warning!

Hygroscopic product. Avoid heat and moisture.

In vitro diagnostic raw material – for professional use only!

TRYPTONE

Mix of peptides and free amino acids obtained through pancreatic digestion of casein. The product is a good source of organic nitrogen and growth factors in culture media for analytical microbiology and industrial fermentation.

Code Number:	500 g: TRP10500, 1000 g: TRP11000
Colour:	Cream
Appearance:	Fine powder, easily soluble in water

Physico-chemical characteristics

Parameter	Specification
Solubility in water 2%	Complete
pH (5% solution)	7.0 – 7.3
Loss on drying	≤ 5 %
Residue on ignition	≤ 15 %
Total nitrogen TN	12,5 – 13,5 %
α-amino nitrogen AN	3,0 – 4,0 %
AN/TNx100	23 – 27

Microbiological characteristics

Parameter	Specification
Total aerobic microbial count	≤ 10 000/g
Coliforms	≤ 10/g
Yeasts and moulds	≤ 20/g
<i>Escherichia coli</i>	Absent
<i>Salmonella</i> spp.	Absent

Storage conditions: Protected from light, at room temperature.

Warning!

Hygroscopic product. Avoid heat and moisture.

In vitro diagnostic raw material – for professional use only!

TRYPTOSE

It is blend of peptones prepared from animal tissues and protein of animal origin, suitable for the media intended for culture of *Streptococcus* spp. and other delicate micro-organisms. Owing to the nutritive properties of its composition, tryptose shows good performances in the isolation and culture of fastidious strains.

Code Number:	500 g: TRY10500, 1000 g: TRY11000
Colour:	Beige
Appearance:	Fine powder, easily soluble in water

Physico-chemical characteristics

Parameter	Specification
Solubility in water 2%	Complete
pH (5% solution)	6.0 – 7.5
Loss on drying	≤ 5 %
Residue on ignition	≤ 15 %
Total nitrogen TN	12,0 – 13,0 %
α-amino nitrogen AN	3,5 – 4,5 %
AN/TNx100	27 – 38

Microbiological characteristics

Parameter	Specification
Total aerobic microbial count	≤ 10 000/g
Coliforms	≤ 10/g
Yeasts and moulds	≤ 20/g
<i>Escherichia coli</i>	Absent
<i>Salmonella</i> spp.	Absent

Storage conditions: Protected from light, at room temperature.

Warning!

Hygroscopic product. Avoid heat and moisture.

In vitro diagnostic raw material – for professional use only!

YEAST EXTRACT

Yeast extract is obtained through autolysis of the cells (enzymatic digestion by its own enzymes) from *Saccharomyces cerevisiae*. Therefore the resulting extract consists of amino-acids, oligo-peptides, carbohydrates, vitamins and purine and pyrimidine bases from nucleic acids. This natural composition of yeast extract, rich in growth factors, make it a widely used ingredient for improving the growth promotion properties of the media. It contains high content of carbohydrates, therefore it is not suitable for studying sugar fermentation.

Code Number:	500 g: YEE10500, 1000 g: YEE11000
Colour:	Pale-yellow
Appearance:	Fine powder, easily soluble in water

Physico-chemical characteristics

Parameter	Specification
Solubility in water 2%	Complete
pH (2% solution)	6.5 – 7.5
Loss on drying	≤ 5 %
Residue on ignition	≤ 18 %
Total nitrogen TN	8,0 – 10,0 %
α-amino nitrogen AN	2,3 – 4,0 %
AN/TNx100	23 – 50

Microbiological characteristics

Parameter	Specification
Total aerobic microbial count	≤ 5 000/g
Coliforms	≤ 10/g
Yeasts and moulds	≤ 100/g
<i>Escherichia coli</i>	Absent
<i>Salmonella</i> spp.	Absent
<i>Staphylococcus aureus</i>	Absent

Storage conditions: Protected from light, at room temperature.

Warning!

Hygroscopic product. Avoid heat and moisture.

In vitro diagnostic raw material – for professional use only!



DEHYDRATED CULTURE MEDIA

II. DEHYDRATED CULTURE MEDIA

Alphabetical list of media

A-1 BROTH BASE

A non-selective medium for the detection of coliforms.

Dehydrated media

Code Number:	500 g: A1B20500, 5 kg: A1B25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	6,9 (approx.) at 25 °C

Direction: Suspend **31 g** in one litre of distilled water. **Add 1 ml of Triton X-100 Supplement (TXS80100)**. Mix well and heat gently to dissolve the medium completely. Dispense into test tubes fitted with Durham tube and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: A1B30100, 500 ml: A1B30500
Tubed media:	150 x 15 mm: A1B40010 (10 ml)
Colour:	Yellowish
pH (25 °C):	6,9

Direction: Dispense the bottled media aseptically into sterile test tubes. Media in tubes are ready to use.

FORMULA in g/l

Peptones	20,5
Lactose	5,0
Salicin	0,5
Sodium chloride	5,0

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good with gas production	
<i>Salmonella typhimurium</i>	ATCC 14028	Good without gas production	
<i>Enterococcus faecalis</i>	ATCC 29212	Inhibited	

References: Andrews and Presnell (1972) Appl. Microbiol. 23: 521.

ACETAMIDE BROTH

A synthetic differential medium for the enrichment and differentiation of *Pseudomonas aeruginosa*.

Dehydrated media

Code Number:	500 g: ACB20500, 5 kg: ACB25000
Colour:	White
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	6,8 (approx.) at 25 °C

Direction: Suspend **3,4 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into test tubes fitted with Durham tube and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: ACB30100, 500 ml: ACB30500
Tubed media:	100 x 12 mm: ACB40003 (3 ml)
Colour:	Water clear
pH (at 25 °C):	6,7 – 6,9

Direction: Dispense the bottled media aseptically into sterile test tubes. Media in tubes are ready to use.

FORMULA in g/l

Acetamide	2,000
Sodium chloride	0,200
Magnesium sulphate	0,200
Sodium molybdate	0,0050
Ferrous sulphate	0,0005
Buffers	1,0000

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Pseudomonas aeruginosa</i>	ATCC 27853	Good, yellow colour with Nessler's reagent	
<i>Escherichia coli</i>	ATCC 25922	Inhibited, no colour change with Nessler's reagent	

References: ISO 16266

ACETATE DIFFERENTIAL AGAR

A synthetic differential medium for the differentiation of *Shigella* spp. from *Escherichia coli*.

Dehydrated media

Code Number:	500 g: ADA20500, 5 kg: ADA25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	6,8 (approx.) at 25 °C

Direction: Suspend **29 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Dispense into test tubes and sterilise by autoclaving at 121 °C for 15 minutes. Allow to cool in slanted position.

Prepared media

Bottled media:	100 ml: ADA30100, 500 ml: ADA30500
Tubed media:	100 x 12 mm: ADA40002 (2 ml, slant)
Colour:	Green
pH (25 °C):	6,7 – 6,9

Direction: Dispense the melted bottled media aseptically into sterile test tubes. Allow to cool in slanted position. Media in tubes are ready to use.

FORMULA in g/l

Sodium acetate	2,00
Sodium chloride	5,00
Magnesium sulphate	0,20
Bromothymol blue	0,08
Buffers	2,00
Agar	19,80

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the tubed media protected from light at 2–8 °C.

II. DEHYDRATED CULTURE MEDIA

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Positive – colour change to blue	
<i>Shigella sonnei</i>	ATCC 25931	Negative – no colour change	

References: Trabulsi and Ewing (1962) Public Health Lab. 20: 137.

AEROMONAS AGAR BASE

A selective medium for the isolation of *Aeromonas* spp.

Dehydrated media

Code Number:	500 g: AEA20500, 5 kg: AEA25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	8,0 (approx.) at 25 °C

Direction: Suspend 30 g in 500 ml of distilled water and heat with frequent agitation until the medium boils well. Cool to 50 °C and add aseptically the contents of one vial of **Aeromonas Selective Supplement (AES80004)** reconstituted with 4 ml of sterile distilled water. Mix well before pouring.

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: AEA30100, 500 ml: AEA30500
Tubed media:	55 mm: AEA50055, 90 mm: AEA50090
Colour:	Greenish blue
pH (25 °C):	7,9 – 8,1

Direction: Supplement the melted bottled media according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	9,00
Bile salt	3,00
Xylose	3,75
Sorbitol	3,00
Inositol	2,50
Lactose	1,50
Sodium thiosulphate	10,87
Sodium chloride	5,00
Ferric ammonium citrate	0,80
L-Lysine	3,50
L-Arginine	2,00
Bromothymol blue	0,04
Thymol blue	0,04
Agar	15,00

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Aeromonas hydrophila</i>	ATCC 7966	Good, opaque green colonies with dark centre	
<i>Pseudomonas aeruginosa</i>	ATCC 27853	Tiny, translucent blue/green colonies	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	

References: Havelaar et al. (1987) J. Appl. Bact. 62: 279.

ANAEROBE ISOLATION AGAR

A non-selective medium designed to give optimum growth of nutritionally exacting anaerobe micro-organisms.

Dehydrated media

Code Number:	500 g: AIA20500, 5 kg: AIA25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,2 (approx.) at 25 °C

Direction: Suspend 46 g in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. If addition of blood is necessary, cool to 50 °C and add aseptically 50 ml of sterile defibrinated blood. Mix well before pouring.

Prepared media

Bottled media:	100 ml: AIA30100, 500 ml: AIA30500
Plated blood-free agar:	55 mm: AIA50055, 90 mm: AIA50090
Plated blood agar:	55 mm: AIA50055-BA, 90 mm: AIA50090-BA
Colour of blood-free agar:	Yellowish
Colour of blood agar:	Ruby red
pH (at 25 °C):	7,1 – 7,3

Direction: If necessary, blood may be added to the melted bottled media according to the direction of the dehydrated media. Dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Nutrient substrate (peptones, extracts)	23,400
Glucose	1,000
Starch soluble	1,000
Sodium chloride	5,000
L-Arginine	0,500
L-Cysteine	0,500
Growth promoters	0,830
Vitamins	0,011
Buffers	0,760
Agar	13,000

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control of blood-free agar:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 48 h
<i>Bacteroides fragilis</i>	ATCC 25285	Good (under anaerobic conditions)	
<i>Clostridium perfringens</i>	ATCC 13124	Good (under anaerobic conditions)	

Quality Control of blood agar:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 48 h
<i>Bacteroides fragilis</i>	ATCC 25285	Good, without haemolysis (under anaerobic conditions)	
<i>Clostridium perfringens</i>	ATCC 13124	Good, with target haemolysis (under anaerobic conditions)	

II. DEHYDRATED CULTURE MEDIA

ANAEROBE ISOLATION BROTH

A non-selective medium for the general growth of anaerobic micro-organisms.

Dehydrated media

Code Number:	500 g: AIB20500, 5 kg: AIB25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,2 (approx.) at 25 °C

Direction: Suspend **33 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into final containers and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: AIB30100, 500 ml: AIB30500
Tubed media:	150 x 15 mm: AIB40010 (10 ml)
Colour:	Yellowish
pH (at 25 °C):	7,1 – 7,3

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Nutrient substrate (peptones, extracts)	23,400
L-Arginine	0,500
L-Cysteine	0,500
Glucose	1,000
Starch soluble	1,000
Sodium chloride	5,000
Growth promoters	0,830
Vitamins	0,011
Buffers	0,760

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 48 h
<i>Bacteroides fragilis</i>	ATCC 25285	Good (under anaerobic conditions)	
<i>Clostridium perfringens</i>	ATCC 13124	Good (under anaerobic conditions)	

ANTIBIOTIC ASSAY MEDIA

See: Antibiotic Assay Media (page 136)

NEW PRODUCT

ANTIBIOTIC ASSAY MEDIUM E

Medium for the microbiological assay of antibiotics according to pharmacopoeia.

Dehydrated media

Code Number:	500 g: AME20500, 5 kg: AME25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,9 (approx.) at 25 °C

Direction: Suspend **44,9 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: AME30100, 500 ml: AME30500
Colour:	Yellowish
pH (25 °C):	7,8 - 8,0

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes.

FORMULA in g/l

Peptone	5,0
Beef extract	3,0
Disodium hydrogen phosphate x 12 H ₂ O	26,9
Agar	10,0

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Bacillus subtilis</i>	ATCC 6633	Good	
<i>Bacillus pumilus</i>	ATCC 14884	Good	

References: European Pharmacopoeia

NEW PRODUCT

ANTIBIOTIC ASSAY MEDIUM No.24

Medium for the microbiological assay of antibiotics according to pharmacopoeia.

Dehydrated media

Code Number:	500 g: A2420500, 5 kg: A2425000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	6,6 (approx.) at 25 °C

Direction: Suspend **26 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: A2430100, 500 ml: A2430500
Colour:	Yellowish
pH (25 °C):	6,5 – 6,7

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes.

FORMULA in g/l

Peptone	6,0
Yeast extract	3,0
Beef extract	1,5
Agar	15,5

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good	
<i>Staphylococcus aureus</i>	ATCC 29213	Good	

References: European Pharmacopoeia

II. DEHYDRATED CULTURE MEDIA

APT AGAR BASE

A non-selective medium for the cultivation and enumeration of lactic acid bacteria.

Dehydrated media

Code Number:	500 g: APT20500, 5 kg: APT25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	6,7 (approx.) at 25 °C

Direction: Suspend **59 g** in one litre of distilled water. Add **1 ml** of **TWEEN 80 Supplement (TWS80100)** and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: APT30100, 500 ml: APT30500
Plated media:	55 mm: APT50055, 90 mm: APT50090
Colour:	Yellowish
pH (25 °C):	6,6 - 6,8

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	20,000
Glucose	10,000
Sodium chloride	5,000
Sodium citrate	5,000
Magnesium sulphate	0,800
Manganese chloride	0,140
Ferrous sulphate	0,001
Thiamine HCl	0,001
Buffers	5,000
Agar	13,000

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 48 h
<i>Lactobacillus fermentum</i>	ATCC 9338	Good	

References: Evans and Niven (1951) J. Bact. 62: 599.

NEW PRODUCT

APT BROTH BASE

A non-selective medium for the cultivation of lactic acid bacteria.

Dehydrated media

Code Number:	500 g: APB20500, 5 kg: APB25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	6,7 (approx.) at 25 °C

Direction: Suspend **46 g** in one litre of distilled water. Add **1 ml** of **TWEEN 80 Supplement (TWS80100)**. Mix well and heat gently to dissolve the medium completely. Dispense into final containers. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: APB30100, 500 ml: APB30500
Tubed media:	150 x 15 mm: APB40010 (10 ml)
Colour:	Yellowish
pH (25 °C):	6,6 - 6,8

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Peptones	20,000
Glucose	10,000
Sodium chloride	5,000
Sodium citrate	5,000
Magnesium sulphate	0,800
Manganese chloride	0,140
Ferrous sulphate	0,001
Thiamine HCl	0,001
Buffers	5,000

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 48 h
<i>Lactobacillus fermentum</i>	ATCC 9338	Good	

References: Evans and Niven (1951) J. Bact. 62: 599.

ARGININE BROTH

A selective and differential medium for the cultivation of *Pseudomonas aeruginosa*.

Dehydrated media

Code Number:	500 g: ARB20500, 5 kg: ARB25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,0 (approx.) at 25 °C

Direction: Suspend **35 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into final containers and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: ARB30100, 500 ml: ARB30500
Tubed media:	150 x 15 mm: ARB40010 (10 ml)
Colour:	Brownish
pH (at 25 °C):	6,9 - 7,1

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Peptones	19,50000
L-Arginine	10,00000
Glucose	0,50000
Sodium chloride	5,00000
cresol red	0,02000
Bromothymol blue	0,00750
Brilliant green	0,00038

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

II. DEHYDRATED CULTURE MEDIA

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Pseudomonas aeruginosa</i>	ATCC 27853	Good, colour change to pink – violet	
<i>Escherichia coli</i>	ATCC 25922	Good, colour change to yellow	

References: Schubert (1989) Zbl. Bakt. Hyg. B 187: 266.

ASPARAGINE BROTH BASE

A selective medium for the enumeration and detection of *Pseudomonas aeruginosa*.

Dehydrated media

Code Number:	500 g: ASB20500, 5 kg: ASB25000
Colour:	White
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,0 (approx.) at 25 °C

Direction: Suspend **11 g** in one litre of distilled water. Add **8 ml** of Glycerol Supplement (GLC80100). Mix well and heat gently to dissolve the medium completely. Dispense into final containers. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: ASB30100, 500 ml: ASB30500
Tubed media:	150 x 15 mm: ASB40010 (10 ml)
Colour:	Water clear
pH (25 °C):	6,9 – 7,1

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

DL Asparagine	3,0
Magnesium sulphate	0,5
Buffers	7,5

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 48 h
<i>Pseudomonas aeruginosa</i>	ATCC 27853	Good	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	

References: APHA (2005) Standard Methods for the Examination of Water and Wastewater, 21st ed.

AZIDE DEXTROSE BROTH, ROTHE

A selective medium for the detection of enterococci.

Dehydrated media

Code Number:	500 g: ADR20500, 5 kg: ADR25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,0 (approx.) at 25 °C

Direction: Suspend **36 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into final containers and sterilise by autoclaving at 115 °C for 15 minutes.

Warning!

The medium is heat sensitive.

No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: ADR30100, 500 ml: ADR30500
Tubed media:	150 x 15 mm: ADR40010 (10 ml)
Colour:	Yellowish
pH (at 25 °C):	6,9 – 7,1

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Peptones	20,4
Glucose	5,0
Sodium chloride	5,0
Sodium azide	0,2
Buffers	5,4

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Enterococcus faecalis</i>	ATCC 51299	Good	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	

References: Greenberg et al. (1985) APHA, Standard Methods for the Examination of Water and Wastewater, 16th ed.

AZIDE DEXTROSE BROTH

A selective medium for the detection of enterococci.

Dehydrated media

Code Number:	500 g: ADB20500, 5 kg: ADB25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,2 (approx.) at 25 °C

Direction: Suspend **35 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into final containers and sterilise by autoclaving at 115 °C for 15 minutes.

Warning!

The medium is heat sensitive.

No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: ADB30100, 500 ml: ADB30500
Tubed media:	150 x 15 mm: ADB40010 (10 ml)
Colour:	Yellowish
pH (at 25 °C):	7,1 – 7,3

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Peptones	19,8
Glucose	7,5
Sodium chloride	7,5
Sodium azide	0,2

Note: The typical formula can be adjusted to obtain optimal performance.

II. DEHYDRATED CULTURE MEDIA

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Enterococcus faecalis</i>	ATCC 51299	Good	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	

References: Mallmann and Seigmann (1950) Am. J. Public Health 40: 286.

BACILLUS CEREUS (PEMBA) AGAR BASE

A selective and differential medium for the isolation and enumeration of *Bacillus cereus*.

Dehydrated media

Code Number:	500 g: BCA20500, 5 kg: BCA25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,2 (approx.) at 25 °C

Direction: Suspend **40 g** in 950 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically **50 ml of Sterile Egg Yolk Polymyxin (PEMBA) Emulsion (EYP80050-01)**. Mix well before pouring.

Prepared media

Bottled media:	100 ml: BCA30100, 500 ml: BCA30500
Plated media:	55 mm: BCA50055, 90 mm: BCA50090
Colour of bottled media:	Green, transparent
Colour of plated media:	Green, homogeneous turbid
pH (at 25 °C):	7,1 – 7,3

Direction: Supplement the melted bottled media according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	1,00
Mannitol	10,00
Sodium pyruvate	10,00
Sodium chloride	2,00
Magnesium sulphate	0,10
Bromothymol blue	0,12
Buffers	2,75
Agar	14,00

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 48 h
<i>Bacillus cereus</i>	ATCC 11778	Good, blue colonies with precipitate halo	
<i>Bacillus subtilis</i>	ATCC 6633	Moderate, yellow colonies without halo	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	

References: Holbrook and Anderson (1980) Can. J. Microbiol. 26: 753.

BACILLUS CEREUS (PREP) AGAR BASE

A selective and differential medium for the enumeration of *Bacillus cereus*.

Dehydrated media

Code Number:	500 g: BPR20500, 5 kg: BPR25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,2 (approx.) at 25 °C

Direction: Suspend **46 g** in 900 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically **100 ml of Sterile Egg Yolk Polymyxin (PREP) Emulsion (EYP80100-02)**. Mix well before pouring.

Prepared media

Bottled media:	100 ml: BPR30100, 500 ml: BPR30500
Plated media:	55 mm: BPR50055, 90 mm: BPR50090
Colour of bottled media:	Red, transparent
Colour of plated media:	Orange, homogeneous turbid
pH (at 25 °C):	7,1 – 7,3

Direction: Supplement the melted bottled media according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	11,000
Mannitol	10,000
Sodium chloride	10,000
Phenol red	0,025
Agar	15,000

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 48 h
<i>Bacillus cereus</i>	ATCC 11778	Good, pink colonies with precipitate halo	
<i>Bacillus subtilis</i>	ATCC 6633	Moderate, yellow colonies without halo	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	

References: Mossel et al. (1967) Appl. Microbiol. 15: 650.

BACTEROIDES BILE ESCULIN AGAR

A selective and differential medium for the isolation and presumptive identification of *B. fragilis* group.

Dehydrated media

Code Number:	500 g: BBE20500, 5 kg: BBE25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,2 (approx.) at 25 °C

Direction: Suspend **62 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: BBE30100, 500 ml: BBE30500
Plated media:	55 mm: BBE50055, 90 mm: BBE50090
Colour:	Yellowish
pH (25 °C):	7,1 – 7,3

II. DEHYDRATED CULTURE MEDIA

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Anaerobe Isolation Agar	45,4
Bacteriological bile	15,0
Ferric citrate	0,5
Esculin	1,0
Gentamicin	0,1

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 48 h
<i>Bacteroides fragilis</i>	ATCC 25285	Good, esculin hydrolysis (under anaerobic conditions)	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	
<i>Clostridium perfringens</i>	ATCC 13124	Inhibited (under anaerobic conditions)	

References: Livingston et al. (1978) J. Clin. Microbiol. 7: 448.

BAGG BROTH BASE

A selective medium for the cultivation of faecal streptococci.

Dehydrated media

Code Number:	500 g: BAG20500, 5 kg: BAG25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	6,9 (approx.) at 25 °C

Direction: Suspend **36 g** in one litre of distilled water. Add **5 ml of Glycerol Supplement (GLC80100)**. Mix well and heat gently to dissolve the medium completely. Dispense into final containers and sterilise by autoclaving at 115 °C for 15 minutes.

Warning!

The medium is heat sensitive.

No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: BAG30100, 500 ml: BAG30500
Tubed media:	150 x 15 mm: BAG40010 (10 ml)
Colour:	Purple
pH (25 °C):	6,8 – 7,0

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Peptones	20,000
Glucose	5,000
Sodium chloride	5,000
Sodium azide	0,500
Bromocresol purple	0,015
Buffers	5,500

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Enterococcus faecalis</i>	ATCC 29212	Good, colour change to yellow	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	

References: Hajna (1951) Public Health Lab. 9: 80.

BAIRD-PARKER AGAR BASE, PH EUR

A selective and differential medium for the isolation and enumeration of *Staphylococcus aureus* according to PH EUR (Agar Medium O).

Dehydrated media

Code Number:	500 g: BPA20500, 5 kg: BPA25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	6,8 (approx.) at 25 °C

Direction: Suspend **60 g** in 950 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically **50 ml of Sterile Egg Yolk Tellurite Emulsion (EYT80050)**. Mix well before pouring.

Prepared media

Bottled media:	100 ml: BPA30100, 500 ml: BPA30500
Plated media:	55 mm: BPA50055, 90 mm: BPA50090
Colour of bottled media:	Yellowish, transparent
Colour of plated media:	Yellowish, homogeneous turbid
pH (at 25 °C):	6,7 – 6,9

Direction: Supplement the melted bottled media according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Casein peptone	10
Beef extract	5
Yeast extract	1
Sodium pyruvate	10
Lithium chloride	5
Glycine	12
Agar	17

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 48 h
<i>Staphylococcus aureus</i>	ATCC 29213	Good, black colonies with double zones	
<i>Staphylococcus epidermidis</i>	ATCC 12228	Poor, black colonies without zones	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	

References: European Pharmacopoeia ISO 16266

II. DEHYDRATED CULTURE MEDIA

BAIRD-PARKER BROTH BASE

A selective and differential medium for the isolation and enumeration of *Staphylococcus aureus*.

Dehydrated media

Code Number:	500 g: BBR20500, 5 kg: BBR25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,0 (approx.) at 25 °C

Direction: Suspend **43 g** in 950 ml of distilled water and heat gently to dissolve the medium completely. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically **50 ml of Sterile Egg Yolk Tellurite Emulsion (EYT80050)**. Mix well and dispense aseptically into sterile final containers.

Prepared media

Bottled media:	100 ml: BBR30100, 500 ml: BBR30500
Tubed media:	150 x 15 mm: BBR40010 (10 ml)
Colour of bottled media:	Yellowish, transparent
Colour of tubed media:	Yellowish, homogeneous turbid
pH (at 25 °C):	6,9 – 7,1

Direction: Supplement the bottled media according to the direction of the dehydrated media and dispense aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Peptones	16
Sodium pyruvate	10
Lithium chloride	5
Glycine	12

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the tubed media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 48 h
<i>Staphylococcus aureus</i>	ATCC 29213	Good, colour change to black	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	

References: Baird-Parker (1962) J. Appl. Bact. 25: 12.

BAT AGAR

A selective medium for the detection of *Alicyclobacillus* spp.

Dehydrated media

Code Number:	500 g: BTA20500, 5 kg: BTA25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	5,2 (approx.) at 25 °C

Direction: Suspend **29 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 115 °C for 15 minutes. If adjustment of pH is necessary to pH 4 (approx.), cool to 50 °C and add aseptically 1N sulphuric acid (approx: 1,7 ml) to the medium.

Warning!

The medium is heat sensitive.

No further sterilisation is necessary or desirable.

Once acidified with sulphuric acid, the medium should not be reheated.

Prepared media

Bottled media:	100 ml: BTA30100, 500 ml: BTA30500
Plated media:	55 mm: BTA50055, 90 mm: BTA50090
Colour:	Yellowish
pH (25 °C):	5,1 – 5,3

Direction: If adjustment of pH is necessary, complete according to direction of the dehydrated media and dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	2,000
Glucose	5,000
Magnesium sulphate	0,500
Calcium chloride	0,250
Ammonium sulphate	0,200
Mixture of minerals	0,001
Buffers	3,000
Agar	18,000

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 48 h
<i>Alicyclobacillus acidoterrestris</i>	ATCC 49025	Good	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	
<i>Staphylococcus aureus</i>	ATCC 29213	Inhibited	

References: First Standard IFU-Method on the Detection of *Alicyclobacillus* in Fruit Juices. April 2003.

BILE ESCULIN AGAR

A selective and differential medium for the isolation and presumptive identification of enterococci and group D streptococci.

Dehydrated media

Code Number:	500 g: BEA20500, 5 kg: BEA25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,1 (approx.) at 25 °C

Direction: Suspend **45 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: BEA30100, 500 ml: BEA30500
Plated media:	55 mm: BEA50055, 90 mm: BEA50090
Colour:	Yellowish
pH (25 °C):	7,0 – 7,2

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	8,5
Bacteriological bile	20,0
Ferric citrate	0,5
Esculin	1,0
Agar	15,0

II. DEHYDRATED CULTURE MEDIA

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Enterococcus faecalis</i>	ATCC 29212	Good, blackening around the colonies	
<i>Streptococcus pyogenes</i>	ATCC 19615	Inhibited	

References: Swan (1954) J. Clin. Pathol. 7: 160.

BILE ESCULIN AZIDE AGAR

A selective and differential medium for the isolation and presumptive identification of enterococci and group D streptococci.

Dehydrated media

Code Number:	500 g: BES20500, 5 kg: BES25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,2 (approx.) at 25 °C

Direction: Suspend **55 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 115 °C for 15 minutes.

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: BES30100, 500 ml: BES30500
Plated media:	55 mm: BES50055, 90 mm: BES50090
Colour:	Yellowish
pH (25 °C):	7,1 – 7,3

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Tryptone	17,00
Peptones	3,00
Yeast extract	5,00
Bacteriological bile	10,00
Sodium chloride	5,00
Ferric citrate	0,50
Sodium azide	0,15
Esculin	1,00
Agar	13,35

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Enterococcus faecalis</i>	ATCC 29212	Good, blackening around the colonies	
<i>Streptococcus pyogenes</i>	ATCC 19615	Inhibited	

References: Swan (1954) J. Clin. Pathol. 7: 160. ISO 7899-2

BILE ESCULIN AZIDE BROTH

A selective and differential medium for the differentiation of enterococci and Group D streptococci.

Dehydrated media

Code Number:	500 g: BIB20500, 5 kg: BIB25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,1 (approx.) at 25 °C

Direction: Suspend **43 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into final containers and sterilise by autoclaving at 115 °C for 15 minutes.

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: BIB30100, 500 ml: BIB30500
Tubed media:	150 x 15 mm: BIB40010 (10 ml)
Colour:	Yellowish
pH (at 25 °C):	7,0 – 7,2

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Peptones	25,25
Bacteriological bile	10,00
Sodium chloride	5,00
Sodium citrate	1,00
Ferric citrate	0,50
Sodium azide	0,25
Esculin	1,00

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Enterococcus faecalis</i>	ATCC 51299	Good, colour change to black	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	
<i>Streptococcus pyogenes</i>	ATCC 19615	Inhibited	

References: Isenberg et al. (1970) Appl. Microbiol. 20: 433.

BILE ESCULIN BROTH

A selective and differential medium for the differentiation of enterococci and Group D streptococci.

Dehydrated media

Code Number:	500 g: BEB20500, 5 kg: BEB25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,1 (approx.) at 25 °C

Direction: Suspend **43 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into final containers and sterilise by autoclaving at 121 °C for 15 minutes.

II. DEHYDRATED CULTURE MEDIA

Prepared media

Bottled media:	100 ml: BEB30100, 500 ml: BEB30500
Tubed media:	150 x 15 mm: BEB40010 (10 ml)
Colour:	Yellowish
pH (at 25 °C):	7,0 – 7,2

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Peptones	25,5
Bacteriological bile	10,0
Sodium chloride	5,0
Sodium citrate	1,0
Ferric citrate	0,5
Esculin	1,0

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Enterococcus faecalis</i>	ATCC 51299	Good, colour change to black	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	
<i>Streptococcus pyogenes</i>	ATCC 19615	Inhibited	

References: Isenberg et al. (1970) Appl. Microbiol. 20: 433.

BISMUTH SULPHITE AGAR

A strongly selective medium for the isolation of *Salmonella* spp. including *Salmonella typhi*.

Dehydrated media

Code Number:	450 g: BSA20450
	packaging: 450 g agar base + 3 l indicator
	4,5 kg: BSA24500
	packaging: 4,5 kg agar base + 30 l indicator
Appearance of agar base:	Yellowish, homogeneous hygroscopic powder
Appearance of indicator:	Greenish grey suspension
pH before autoclaving:	7,2 (approx.) at 25 °C

Direction: Suspend **30 g** agar base in 800 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool down and add aseptically **200 ml of Bismuth Sulphite Indicator (BSI81000)**. Mix well before pouring.

Warning!

- Before use warm up the indicator to room temperature carefully. The crystals precipitated during chilled stor-age must be redissolved completely. Several refrigeration – warm up process do not cause any damage.
- To ensure homogeneity shake well the indicator before use.
- Immediately after its preparation, the medium has optimal selectivity which gradually decreases over time. For this reason it is not recommended to store the ready to use medium more than 4 days at 2–8 °C.

Prepared media

Bottled media:	100 ml: BSA30100, 500 ml: BSA30500
Plated media:	55 mm: BSA50055, 90 mm: BSA50090
Colour of bottled media:	Yellowish, transparent
Colour of plated media:	Light green – cream, homogeneous turbid
pH (at 25 °C):	7,1 – 7,3

Direction: Supplement the melted bottled media according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA OF ONE LITRE OF THE COMPLETE MEDIUM in g/l

Peptones	14,700
Glucose	5,000
Ferrous sulphate	0,300
Bismuth sulphite indicator	6,000
Brilliant green	0,016
Buffers	5,000
Agar	15,000

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Salmonella typhi</i>	ATCC 19430	Good, black centre of the colonies usually appears	
<i>Salmonella typhimurium</i>	ATCC 14028	Good, black colonies with metallic sheen	
<i>Escherichia coli</i>	ATCC 25922	Inhibited, brownish colonies	
<i>Proteus mirabilis</i>	ATCC 29906	Inhibited, greenish to colourless colonies	

References: Wilson and Blair (1972) J. Hyg. Camb. 26: 374.

BLOOD AGAR BASE

A multi-purpose, non-selective medium for the cultivation of non-fastidious and fastidious micro-organisms.

Dehydrated media

Code Number:	500 g: BAN20500, 5 kg: BAN25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,3 (approx.) at 25 °C

Direction: Suspend **40 g** in 950 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically **50 ml of sterile defibrinated sheep blood**. Mix well before pouring.

Prepared media

Bottled media:	100 ml: BAN30100, 500 ml: BAN30500
Plated media:	55 mm: BAN50055, 90 mm: BAN50090
Colour of bottled agar:	Yellowish
Colour of plated agar:	Ruby red
pH (at 25 °C):	7,2 – 7,4

Direction: Supplement the melted bottled media according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Nutrient substrate (peptones, liver and other extracts)	22
Sodium chloride	5
Agar	13

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

II. DEHYDRATED CULTURE MEDIA

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Streptococcus pneumoniae</i>	ATCC 49619	Good, alpha haemolysis (under micro-aerobic conditions)	
<i>Streptococcus pyogenes</i>	ATCC 19615	Good, beta haemolysis (under micro-aerobic conditions)	
<i>Enterococcus faecalis</i>	ATCC 29212	Good, without haemolysis	

References: APHA (1972) Comp. of Meth. for the Micr. Examin. of Foods. 3rd ed.

BLOOD AGAR BASE No.2

A modified blood agar possessing enhanced nutritional properties for the cultivation of fastidious and other micro-organisms.

Dehydrated media

Code Number:	500 g: BAL20500, 5 kg: BAL25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,4 (approx.) at 25 °C

Direction: Suspend **42 g** in 950 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically **50 ml of sterile defibrinated sheep blood**. Mix well before pouring.

Prepared media

Bottled media:	100 ml: BAL30100, 500 ml: BAL30500
Plated media:	55 mm: BAL50055, 90 mm: BAL50090
Colour of bottled agar:	Yellowish
Colour of plated agar:	Ruby red
pH (at 25 °C):	7,4 – 7,5

Direction: Supplement the melted bottled media according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Nutrient substrate (peptones, liver and other extracts)	24
Sodium chloride	5
Agar	13

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Streptococcus pneumoniae</i>	ATCC 49619	Good, alpha haemolysis (under micro-aerobic conditions)	
<i>Streptococcus pyogenes</i>	ATCC 19615	Good, beta haemolysis (under micro-aerobic conditions)	
<i>Enterococcus faecalis</i>	ATCC 29212	Good, without haemolysis	

References: FDA Bacteriological Analytical Manual (1992) 7th ed.

BLUE AGAR

A differential medium for the differentiation of lactose-positive micro-organisms from lactose-negative ones.

Dehydrated media

Code Number:	500 g: BLU20500, 5 kg: BLU25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,4 (approx.) at 25 °C

Direction: Suspend **48 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: BLU30100, 500 ml: BLU30500
Plated media:	55 mm: BLU50055, 90 mm: BLU50090
Colour:	Green
pH (25 °C):	7,3 – 7,5

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	20,000
Lactose	10,000
Sodium chloride	5,000
Bromothymol blue	0,045
Agar	13,000

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922 (L + control)	Good, yellow colonies	
<i>Salmonella typhimurium</i>	ATCC 14028 (L – control)	Good, bluish green colonies	

BLUE BROTH

A differential medium for the differentiation of lactose-positive micro-organisms from lactose-negative ones.

Dehydrated media

Code Number:	500 g: BLB20500, 5 kg: BLB25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,2 (approx.) at 25 °C

Direction: Suspend **38 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into test tubes and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: BLB30100, 500 ml: BLB30500
Tubed media:	150 x 15 mm: BLB40010 (10 ml)
Colour:	Green
pH (at 25 °C):	7,1 – 7,3

Direction: Dispense the bottled media aseptically into sterile test tubes. Media in tubes are ready to use.

FORMULA in g/l

Peptones	10,00
Lactose	20,00
Sodium chloride	4,00
Potassium sulphate	2,00
Ammonium sulphate	1,00
Magnesium sulphate	0,50
Bromothymol blue	0,04
Buffers	0,50

Note: The typical formula can be adjusted to obtain optimal performance.

II. DEHYDRATED CULTURE MEDIA

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Positive: Colour change to yellow	
<i>Proteus mirabilis</i>	ATCC 29906	Negative: Colour change to blue	

BOLTON BROTH BASE

A selective medium for the selective enrichment of *Campylobacter* spp.

Dehydrated media

Code Number:	500 g: BOB20500, 5 kg: BOB25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,4 (approx.) at 25 °C

Direction: Suspend **14 g** in 470 ml of distilled water and heat gently to dissolve the medium completely. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically **25 ml of sterile lysed horse blood** and the contents of **one vial of Campylobacter Selective Supplement, Bolton (CBS80004)** reconstituted with 4 ml of sterile distilled water. Mix well and dispense aseptically into sterile test tubes.

Prepared media

Bottled media:	100 ml: BOB30100, 500 ml: BOB30500
Tubed media:	150 x 15 mm: BOB40010 (10 ml)
Colour of bottled media:	Yellowish
Colour of tubed media:	Dark red
pH (at 25 °C):	7,3 – 7,5

Direction: Supplement the bottled media according to the direction of the dehydrated media and dispense aseptically into sterile test tubes. Media in tubes are ready to use.

FORMULA in g/l

Peptones	21,00
Sodium chloride	5,00
Sodium metabisulphite	0,50
Sodium pyruvate	0,50
α-Ketoglutaric acid	1,00
Haemin	0,01

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 48 h
<i>Campylobacter jejuni</i>	ATCC 33291	Good	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	

References: FDA (1988) Bacteriological Analytical Manual, 8th ed.

BRAIN HEART INFUSION AGAR

A highly nutritious medium for the cultivation of fastidious micro-organisms.

Dehydrated media

Code Number:	500 g: BHA20500, 5 kg: BHA25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,4 (approx.) at 25 °C

Direction: Suspend **50 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Direction for Vancomycin Screen Agar: Suspend **25 g** in 500 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the contents of **one vial of Vancomycin (3 mg) Supplement (VSS80004-03)** reconstituted with 4 ml of sterile distilled water. Mix well before pouring.

Prepared media

Bottled media:	100 ml: BHA30100, 500 ml: BHA30500
Plated Brain Heart Infusion Agar:	55 mm: BHA50055, 90 mm: BHA50090
Plated Vancomycin Screen Agar:	55 mm: BHA50055-01, 90 mm: BHA50090-01
Colour:	Yellowish
pH (25 °C):	7,3 – 7,5

Direction: If necessary, supplement may be added to the melted bottled media according to the direction of the dehydrated media. Dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Nutrient substrate (brain + heart infusion, peptones)	27,5
Glucose	2,0
Sodium chloride	5,0
Buffers	2,5
Agar	13,0

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains BHA	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Streptococcus pneumoniae</i>	ATCC 49619	Good (under micro-aerobic conditions)	

Test strains BHA-01	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Enterococcus faecalis</i>	ATCC 51299	Good	
<i>Enterococcus faecalis</i>	ATCC 29212	Inhibited	

References: Lenette et al. (1985) Manual of Clinical Microbiology, 4th ed.

BRAIN HEART INFUSION BROTH

A highly nutritious medium for the cultivation of fastidious micro-organisms.

Dehydrated media

Code Number:	500 g: BHI20500, 5 kg: BHI25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,4 (approx.) at 25 °C

Direction: Suspend **37 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into final containers and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: BHI30100, 500 ml: BHI30500
Tubed media:	150 x 15 mm: BHI40010 (10 ml)
Colour:	Yellowish
pH (at 25 °C):	7,3 – 7,5

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

II. DEHYDRATED CULTURE MEDIA

FORMULA in g/l

Nutrient substrate brain + heart infusion, peptones	27,5
Glucose	2,0
Sodium chloride	5,0
Buffers	2,5

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Streptococcus pneumoniae</i>	ATCC 49619	Good	

References: Rosenow (1919) J. Dental Research 205.

BRILLIANT GREEN (BPLS) AGAR, PH EUR

A selective and differential medium for the isolation of *Salmonella* spp. (other than *S. typhi*) according to PH EUR (Agar Medium L – Brilliant Green Phenol Red Lac-tose Sucrose Agar).

Dehydrated media

Code Number:	500 g: BPE20500, 5 kg: BPE25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
Final pH:	6,9 (approx.) at 25 °C

Direction: Suspend **58 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Cool quickly and pour into Petri-dishes immediately!

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: BPE30100, 500 ml: BPE30500
Plated media:	55 mm: BPE50055, 90 mm: BPE50090
Colour:	Brownish
pH (25 °C):	6,8 – 7,0

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	10,0000
Yeast extract	3,0000
Lactose monohydrate	10,0000
Sucrose	10,0000
Sodium chloride	5,0000
Phenol red	0,0800
Brilliant green	0,0125
Agar	20,0000

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Salmonella typhimurium</i>	ATCC 14028	Good, red colonies	
<i>Escherichia coli</i>	ATCC 25922	Partially inhibited, greenish yellow colonies	
<i>Proteus mirabilis</i>	ATCC 29906	Partially inhibited, red colonies without swarming	
<i>Enterococcus faecalis</i>	ATCC 29212	Inhibited	

References: European Pharmacopoeia

BRILLIANT GREEN AGAR BASE, HUMAN

A selective and differentiation medium for the isolation of *Salmonella* spp. (including *S. typhi*) from clinical specimens.

Dehydrated media

Code Number:	500 g: BGH20500, 5 kg: BGH25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,3 (approx.) at 25 °C

Direction: Suspend **21,5 g** in 500 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically **10 drops (0,5 ml) Brilliant Green Solution, Sterile (BGS80030-DC)**. Mix well before pouring.

Prepared media

Bottled media:	100 ml: BGH30100, 500 ml: BGH30500
Plated media:	55 mm: BGH50055, 90 mm: BGH50090
Colour of bottled media:	Pink
Colour of tubed media:	Bluish
pH (25 °C):	7,2 – 7,4

Direction: Supplement the melted bottled media according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	16,50
Lactose	10,00
Sucrose	1,00
Glucose	0,50
Acid fuchsin	0,08
Agar	15,00

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 48 h
<i>Salmonella typhi</i>	ATCC 19430	Good, colourless colonies	
<i>Escherichia coli</i>	ATCC 25922	Slightly inhibited, red colonies	
<i>Proteus mirabilis</i>	ATCC 29906	Partially inhibited, colourless colonies with-out swarming	
<i>Enterococcus faecalis</i>	ATCC 29212	Inhibited	

II. DEHYDRATED CULTURE MEDIA

BRILLIANT GREEN AGAR BASE, MODIFIED

A selective and differentiation medium for the isolation of *Salmonella* spp. other than *S. typhi*.

Dehydrated media

Code Number:	500 g: BGM20500, 5 kg: BGM25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
Final pH:	6,9 (approx.) at 25 °C

Direction: Suspend **26,5 g** in 500 ml of distilled water and heat with frequent agitation until the medium boils well. Cool quickly to 50 °C and add aseptically the contents of **one vial of Sulphamandelate Selective Supplement (SUS80004)** reconstituted with 4 ml of sterile distilled water. Mix well before pouring.

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: BGM30100, 500 ml: BGM30500
Plated media:	55 mm: BGM50055, 90 mm: BGM50090
Colour:	Brown
pH (25 °C):	6,8 – 7,0

Direction: Supplement the melted bottled media according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	17,0000
Lactose	10,0000
Sucrose	10,0000
Phenol red	0,0800
Brilliant green	0,0047
Buffers	1,6000
Agar	14,4000

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 48 h
<i>Salmonella typhimurium</i>	ATCC 14028	Good, red colonies	
<i>Escherichia coli</i>	ATCC 25922	Partially inhibited, yellow colonies	
<i>Proteus mirabilis</i>	ATCC 29906	Partially inhibited, red colonies without swarming	
<i>Enterococcus faecalis</i>	ATCC 29212	Inhibited	

References: Edel and Kampelmacher (1968) Bull. Wld. Hlth. Org. 39: 487.

BRILLIANT GREEN BILE (2%) BROTH

A selective and differential medium for the detection of coliforms.

Dehydrated media

Code Number:	500 g: BBB20500, 5 kg: BBB25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,4 (approx.) at 25 °C

Direction: Suspend **40 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into test tubes fitted with Durham tube and sterilise by autoclaving at 115 °C for 15 minutes. Cool quickly!

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: BBB30100, 500 ml: BBB30500
Tubed media:	150 x 15 mm: BBB40010 (10 ml)
Colour:	Green
pH (at 25 °C):	7,3 – 7,5

Direction: Dispense the bottled media aseptically into sterile test tubes fitted with Durham tube. Media in tubes are ready to use.

FORMULA in g/l

Peptones	10,0000
Bacteriological bile	20,0000
Lactose	10,0000
Brilliant green	0,0133

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 48 h
<i>Escherichia coli</i>	ATCC 25922	Good with gas production, colour change to yellow	
<i>Enterobacter aerogenes</i>	ATCC 13048	Good with gas production without colour change	
<i>Staphylococcus aureus</i>	ATCC 29213	Inhibited	

References: APHA (1986) Standard Methods for the Examination of Water and Wastewater, 15th ed.

BROLAC AGAR

A differential medium for the differentiation of lactose-positive micro-organisms from lactose-negative ones.

Dehydrated media

Code Number:	500 g: BRO20500, 5 kg: BRO25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,0 (approx.) at 25 °C

Direction: Suspend **40 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: BRO30100, 500 ml: BRO30500
Plated media:	55 mm: BRO50055, 90 mm: BRO50090
Colour:	Green
pH (25 °C):	6,9 – 7,1

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

II. DEHYDRATED CULTURE MEDIA

FORMULA in g/l

Peptones	7,00
Lactose	15,00
Sodium chloride	5,00
Bromothymol blue	0,04
Agar	13,00

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922 (L + control)	Good, yellow colonies	
<i>Salmonella typhimurium</i>	ATCC 14028 (L – control)	Good, bluish green colonies	

BROMOCRESOL PURPLE AZIDE BROTH BASE

A selective medium for the confirmation of the presence of enterococci.

Dehydrated media

Code Number:	500 g: BCB20500, 5 kg: BCB25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,2 (approx.) at 25 °C

Direction: Suspend **36 g** in one litre of distilled water. Add **5 ml of Glycerol Supplement (GLC80100)**. Mix well and heat gently to dissolve the medium completely. Dispense into final containers and sterilise by autoclaving at 115 °C for 15 minutes.

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: BCB30100, 500 ml: BCB30500
Tubed media:	150 x 15 mm: BCB40010 (10 ml)
Colour:	Purple
pH (at 25 °C):	7,1 – 7,3

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Peptones	20,000
Glucose	5,000
Sodium chloride	5,000
Sodium azide	0,500
Bromocresol purple	0,032
Buffers	5,500

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Enterococcus faecalis</i>	ATCC 29212	Good, colour change to yellow	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	

References: Hajna and Perry (1943) Am. J. Publ. Health. 3: 550.

BROMOCRESOL PURPLE GLUCOSE AGAR

A glucose containing differential medium for the differentiation and enumeration of Enterobacteriaceae.

Dehydrated media

Code Number:	500 g: BPD20500, 5 kg: BPD25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,0 (approx.) at 25 °C

Direction: Suspend **41,5 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: BPD30100, 500 ml: BPD30500
Plated media:	55 mm: BPD50055, 90 mm: BPD50090
Colour:	Purple
pH (25 °C):	6,9 – 7,1

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Tryptone	10,000
Yeast extract	1,500
Glucose	10,000
Sodium chloride	5,000
Bromocresol purple	0,015
Agar	15,000

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good, yellow colonies	

References: ISO 21528-2

BROMOCRESOL PURPLE LACTOSE AGAR

A lactose containing differential medium for the isolation of coliforms.

Dehydrated media

Code Number:	500 g: BPL20500, 5 kg: BPL25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,0 (approx.) at 25 °C

Direction: Suspend **41,5 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: BPL30100, 500 ml: BPL30500
Plated media:	55 mm: BPL50055, 90 mm: BPL50090
Colour:	Purple
pH (25 °C):	6,9 – 7,1

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

II. DEHYDRATED CULTURE MEDIA

FORMULA in g/l

Peptones	11,500
Lactose	10,000
Sodium chloride	5,000
Bromocresol purple	0,015
Agar	15,000

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good, yellow colonies	
<i>Salmonella typhimurium</i>	ATCC 14028	Good, purple colonies	

References: Lenette et al. (1985) Manual of Clinical Microbiology, 4th ed.

BRUCELLA AGAR BASE

A selective medium for the isolation of *Brucella* spp.

Dehydrated media

Code Number:	500 g: BAB20500, 5 kg: BAB25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,5 (approx.) at 25 °C

Direction: Suspend **22,5 g** in 460 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C. Add aseptically 4 ml of 1:1 mixture of methanol and sterile distilled water to **one vial of Brucella Selective Supplement (BAS80004)** to form suspension. Incubate for 15 minutes at 37 °C. Shake well and add immediately to the agar base together with **35 ml of sterile inactivated (i.e. serum held at 56 °C for 30 minutes) horse serum**. Mix well before pouring.

Prepared media

Bottled media:	100 ml: BAB30100, 500 ml: BAB30500
Plated media:	55 mm: BAB50055, 90 mm: BAB50090
Colour:	Yellowish
pH (25 °C):	7,4 – 7,6

Direction: Supplement the melted bottled media according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	15
Glucose	10
Sodium chloride	5
Agar	15

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Brucella abortus</i>	ATCC 4315	Good	

References: Farell and Robinson (1972) J. Appl. Bact. 35: 625.

BRUCELLA AGAR BASE WITH HEMIN + VITAMIN K

A non-selective medium for the cultivation and isolation of anaerobe micro-organisms.

Dehydrated media

Code Number:	500 g: BHK20500, 5 kg: BHK25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,5 (approx.) at 25 °C

Direction: Suspend **45 g** in 950 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically **50 ml of sterile defibrinated sheep blood**. Mix well before pouring.

Prepared media

Bottled media:	100 ml: BHK30100, 500 ml: BHK30500
Plated media:	55 mm: BHK50055, 90 mm: BHK50090
Colour of bottled agar:	Yellowish
Colour of plated agar:	Ruby red
pH (25 °C):	7,4 – 7,6

Direction: Supplement the melted bottled media according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	22,00
L-Cysteine	0,50
Glucose	1,00
Sodium chloride	5,00
Sodium bisulphite	0,10
Hemin	0,01
Vitamin K	0,01
Agar	14,40

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 48 h
<i>Bacteroides fragilis</i>	ATCC 23745	Good (under anaerobic conditions)	
<i>Clostridium pefringens</i>	ATCC 13124	Good (under anaerobic conditions)	

References: Zennette et al. (1985) Manual of Clinical Microbiology, 4th ed., ASM, Washington, D.C.

BRUCELLA BROTH

A non-selective medium for the cultivation of *Brucella* spp.

Dehydrated media

Code Number:	500 g: BRB20500, 5 kg: BRB25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,0 (approx.) at 25 °C

Direction: Suspend **28 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into final containers and sterilise by autoclaving at 121 °C for 15 minutes.

II. DEHYDRATED CULTURE MEDIA

Prepared media

Bottled media:	100 ml: BRB30100, 500 ml: BRB30500
Tubed media:	150 x 15 mm: BRB40010 (10 ml)
Colour:	Yellowish
pH (at 25 °C):	6,9 – 7,1

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Peptones	22,0
Glucose	1,0
Sodium chloride	5,0
Sodium sulphite	0,1

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Brucella abortus</i>	ATCC 4315	Good	

References: APHA (1976) Standard Methods for the Examination of Dairy Product, 14th ed.

BRYANT-BURKEY BROTH

A selective medium for the cultivation of lactate fermenting *Clostridia* spp.

Dehydrated media

Code Number:	500 g: BBA20500-M
	packaging: 300 g broth base + 200 g supplement
	5 kg: BBA25000
	packaging: 3 kg broth base + 2 kg supplement
Appearance of agar base:	Yellowish homogeneous hygroscopic powder
Appearance of supplement:	White powder
pH after autoclaving:	5,9 (approx.) at 25 °C

Direction: Suspend **19 g of Bryant-Burkey Supplement (BSU80200)** in one litre of distilled water and sterilise by autoclaving at 121 °C for 15 minutes. Cool to room temperature and filter the precipitate. Suspend **28 g of Bryant-Burkey Broth Base (BBA20500)** in the filtrate and fill up the solution with distilled water to one litre. Adjust the pH to 6,0 ± 0,1. Dispense into test tubes and sterilise by autoclaving at 121 °C for 15 minutes.

Warning!

As the best result is expected in case of freshly prepared lactate, carry out the two steps above successively.

Prepared media

Tubed media:	150 x 15 mm: BBA40010 (10 ml)
Colour:	Yellowish with red colour ring
pH: (at 25 °C)	5,8 – 6,0

Direction: Media in tubes are ready to use.

Warning!

The medium may be used until approximately 30% of the medium (top layer) has been oxidized, as indicated by a pink colour of the resazurin near the surface. If oxidation has proceeded further, the broth may be reheated once in steam or boiling water, cooled and used.

FORMULA OF ONE LITRE OF THE COMPLETE MEDIUM in g/l

Peptones	27,5000
Sodium lactate	5,0000
Sodium acetate	5,0000
L-Cysteine	0,5000
Resazurin	0,0025

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at 2–8 °C, but the best is to use it freshly.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 72 h
<i>Clostridium perfringens</i>	ATCC 13124	Good with gas production (under anaerobic conditions)	

References: Bryant and Burkey (1953) J. Dairy Science 23: 30.

CAMPYLOBACTER AGAR BASE

A selective medium for the isolation of *Campylobacter* spp.

Dehydrated media

Code Number:	500 g: CAA20500, 5 kg: CAA25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,5 (approx.) at 25 °C

Direction for Campylobacter Agar: Suspend **19 g** in 470 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically **25 ml of sterile lysed horse blood** and the contents of **one vial of Campylobacter Growth Supplement (CGS80004)** reconstituted with 4 ml of sterile distilled water. Mix well before pouring.

Direction for selective Campylobacter Agars: Dissolve the contents of **one vial of Campylobacter Selective Supplement, Blaser-Wang (CBW80004)** or **Campylobacter Selective Supplement, Skirrow (CSS80004)** with 4 ml of sterile distilled water or dissolve the content of **one vial of Campylobacter Selective Supplement, Preston (CPS80004)** with 4 ml of 1:1 mixture of acetone and sterile distilled water and add aseptically to the above at 50 °C. Mix well before pouring.

Prepared media

Bottled media:	100 ml: CAA30100, 500 ml: CAA30500
Plated Campylobacter Selective Agar, Blaser-Wang:	55 mm: CAA50055-BW, 90 mm: CAA50090-BW
Plated Campylobacter Selective Agar, Skirrow:	55 mm: CAA50055-SR, 90 mm: CAA50090-SR
Plated Campylobacter Selective Agar, Preston:	55 mm: CAA50055-PR, 90 mm: CAA50090-PR
Colour of bottled agar:	Yellowish
Colour of plated agars:	Red
pH (25 °C):	7,4 – 7,6

Direction: Supplement the melted bottled media according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	20
Sodium chloride	5
Agar	13

Note: The typical formula can be adjusted to obtain optimal performance.

II. DEHYDRATED CULTURE MEDIA

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 48 h
<i>Campylobacter jejuni</i>	ATCC 33291	Good	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	

References: Bolton and Robertson (1982) J. Clin. Pathol. 35: 462.

CAMPYLOBACTER AGAR BASE, KARMALI

A selective blood-free medium for the isolation of *Campylobacter* spp.

Dehydrated media

Code Number:	500 g: CAK20500, 5 kg: CAK25000
Colour:	Black
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,4 (approx.) at 25 °C

Direction: Suspend **23 g** in 500 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the contents of **one vial of Campylobacter Selective Supplement, Karmali (CPK80004)** reconstituted with 4 ml of sterile distilled water. Mix well before pouring.

Prepared media

Bottled media:	100 ml: CAK30100, 500 ml: CAK30500
Plated media:	55 mm: CAK50055, 90 mm: CAK50090
Colour:	Black
pH (25 °C):	7,3 – 7,5

Direction: Supplement the melted bottled media according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Columbia Blood Agar Base	42,000
Charcoal	4,000
Hemin	0,032

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 48 h
<i>Campylobacter jejuni</i>	ATCC 33291	Good	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	

References: Karmali et al. (1986) J. Clin. Microbiol. 23: 456.

CAMPYLOBACTER BLOOD-FREE (CCDA) AGAR BASE

A selective blood-free medium for the isolation of *Campylobacter* spp.

Dehydrated media

Code Number:	500 g: CCA20500, 5 kg: CCA25000
Colour:	Black
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,2 (approx.) at 25 °C

Direction: Suspend **24 g** in 500 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the contents of **one vial of Campylobacter Selective Supplement, CCDA (CCS80004)** reconstituted with 4 ml of sterile distilled water. Mix well before pouring.

Prepared media

Bottled media:	100 ml: CCA30100, 500 ml: CCA30500
Plated media:	55 mm: CCA50055, 90 mm: CCA50090
Colour:	Black
pH (25 °C):	7,1 – 7,3

Direction: Supplement the melted bottled media according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	24,50
Sodium chloride	5,00
Sodium deoxycholate	1,00
Ferrous sulphate	0,25
Sodium pyruvate	0,25
Charcoal	4,00
Agar	13,00

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 48 h
<i>Campylobacter jejuni</i>	ATCC 33291	Good	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	

References: Bolton et al. (1984) J. Clin. Microbiol. 19: 169.

CASEIN PEPTONE LECITHIN POLYSORBATE BROTH BASE, USP

An inactivating solution for diluting samples when determining microbial count.

Dehydrated media

Code Number:	500 g: CLP20500, 5 kg: CLP25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,1 (approx.) at 25 °C

Direction: Suspend **25 g** in 960 ml of distilled water. Add **40 ml of TWEEN 80 Supplement (TWS80500)**. Mix well and keep the suspension at about 50 °C until the lecithin dissolves completely (20–30 min). The ready broth is yellowish and slightly turbid, but exempt from any precipitate. Dispense into final containers and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: CLP30100, 500 ml: CLP30500
Tubed media:	150 x 15 mm: CLP40010 (10 ml)
Colour:	Yellowish, homogeneous turbid
pH (at 25 °C):	7,0 – 7,2

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

II. DEHYDRATED CULTURE MEDIA

FORMULA in g/l

Casein peptone	20
Lecithin	5

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good	
<i>Staphylococcus aureus</i>	ATCC 29213	Good	

References: United States Pharmacopoeia

CATC AGAR BASE

A selective and differential medium for the detection of enterococci.

Dehydrated media

Code Number:	500 g: CAT20500, 5 kg: CAT25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,0 (approx.) at 25 °C

Direction: Suspend **28,5 g** in 500 ml of distilled water and heat with frequent agitation until the medium boils well. Cool to 50 °C and add aseptically **10 drops (0,5 ml) of TTC Solution, Sterile (TTC80030)**. Mix well before pouring.

Warning!

The medium is heat sensitive. No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: CAT30100, 500 ml: CAT30500
Plated media:	55 mm: CAT50055, 90 mm: CAT50090
Colour:	Yellowish
pH (25 °C):	6,9 – 7,1

Direction: Supplement the melted bottled media according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Tryptone	17,00
Peptones	20,6
Sodium citrate	15,0
Sodium carbonate	2,0
Sodium azide	0,4
TWEEN 80	1,0
Buffers	5,0
Agar	13,0

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 48 h
<i>Enterococcus faecalis</i>	ATCC 29212	Good, ferruginous colonies	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	

References: Burkwall and Hartman (1964) Appl. Microbiol. 12: 18.

CETRIMIDE (CN) AGAR BASE

A selective medium for isolation and identification of *Pseudomonas aeruginosa*.

Dehydrated media

Code Number:	500 g: CCN20500, 5 kg: CCN25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,1 (approx.) at 25 °C

Direction: Suspend **50 g** in one litre of distilled water. Add **10 ml of Glycerol Supplement (GLC80100)** and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: CCN30100, 500 ml: CCN30500
Plated media:	55 mm: CCN50055, 90 mm: CCN50090
Colour:	Yellowish
pH (25 °C):	7,0 – 7,2

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	25,400
Potassium sulphate	10,000
Magnesium chloride	1,400
Cetrimide	0,200
Nalidixic acid	0,015
Agar	13,000

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Pseudomonas aeruginosa</i>	ATCC 27853	Good growth, fluorescent green colonies	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	

References: Lowbury and Collins (1955) J. Clin. Pathol. 8: 47.

CETRIMIDE (CN) AGAR BASE No.2

A selective medium for isolation and identification of *Pseudomonas aeruginosa*.

Dehydrated media

Code Number:	500 g: CCT20500, 5 kg: CCT25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,1 (approx.) at 25 °C

Direction for Cetrimide (CN) Agar No.2: Suspend **25 g** in 500 ml of distilled water. Add **5 ml of Glycerol Supplement (GLC80100)** and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the content of **one vial of Pseudomonas Selective Supplement, CN (PCN80004)** reconstituted with 4 ml of sterile distilled water. Mix well before pouring.

Direction for Cetrimide (CFC) Agar No.2: Suspend **25 g** in 500 ml of distilled water. Add **5 ml of Glycerol Supplement (GLC80100)** and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the content of **one vial of Pseudomonas Selective Supplement, CFC (CFC80004)** reconstituted with 4 ml of sterile distilled water. Mix well before pouring.

II. DEHYDRATED CULTURE MEDIA

Direction for Cetrimide (PP) Agar No.2: Suspend **25 g** in 500 ml of distilled water. Add **5 ml of Glycerol Supplement (GLC80100)** and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the content of **one vial of Pseudomonas Selective Supplement, PP (PPP80004)** reconstituted with 4 ml of sterile distilled water. Mix well before pouring.

Prepared media

Bottled media:	100 ml: CCT30100, 500 ml: CCT30500
Plated Cetrimide (CN) agar:	55 mm: CCT50055-01, 90 mm: CCT50090-01
Plated Cetrimide (CFC) agar:	55 mm: CCT50055-02, 90 mm: CCT50090-02
Plated Cetrimide (PP) agar:	55 mm: CCT50055-03, 90 mm: CCT50090-03
Colour:	Yellowish
pH (25 °C):	7,0 – 7,2

Direction: Supplement the melted bottled media according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	25,0
Potassium sulphate	10,0
Magnesium chloride	1,4
Agar	12,6

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Pseudomonas aeruginosa</i>	ATCC 27853	Good growth, fluorescent green colonies	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	

References: Lowbury and Collins (1955) J. Clin. Pathol. 8: 47.
ISO 16266; ISO 13720; ISO 11059

CETRIMIDE AGAR BASE, PH EUR - USP

A selective medium for isolation and identification of *Pseudomonas aeruginosa* according to PH EUR (Agar Medium N – Harmonised).

Dehydrated media

Code Number:	500 g: CAB20500, 5 kg: CAB25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,2 (approx.) at 25 °C

Direction: Suspend **45 g** in one litre of distilled water. Add **10 ml of Glycerol Supplement (GLC80100)** and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: CAB30100, 500 ml: CAB30500
Plated media:	55 mm: CAB50055, 90 mm: CAB50090
Colour:	Yellowish
pH (25 °C):	7,1 – 7,3

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Gelatine peptone	20,0
Potassium sulphate	10,0
Magnesium chloride	1,4
Cetrimide	0,3
Agar	13,3

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Pseudomonas aeruginosa</i>	ATCC 27853	Good growth, fluorescent green colonies	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	

References: European Pharmacopoeia

CHARCOAL AGAR BASE

A selective medium for the cultivation and isolation of *Bordetella pertussis* and *Haemophilus influenzae*.

Dehydrated media

Code Number:	500 g: CHA20500, 5 kg: CHA25000
Colour:	Black
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,2 (approx.) at 25 °C

Direction for Bordetella agar: Suspend 26 g in 450 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically **50 ml of sterile defibrinated blood** and the content of **one vial of Bordetella Selective Supplement (BSS80004)** reconstituted with 4 ml of sterile distilled water. Mix well before pouring.

Direction for Haemophilus agar: Suspend **26 g** in 460 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically **35 ml of sterile defibrinated blood** and “chocolate” by heating at 80 °C for 10 min. Cool to 50 °C. Dissolve the content of **one vial of Growth Factor Mixture Hydration Fluid** with 5 ml of sterile distilled water and add aseptically to the **Growth Factor Mixture (GFM80005)**. Mix well and add aseptically to the medium. Mix well before pouring.

Prepared media

Bottled media:	100 ml: CHA30100, 500 ml: CHA30500
Plated Bordetella Agar:	90 mm: CHA50090-BO
Plated Haemophilus Agar:	90 mm: CHA50090-HA
Colour:	Black
pH (25 °C):	7,1 – 7,3

Direction: Supplement the melted bottled media according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	20,000
Starch soluble	10,000
Sodium chloride	5,000
Charcoal	4,000
Nicotinic acid	0,001
Agar	13,000

Note: The typical formula can be adjusted to obtain optimal performance.

II. DEHYDRATED CULTURE MEDIA

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains BO Agar	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Bordetella pertussis</i>	ATCC 8467	Good	
<i>Klebsiella pneumoniae</i>	ATCC 13883	Inhibited	
<i>Staphylococcus aureus</i>	ATCC 29213	Inhibited	

Test strains HA Agar	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Haemophilus influenzae</i>	ATCC 49247	Good	

References: Proom (1955) J. Gen. Microbiol. 12: 63.

CHINA BLUE LACTOSE AGAR

A differential medium for the differentiation of lactose-positive micro-organisms from lactose-negative ones and for enumeration of bacteria.

Dehydrated media

Code Number:	500 g: CBA20500, 5 kg: CBA25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,0 (approx.) at 25 °C

Direction: Suspend **36 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: CBA30100, 500 ml: CBA30500
Plated media:	55 mm: CBA50055, 90 mm: CBA50090
Colour:	Blue
pH (25 °C):	6,9 – 7,1

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	8,600
Lactose	10,000
Sodium chloride	5,000
China blue	0,375
Agar	12,000

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922 (L + control)	Good, blue colonies	
<i>Salmonella typhimurium</i>	ATCC 14028 (L – control)	Good, colourless colonies	

References: Brandt and Sobeck-Skal (1963) Milchwiss. Ber. 13: 1.

CHLORAMPHENICOL GLUCOSE AGAR

A selective medium for the enumeration of yeasts and moulds.

Dehydrated media

Code Number:	500 g: CGA20500, 5 kg: CGA25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	6,6 (approx.) at 25 °C

Direction: Suspend **40 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: CGA30100, 500 ml: CGA30500
Plated media:	55 mm: CGA50055, 90 mm: CGA50090
Colour:	Yellowish
pH (25 °C):	6,5 – 6,7

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Yeast extract	5,0
Glucose	20,0
Chloramphenicol	0,1
Agar	14,9

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 48 h
<i>Candida albicans</i>	ATCC 10231	Good	
<i>Saccharomyces cerevisiae</i>	ATCC 9763	Good	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	

References: ISO 7954

CHOCOLATE AGAR BASE

A highly nutritious medium for the isolation and cultivation of fastidious micro-organisms especially *Neisseria* and *Haemophilus* spp.

Dehydrated media

Code Number:	500 g: CHO20500, 5 kg: CHO25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,2 (approx.) at 25 °C

Direction for Chocolate Agar: Suspend **18 g** in 460 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically **35 ml of sterile defibrinated blood** and “chocolate” by heating at 80 °C for 10 min. Cool to 50 °C. Dis-solve the contents of **one vial of Growth Factor Mixture Hydration Fluid** with 5 ml of sterile distilled water and add aseptically to the **Growth Factor Mixture (GFM80005)**. Mix well and add aseptically to the medium. Mix well before pouring.

Direction for Chocolate Agar + Bacitracin: Dissolve the contents of **one vial of Bacitracin (150 mg) Supplement (BAC80004)** with 4 ml of sterile distilled water and add aseptically to the agar base at 50 °C. Mix well before pouring.

II. DEHYDRATED CULTURE MEDIA

Direction for Chocolate Agar + Vancomycin: Dissolve the contents of one vial of Vancomycin (13 mg) Supplement (VSS80004-13) with 4 ml of sterile distilled water and add aseptically to the agar base at 50 °C. Mix well before pouring.

Prepared media

Bottled media:	100 ml: CH030100, 500 ml: CH030500
Plated Chocolate Agar:	55 mm: CH050055-02, 90 mm: CH050090-02
Plated Chocolate Agar + Bacitracin:	55 mm: CH050055-03, 90 mm: CH050090-03
Plated Chocolate Agar + Vancomycin:	55 mm: CH050055-04, 90 mm: CH050090-04
Colour of bottled agar:	Yellowish
Colour of plated agars:	Chocolate brown
pH (at 25 °C):	7,1 – 7,3

Direction: Supplement the melted bottled media according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Nutrient substrate (peptones, extracts)	16
Sodium chloride	5
Buffers	1
Agar	14

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Haemophilus influenzae</i>	ATCC 49766	Good	
<i>Streptococcus pyogenes</i>	ATCC 19615	Inhibited (in case of selective media)	

References: Carpenter and Morton (1947) Proc. N. Y. State Assoc. Public Health Labs. 27: 58.

ChromoBio® CANDIDA

A selective and differential chromogenic medium for isolation and differentiation of major clinical-significant *Candida* spp.

Dehydrated media

Code Number:	500 g: CAN20500, 5 kg: CAN25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	6,1 (approx.) at 25 °C

Direction: Suspend **48 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Mix well before pouring.

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: CAN30100, 500 ml: CAN30500
Plated media:	55 mm: CAN50055, 90 mm: CAN50090
Colour:	Yellowish
pH (25 °C):	6,0 – 6,2

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	10,0
Glucose	20,0
Chromogenic substrate	1,5
Chloramphenicol + gentamicin	0,5
Agar	15,0

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 48 h
<i>Candida albicans</i>	ATCC 10231	Good, green colonies	
<i>Candida krusei</i>	ATCC 14243	Good, pink colonies	
<i>Candida tropicalis</i>	ATCC 1369	Good, blue colonies	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	

ChromoBio® CERESUS BASE

A selective and differential chromogenic medium for the detection of *Bacillus cereus*.

Dehydrated media

Code Number:	500 g: CER20500, 5 kg: CER25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,2 (approx.) at 25 °C

Direction: Suspend **16,5 g** in 450 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

In the meantime add 50 ml of sterile distilled water to one bottle of **Cereus Supplement (CES80050)**. Mix well and soak the suspension about one hour – repeating the mixing a few times – until the lecithin dissolves completely. The ready supplement is homogeneous turbid, but exempt from any precipitate.

Cool the agar base to 50 °C and add aseptically the supplement. Mix well before pouring. To ensure the complete homogeneity repeat the mixing a few times during the pouring again.

Prepared media

Bottled media:	100 ml: CER30100, 500 ml: CER30500
Plated media:	55 mm: CER50055, 90 mm: CER50090
Colour of bottled agar:	Yellowish
Colour of plated agar:	Yellowish, homogeneous turbid
pH (25 °C):	7,1 – 7,3

Direction: Supplement the melted bottled media according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	18
Chromogenic substrate	2
Agar	13

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

II. DEHYDRATED CULTURE MEDIA

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Bacillus cereus</i>	ATCC 11778	Good, blue colonies with opaque halo	
<i>Bacillus subtilis</i>	ATCC 6633	Partially inhibited, blue colonies without halo	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	

ChromoBio® COLIFORM

A selective and differential chromogenic medium for the simultaneous detection of coliforms and *Escherichia coli* according to ISO 9308-1: 2014.

Dehydrated media

Code Number:	500 g: COF20500, 5 kg: COF25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
Final pH:	6,8 (approx.) at 25 °C

Direction: Suspend **30 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise at 100 °C (in water bath or flowing steam) for 30 minutes.

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: COF30100, 500 ml: COF30500
Plated media:	55 mm: COF50055, 90 mm: COF50090
Colour:	Yellowish
pH (at 25 °C):	6,7 – 6,9

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Casein peptone	1,00
Yeast extract	2,00
Tryptophan	1,00
Sorbitol	1,00
Sodium chloride	5,00
Sodium pyruvate	1,00
6-chloro-3-indolyl-β-D-galactopyranoside	0,20
5-bromo-4-chloro-3-indolyl-β-D-glucuronide	0,10
Isopropyl-β-D-1-thiogalactopyranoside	0,10
Tergitol 7	0,15
Sodium phosphate dibasic	2,70
Sodium phosphate monobasic x 2H ₂ O	2,20
Agar	13,55

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good, blue colonies	
<i>Citrobacter freundii</i>	ATCC 8090	Good, red colonies	
<i>Salmonella typhimurium</i>	ATCC 14028	Good, colourless colonies	
<i>Enterococcus faecalis</i>	ATCC 29212	Inhibited	

References: Manafi and Kneifel (1989) Zentralbl. Hyg. 189: 225.
ISO 9308-1: 2014

ChromoBio® ENTEROCOCCUS AGAR

A selective and differential chromogenic medium for the enumeration of enterococci.

Dehydrated media

Code Number:	500 g: CEA20500, 5 kg: CEA25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,0 (approx.) at 25 °C

Direction: Suspend **42 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 115 °C for 15 minutes.

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: CEA30100, 500 ml: CEA30500
Plated media:	55 mm: CEA50055, 90 mm: CEA50090
Colour:	Yellowish
pH (25 °C):	6,9 – 7,1

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	20
Chromogenic substrate	3
TWEEN 80	1
Buffers	5
Agar	13

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 48 h
<i>Enterococcus faecalis</i>	ATCC 29212	Good, blue colonies	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	
<i>Pseudomonas aeruginosa</i>	ATCC 27853	Inhibited	
<i>Staphylococcus aureus</i>	ATCC 29213	Inhibited	

ChromoBio® ENTEROCOCCUS BROTH

A selective and differential chromogenic medium for the selective enrichment of enterococci.

Dehydrated media

Code Number:	500 g: CEB20500, 5 kg: CEB25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,5 (approx.) at 25 °C

Direction: Suspend **20 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into final containers and sterilise by autoclaving at 115 °C for 15 minutes.

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

II. DEHYDRATED CULTURE MEDIA

Prepared media

Bottled media:	100 ml: CEB30100, 500 ml: CEB30500
Tubed media:	150 x 15 mm: CEB40010 (10 ml)
Colour:	Yellowish
pH (at 25 °C):	7,4 – 7,6

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Peptones	10,0
Sodium chloride	6,4
Sodium azide	0,6
Chromogenic substrate	3,0

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Enterococcus faecalis</i>	ATCC 29212	Good, blue colonies	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	
<i>Pseudomonas aeruginosa</i>	ATCC 27853	Inhibited	
<i>Staphylococcus aureus</i>	ATCC 29213	Inhibited	

ChromoBio® LISTERIA

A selective and differential chromogenic medium for the cultivation, differentiation and isolation of *Listeria monocytogenes* according to ISO 11290-1.

Dehydrated media

Code Number:	500 g: AL020500
	packaging: 500 g agar base + 14 x 100 ml supplement
	5 kg: AL025000
	packaging: 5 kg agar base + 140 x 100 ml supplement
Appearance of agar base:	Yellowish homogeneous hygroscopic powder
Appearance of supplement:	Yellowish solution
pH before autoclaving:	7,2 (approx.) at 25 °C

Direction: Suspend **35 g** agar base in 400 ml of distilled water and heat with frequent agitation until the medium boils well. Cool to 50 °C and add aseptically **100 ml of Listeria Supplement (LDS80100)**. Mix well before pouring.

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: AL030100, 500 ml: AL030500
Plated media:	55 mm: AL050055, 90 mm: AL050090
Colour of bottled media:	Yellowish
Colour of plated media:	Yellowish, homogeneous turbid
pH (25 °C):	7,1 – 7,3

Direction: Supplement the melted bottled media according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA OF ONE LITRE OF COMPLETE MEDIUM

Meat peptone	18,00 g
Casein peptone	6,00 g
Yeast extract	10,00 g
Glucose	2,00 g
Lithium chloride	10,00 g
Sodium chloride	5,00 g
Sodium pyruvate	2,00 g
Magnesium glycerophosphate	1,00 g
Magnesium sulphate	0,50 g
L- α -Phosphatidylinositol	2,00 g
Chromogenic substrate	0,05 g
Ceftazidime	0,02 g
Nalidixic acid	0,02 g
Amphotericin B	0,01 g
Polymyxin B	76,700 U
Sodium phosphate, dibasic	2,50 g
Agar	12,00 g

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Listeria monocytogenes</i>	ATCC 19115	Good, blue colonies with opaque halo	
<i>Listeria innocua</i>	ATCC 33091	Good, blue colonies without opaque halo	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	
<i>Staphylococcus aureus</i>	ATCC 29213	Inhibited	

References: Ottaviani et al. (1997) Quinper Froid Symposium Proceedings, P6 A.D.R.I.A. Quinper (F); ISO 11290-1

ChromoBio® LISTERIA PLUS

A selective and differential chromogenic medium for the cultivation, differentiation and isolation of *Listeria monocytogenes*. *Listeria ivanovii* can also be differentiated from *Listeria monocytogenes* on this medium.

Dehydrated media

Code Number:	500 g: LCA20500
	packaging: 500 g agar base + 14 x 100 ml supplement
	5 kg: LCA25000
	packaging: 5 kg agar base + 140 x 100 ml supplement
Appearance of agar base:	Beige, homogeneous hygroscopic powder
Appearance of supplement:	Yellowish solution
pH before autoclaving:	7,2 (approx.) at 25 °C

Direction: Suspend **35 g** agar base in 400 ml of distilled water and heat with frequent agitation until the medium boils well. Cool to 50 °C and add aseptically **100 ml of Listeria Supplement (LDS80100)**. Mix well before pouring.

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: LCA30100, 500 ml: LCA30500
Plated media:	55 mm: LCA50055, 90 mm: LCA50090
Colour of bottled media:	Purple
Colour of plated media:	Purple, homogeneous turbid
pH (25 °C):	7,1 – 7,3

II. DEHYDRATED CULTURE MEDIA

Direction: Supplement the melted bottled media according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA OF ONE LITRE OF COMPLETE MEDIUM

Peptones	34,00 g
Special carbohydrate mixture	2,00 g
Lithium chloride	10,00 g
Sodium chloride	5,00 g
Sodium pyruvate	2,00 g
Magnesium glycerophosphate	1,00 g
Magnesium sulphate	0,50 g
L- α -Phosphatidylinositol	2,00 g
Chromogenic substrate	0,05 g
Nalidixic acid	0,02 g
Ceftazidime	0,02 g
Amphotericin B	0,01 g
Polymyxin B	76.700 U
Bromocresol purple	0,05 g
Buffers	2,50 g
Agar	12,00 g

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 48 h
<i>Listeria monocytogenes</i>	ATCC 19115	Good, yellowish green colonies with opaque halo and yellow colouration in the medium	
<i>Listeria ivanovii</i>	ATCC 19119	Moderate, deep blue colonies with opaque halo but without yellow colouration in the medium	
<i>Listeria innocua</i>	ATCC 33091	Good, yellowish green colonies with yellow colouration in the medium but without opaque halo	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	

References: Ottaviani et al. (1997) Quinper Froid Symposium Proceedings, P6 A.D.R.I.A. Quinper (F)

ChromoBio® LMX

A selective and differential chromo- and fluorogenic medium for the detection of coliforms and differentiation of *E. coli* from other coliforms.

Dehydrated media

Code Number:	500 g: LMX20500, 5 kg: LMX25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	6,8 (approx.) at 25 °C

Direction: Suspend 17 g in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into test tubes and sterilise by autoclaving at 121 °C for 15 minutes. Cool quickly.

Prepared media

Bottled media:	100 ml: LMX30100, 500 ml: LMX30500
Tubed media:	150 x 15 mm: LMX40010 (10 ml)
Colour:	Yellowish
pH (at 25 °C):	6,7 – 6,9

Direction: Dispense the bottled media aseptically into sterile test tubes. Media in tubes are ready to use.

FORMULA in g/l

Peptones	5,00
Tryptophan	1,00
Sorbitol	1,00
Sodium chloride	5,00
Sodium lauryl sulphate	0,10
Chromo- and fluorogenic substrate	0,23
Buffers	4,70

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h	
			Colour change to blue	Indole production
<i>Escherichia coli</i>	ATCC 25922	+	+	+
<i>Citrobacter freundii</i>	ATCC 8090	+	–	–
<i>Salmonella typhimurium</i>	ATCC 14028	–	–	–
<i>Enterococcus faecalis</i>	ATCC 29212	Inhibited		

References: Manafi and Kneifel (1989) Zentralbl. Hyg. 189: 225.

ChromoBio® M-CP BASE

A selective and differential chromogenic medium for the enumeration of *Clostridium perfringens*.

Dehydrated media

Code Number:	500 g: MCP20500, 5 kg: MCP25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,6 (approx.) at 25 °C

Direction for 100 ml agar: Suspend 7,1 g in 100 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the contents of **one vial of M-CP Chromogenic Supplement (MCC80004-01)** and **one vial of M-CP Selective Supplement (MPS80004-01)** both reconstituted with 4 ml of sterile distilled water. Mix well before pouring.

Direction for 500 ml agar: Suspend 35,5 g in 500 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the contents of **one vial of M-CP Chromogenic Supplement (MCC80004-02)** and **one vial of M-CP Selective Supplement (MPS80004-02)** both reconstituted with 4 ml of sterile distilled water. Mix well before pouring.

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: MCP30100, 500 ml: MCP30500
Plated media:	55 mm: MCP50055, 90 mm: MCP50090
Colour:	Purple
pH (25 °C):	7,5 – 7,7

Direction: Supplement the melted bottled media according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

II. DEHYDRATED CULTURE MEDIA

FORMULA in g/l

Peptones	50,00
L-Cysteine	1,00
Sucrose	5,00
Magnesium sulphate	0,10
Chromogenic substrate	0,06
Bromocresol purple	0,04
Agar	14,90

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C, but no longer than 2 or 3 days.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 48 h
<i>Clostridium perfringens</i>	ATCC 13124	Good, red colonies with NH ₃ exposition (under anaerobic conditions)	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	

References: ISO 6461-1; ISO 6461-2

NEW PRODUCT

ChromoBio® MLGA

A selective and differential chromogenic medium for the differentiation and enumeration of *E. coli* and other coliforms by membrane filtration.

Dehydrated media

Code Number:	500 g: MLG20500, 5 kg: MLG25000
Colour:	Pinkish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,0 (approx.) at 25 °C

Direction: Suspend **88 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: MLG30100, 500 ml: MLG30500
Plated media:	55 mm: MLG50055, 90 mm: MLG50090
Colour:	Red
pH (25 °C):	6,9 – 7,1

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	46,0
Lactose	30,0
Sodium lauryl sulphate	1,0
Sodium pyruvate	0,5
Chromogenic substrate	0,3
Phenol red	0,2
Agar	10,0

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good, green colonies	
<i>Enterobacter aerogenes</i>	ATCC 13048	Good, yellow colonies	
<i>Pseudomonas aeruginosa</i>	ATCC 27853	Good, red colonies	
<i>Enterococcus faecalis</i>	ATCC 29212	Inhibited	

ChromoBio® SALMONELLA BASE

A selective and differential chromogenic medium for the detection of *Salmonella* spp.

Dehydrated media

Code Number:	500 g: SAL20500, 5 kg: SAL25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,4 (approx.) at 25 °C

Direction: Suspend **21,5 g** in 500 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the contents of **one vial of Salmonella Selective Supplement (SSS80004)** reconstituted with 4 ml sterile distilled water. Mix well before pouring.

Prepared media

Bottled media:	100 ml: SAL30100, 500 ml: SAL30500
Plated media:	55 mm: SAL50055, 90 mm: SAL50090
Colour:	Yellowish
pH (25 °C):	7,3 – 7,5

Direction: Supplement the melted bottled media according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Nutrient substrate (peptones, extracts)	10
Chromogenic substrate	20
Agar	13

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Salmonella typhimurium</i>	ATCC 14028	Good, mauve colonies	
<i>Escherichia coli</i>	ATCC 25922	Good, blue colonies	
<i>Pseudomonas aeruginosa</i>	ATCC 27853	Inhibited, colourless colonies	
<i>Enterococcus faecalis</i>	ATCC 29212	Inhibited, green colonies	

NEW PRODUCT

ChromoBio® SALMONELLA PLUS BASE

A selective and differential chromogenic medium for the detection of *Salmonella* spp. Comparing with ChromoBio® Salmonella Base the medium has increased selectivity (especially inhibits the *E. coli* efficiently).

Dehydrated media

Code Number:	500 g: SAP20500, 5 kg: SAP25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,4 (approx.) at 25 °C

II. DEHYDRATED CULTURE MEDIA

Direction: Suspend **22,5 g** in 500 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the contents of **one vial of Salmonella Plus Selective Supplement (SSP80004)** reconstituted with 4 ml sterile distilled water. Mix well before pouring.

Prepared media

Bottled media:	100 ml: SAP30100, 500 ml: SAP30500
Plated media:	55 mm: SAP50055, 90 mm: SAP50090
Colour:	Yellowish
pH (25 °C):	7,3 – 7,5

Direction: Supplement the melted bottled media according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Nutrient substrate (peptones, extracts)	10
Chromogenic substrate	22
Agar	13

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Salmonella typhimurium</i>	ATCC 14028	Good, mauve colonies	
<i>Escherichia coli</i>	ATCC 25922	Good, blue colonies	
<i>Pseudomonas aeruginosa</i>	ATCC 27853	Inhibited, colourless colonies	
<i>Enterococcus faecalis</i>	ATCC 29212	Inhibited, green colonies	

ChromoBio® TBX

A selective and differential chromogenic medium for the detection and enumeration of *E. coli*.

Dehydrated media

Code Number:	500 g: TBX20500, 5 kg: TBX25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,2 (approx.) at 25 °C

Direction: Suspend **37 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: TBX30100, 500 ml: TBX30500
Plated media:	55 mm: TBX50055, 90 mm: TBX50090
Colour:	Yellowish
pH (25 °C):	7,1 – 7,3

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	20,000
Bile salt	1,500
Chromogenic substrate	0,075
Agar	15,500

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good, blue colonies	
<i>Proteus mirabilis</i>	ATCC 29906	Good, colourless colonies without swarming	
<i>Enterococcus faecalis</i>	ATCC 29212	Inhibited	

References: Frampton et al. (1988) J. Food Protection 51: 402.

ChromoBio® URINE

A differential chromogenic medium for the simultaneous detection of all the main micro-organisms that cause urinary tract infections.

Dehydrated media

Code Number:	500 g: URN20500, 5 kg: URN25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,0 (approx.) at 25 °C

Direction: Suspend **47 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: URN30100, 500 ml: URN30500
Plated media:	55 mm: URN50055, 90 mm: URN50090
Colour:	Yellowish
pH (25 °C):	6,9 – 7,1

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	25
Chromogenic substrate	6
Agar	15

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good, purple – claret colonies	
<i>Citrobacter freundii</i>	ATCC 8090	Good, red colonies	
<i>Enterobacter aerogenes</i>	ATCC 13048	Good, greyish-blue colonies	
<i>Proteus mirabilis</i>	ATCC 29906	Good, brown colonies with brown halo	
<i>Salmonella typhimurium</i>	ATCC 14028	Good, colourless colonies	
<i>Enterococcus faecalis</i>	ATCC 29212	Good, green colonies	

CLAUSEN MEDIUM BASE

A non-selective medium for sterility testing of sterile pharmaceutical preparations. The medium has better growth conditions than thioglycollate and also inactivates a large number of preservatives found in pharmaceutical products.

Dehydrated media

Code Number:	500 g: CLB20500, 5 kg: CLB25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,1 (approx.) at 25 °C

II. DEHYDRATED CULTURE MEDIA

Direction: Suspend **40 g** in one litre of distilled water. Add **3 ml of TWEEN 80 Supplement (TWS80100)** and **5 ml of Glycerol Supplement (GLC80100)**. Mix well and keep the suspension at about 50 °C until the lecithin dissolves completely (20–30 min). The dissolution is ready, when the medium is yellowish and slightly turbid, but exempt from any precipitate. Heat again with frequent agitation until the medium boils well. Dispense into final containers and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: CLB30100, 500 ml: CLB30500
Tubed media:	150 x 15 mm: CLB40015 (15 ml)
Colour:	Yellowish, homogeneous turbid
pH (at 25 °C):	7,0 – 7,2

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Peptones	23,700
L-Asparagine	1,250
L-Cystine	0,500
Glucose	6,000
Sodium chloride	2,500
Sodium citrate	1,000
Sodium thioglycollate	0,500
Sodium dithionite	0,400
Mg(II), Ca(II), Co(II), Cu(II), Fe(III), Zn(II), Mn(II) salts	0,410
Lecithin	1,000
Resazurin	0,001
Buffers	2,000
Agar	0,750

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Staphylococcus aureus</i>	ATCC 29213	Good	
<i>Clostridium perfringens</i>	ATCC 13124	Good (under anaerobic conditions)	

References: Clausen (1956) Acta path. microbiol. scand. 38: 107.

CLED AGAR

A differential medium for the isolation and enumeration of micro-organisms from urine.

Dehydrated media

Code Number:	500 g: CLA20500, 5 kg: CLA25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,3 (approx.) at 25 °C

Direction: Suspend **37 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: CLA30100, 500 ml: CLA30500
Plated media:	55 mm: CLA50055, 90 mm: CLA50090
Colour:	Turquoise green
pH (25 °C):	7,2 – 7,4

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	11,900
L-Cystine	0,128
Lactose	10,000
Bromothymol blue	0,020
Agar	15,000

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good, yellow colonies	
<i>Proteus mirabilis</i>	ATCC 29906	Good, blue colonies without swarming	
<i>Enterococcus faecalis</i>	ATCC 29212	Good, small yellow colonies	

References: Mackey et al. (1966) Br. Med. J. 1: 1173.

CLED AGAR WITH ANDRADE INDICATOR

A differential medium for the isolation and enumeration of micro-organisms from urine. The double indicator enhances the differentiation of colony characteristics.

Dehydrated media

Code Number:	500 g: CLD20500, 5 kg: CLD25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,3 (approx.) at 25 °C

Direction: Suspend **37 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: CLD30100, 500 ml: CLD30500
Plated media:	55 mm: CLD50055, 90 mm: CLD50090
Colour:	Turquoise green
pH (25 °C):	7,2 – 7,4

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	11,900
L-Cystine	0,128
Lactose	10,000
Andrade indicator	0,100
Bromothymol blue	0,020
Agar	15,000

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good, red colonies	
<i>Proteus mirabilis</i>	ATCC 29906	Good, blue colonies without swarming	
<i>Enterococcus faecalis</i>	ATCC 29212	Good, small red colonies	

References: Bevis (1968) J. Med. Lab. Tech. 25: 38.

II. DEHYDRATED CULTURE MEDIA

CLOSTRIDIUM DIFFICILE (CCFA) AGAR BASE

A selective medium for the isolation of *Clostridium difficile*.

Dehydrated media

Code Number:	500 g: CCF20500, 5 kg: CCF25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,4 (approx.) at 25 °C

Direction: Suspend **34,5 g** in 500 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the contents of **one vial of Clostridium Selective Supplement (CDS80004)** reconstituted with 4 ml of sterile distilled water. Mix well before pouring. Because of the sensitivity of some *Clostridium difficile* strains, the amount of cycloserine and cefoxitin is reduced. If you want to compensate the decreased selectivity, treat the specimen with alcohol before inoculation.

Prepared media

Bottled media:	100 ml: CCF30100, 500 ml: CCF30500
Plated media:	55 mm: CCF50055, 90 mm: CCF50090
Colour:	Brownish
pH (25 °C):	7,3 – 7,5

Direction: Supplement the melted bottled media according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	40,00
Fructose	6,00
Sodium chloride	2,00
Magnesium sulphate	0,20
Neutral red	0,03
Buffers	5,80
Agar	20,00

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 48 h
<i>Clostridium difficile</i>	ATCC 9689	Good, yellow colonies (under anaerobic conditions)	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	
<i>Staphylococcus aureus</i>	ATCC 29213	Inhibited	

References: George et al. (1976) J. Clin. Microbiol. 9: 214.

CLOSTRIDIUM DIFFICILE AGAR BASE

A selective medium for the isolation of *Clostridium difficile*.

Dehydrated media

Code Number:	500 g: CDA20500, 5 kg: CDA25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,4 (approx.) at 25 °C

Direction: Suspend **34,5 g** in 460 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically **35 ml of sterile defibrinated blood** and the contents of **one vial of Clostridium Selective Supplement (CDS80004)** reconstituted with 4 ml of sterile distilled water. Mix well before pouring.

Because of the sensitivity of some *Clostridium difficile* strains, the amount of cycloserine and cefoxitin is reduced. If you want to compensate the decreased selectivity, treat the specimen with alcohol before inoculation.

Prepared media

Bottled media:	100 ml: CDA30100, 500 ml: CDA30500
Plated media:	55 mm: CDA50055, 90 mm: CDA50090
Colour of bottled media:	Yellowish
Colour of plated media:	Dark red
pH (25 °C):	7,3 – 7,5

Direction: Supplement the melted bottled media according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	40,0
Fructose	6,0
Sodium chloride	2,0
Magnesium sulphate	0,1
Buffers	5,9
Agar	15,0

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 48 h
<i>Clostridium difficile</i>	ATCC 9689	Good, greyish white colonies (under anaerobic conditions)	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	
<i>Staphylococcus aureus</i>	ATCC 29213	Inhibited	

References: George et al. (1976) J. Clin. Microbiol. 9: 214.

COLUMBIA AGAR, PH EUR – USP

A multi-purpose non-selective medium for the cultivation of non-fastidious and fastidious micro-organisms according to PH EUR (Agar Medium Q – Harmonised).

Dehydrated media

Code Number:	500 g: CLE20500, 5 kg: CLE25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,3 (approx.) at 25 °C

Direction: Suspend **42 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. If addition of supplement is necessary, cool to 50 °C and add aseptically the sterile supplement (e.g. 20 mg/litre gentamicin sulphate according to the pharmacopoeia). Mix well before pouring.

Prepared media

Bottled media:	100 ml: CLE30100, 500 ml: CLE30500
Plated media:	55 mm: CLE50055, 90 mm: CLE50090
Colour:	Yellowish
pH (at 25 °C):	7,2 – 7,4

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. If necessary, supplement may be added to the melted bottled medium according to the direction of the dehydrated media. Media in Petri-dishes are ready to use.

II. DEHYDRATED CULTURE MEDIA

FORMULA in g/l

Casein peptone	10
Meat peptone	5
Heart infusion	3
Yeast extract	5
Starch, soluble	1
Sodium chloride	5
Agar	13

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good	
<i>Staphylococcus aureus</i>	ATCC 29213	Good	
<i>Clostridium sporogenes</i>	ATCC 19404	Good (under anaerobic conditions)	

References: European Pharmacopoeia

COLUMBIA BLOOD AGAR BASE

A multi-purpose non-selective medium for the cultivation of non-fastidious and fastidious micro-organisms.

Dehydrated media

Code Number:	500 g: COL20500, 5 kg: COL25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,3 (approx.) at 25 °C

Direction for Columbia Blood Agar: Suspend **42 g** in 950 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically **50 ml of sterile defibrinated sheep blood**. Mix well before pouring.

Direction for Columbia Blood Agar + Ampicillin: Dissolve the contents of **one vial of Ampicillin (5 mg) Supplement (AMP80004)** with 4 ml of sterile distilled water and add aseptically to the above at 50 °C. Mix well before pouring.

Direction for Gardnerella Selective Agar: Dissolve the contents of **one vial of Gardnerella Selective Supplement (GAS80004)** with 4 ml of sterile distilled water and add aseptically to the above at 50 °C. Mix well before pouring.

Prepared media

Bottled media:	100 ml: COL30100, 500 ml: COL30500
Plated Columbia Blood Agar:	55 mm: COL50055, 90 mm: COL50090
Plated Columbia Blood Agar + Ampicillin	55 mm: COL50055-AM, 90 mm: COL50090-AM
Plated Gardnerella Selective Agar:	55 mm: COL50055-GA, 90 mm: COL50090-GA
Colour of bottled agar:	Yellowish
Colour of plated agars:	Ruby red
pH (at 25 °C):	7,2 – 7,4

Direction: Supplement the melted bottled media according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Nutrient substrate (peptones, extracts)	23
Starch, soluble	1
Sodium chloride	5
Agar	13

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control of Columbia Blood Agar:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Streptococcus pneumoniae</i>	ATCC 49619	Good, alpha haemolysis (under micro-aerobic conditions)	
<i>Streptococcus pyogenes</i>	ATCC 19615	Good, beta haemolysis (under micro-aerobic conditions)	
<i>Enterococcus faecalis</i>	ATCC 29212	Good, without haemolysis	

Quality Control of Columbia Blood Agar + Ampicillin:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Pseudomonas aeruginosa</i>	ATCC 27853	Good	
<i>Streptococcus pyogenes</i>	ATCC 19615	Inhibited (under micro-aerobic conditions)	

Quality Control of Gardnerella Selective Agar:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 48 h
<i>Gardnerella vaginalis</i>	ATCC 14018	Good, beta haemolysis (under micro-aerobic conditions)	
<i>Proteus mirabilis</i>	ATCC 29906	Inhibited	

References: Ellner et al. (1966) Am. J. Clin. Pathol. 45: 502.

COLUMBIA CNA AGAR BASE

A selective medium for the isolation and differentiation of Gram-positive micro-organisms.

Dehydrated media

Code Number:	500 g: CNA20500, 5 kg: CNA25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,3 (approx.) at 25 °C

Direction: Suspend **42 g** in 950 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 115 °C for 15 minutes. Cool to 50 °C and add aseptically **50 ml of sterile defibrinated sheep blood**. Mix well before pouring.

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: CNA30100, 500 ml: CNA30500
Plated media:	55 mm: CNA50055, 90 mm: CNA50090
Colour of bottled agar:	Yellowish
Colour of plated agar:	Ruby red
pH (at 25 °C):	7,2 – 7,4

Direction: Supplement the melted bottled media according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Nutrient substrate (peptones, extracts)	23,00
Starch, soluble	1,00
Sodium chloride	5,00
Nalidixic acid	0,01
Colistin	0,01
Agar	13,00

Note: The typical formula can be adjusted to obtain optimal performance.

II. DEHYDRATED CULTURE MEDIA

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Streptococcus pneumoniae</i>	ATCC 49619	Good, alpha haemolysis (under micro-aerobic conditions)	
<i>Streptococcus pyogenes</i>	ATCC 19615	Good, beta haemolysis (under micro-aerobic conditions)	
<i>Enterococcus faecalis</i>	ATCC 29212	Good, without haemolysis	
<i>Escherichia coli</i>	ATCC 29906	Inhibited	

References: Ellner et al. (1966) Am. J. Clin. Pathol. 45: 502.

CZAPEK YEAST EXTRACT AGAR

A selective medium for the cultivation of fungi and soil bacteria.

Dehydrated media

Code Number:	500 g: CYA20500, 5 kg: CYA25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	6,3 (approx.) at 25 °C

Direction: Suspend **55 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: CYA30100, 500 ml: CYA30500
Plated media:	55 mm: CYA50055, 90 mm: CYA50090
Colour:	Yellowish
pH (25 °C):	6,2 – 6,4

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Yeast extract	5,000
Sucrose	30,000
Sodium nitrate	3,000
Magnesium sulphate	0,500
Potassium chloride	0,500
Ferrous sulphate	0,010
Zinc sulphate	0,010
Copper sulphate	0,005
Buffers	1,500
Agar	14,500

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 48 h
<i>Aspergillus niger</i>	ATCC 16404	Good	
<i>Candida albicans</i>	ATCC 10231	Good	
<i>Saccharomyces cerevisiae</i>	ATCC 9763	Good	
<i>Bacillus subtilis</i>	ATCC 6633	Good	

References: Warcup (1950) Nature 166: 117.

CZAPEK-DOX AGAR

A selective medium for the cultivation of fungi and soil bacteria.

Dehydrated media

Code Number:	500 g: CZA20500, 5 kg: CZA25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,3 (approx.) at 25 °C

Direction: Suspend **48 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. If adjustment of pH is necessary to pH 3,5 (approx.), cool to 50 °C and add aseptically **Lactic Acid Solution (LAS80100)** to the medium in the necessary quantity (approx. 10 ml). Mix well before pouring.

Warning!

Once acidified with lactic acid, the medium should not be reheated.

Prepared media

Bottled media:	100 ml: CZA30100, 500 ml: CZA30500
Plated media:	55 mm: CZA50055, 90 mm: CZA50090
Colour:	Yellowish
pH (25 °C):	7,2 – 7,4

Direction: If adjustment of pH is necessary, complete according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Sucrose	30,00
Sodium nitrate	3,00
Magnesium sulphate	0,50
Potassium chloride	0,50
Ferrous sulphate	0,01
Buffers	1,00
Agar	13,00

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 48 h
<i>Aspergillus niger</i>	ATCC 16404	Good	
<i>Candida albicans</i>	ATCC 10231	Good	
<i>Saccharomyces cerevisiae</i>	ATCC 9763	Good	
<i>Bacillus subtilis</i>	ATCC 6633	Good	

References: APHA (1992) Standard Methods for the Examination of Water and Wastewater, 18th ed.

DEOXYCHOLATE CITRATE AGAR, HYNES, MODIFIED

A selective and differential medium for the isolation of Gram-negative enteric microorganisms. Deoxycholate Citrate Agar, Hynes is more selective than Deoxycholate Citrate Agar, Leifson. The medium supplemented with phenylalanine is suitable to distinguish *Salmonella* spp. from *Proteus* spp.

Dehydrated media

Code Number:	500 g: DCH20500, 5 kg: DCH25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,0 (approx.) at 25 °C

II. DEHYDRATED CULTURE MEDIA

Direction: Suspend **73 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Mix well before pouring.

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: DCH30100, 500 ml: DCH30500
Plated media:	55 mm: DCH50055, 90 mm: DCH50090
Colour:	Brownish
pH (at 25 °C):	6,9 – 7,1

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	26,50
L-Phenylalanine	1,00
Lactose	10,00
Sodium citrate	9,00
Sodium thiosulphate	5,50
Sodium deoxycholate	5,00
Ferric citrate	1,00
Neutral red	0,02
Agar	15,00

Note: The typical composition can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Partially inhibited, rose-red colonies	
<i>Salmonella typhimurium</i>	ATCC 14028	Good, colourless colonies with shiny black centre without brown halo	
<i>Proteus mirabilis</i>	ATCC 29906	Good, brown colonies with matt black centre with brown halo without swarming	
<i>Enterococcus faecalis</i>	ATCC 29212	Inhibited	

References: Hynes (1942) J. Path. Bact. 54: 193.

DEOXYCHOLATE CITRATE AGAR, LEIFSON, MODIFIED

A selective and differential medium for the isolation of Gram-negative enteric micro-organisms. Deoxycholate Citrate Agar, Leifson is less selective than Deoxycholate Citrate Agar, Hynes. The medium supplemented with phenylalanine is suitable to distinguish *Salmonella* spp. from *Proteus* spp.

Dehydrated media

Code Number:	500 g: DCC20500, 5 kg: DCC25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,0 (approx.) at 25 °C

Direction: Suspend **66 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Mix well before pouring.

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: DCC30100, 500 ml: DCC30500
Plated media:	55 mm: DCC50055, 90 mm: DCC50090
Colour:	Brownish
pH (at 25 °C):	6,9 – 7,1

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	26,50
L-Phenylalanine	1,00
Lactose	10,00
Sodium citrate	5,00
Sodium thiosulphate	5,00
Sodium deoxycholate	2,50
Ferric citrate	1,00
Neutral red	0,02
Agar	15,00

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Partially inhibited, rose-red colonies	
<i>Salmonella typhimurium</i>	ATCC 14028	Good growth, colourless colonies with shiny black centre without brown halo	
<i>Proteus mirabilis</i>	ATCC 29906	Good growth without swarming, brown colonies with matt black centre with brown halo	
<i>Enterococcus faecalis</i>	ATCC 29212	Inhibited	

References: Leifson (1935) J. Path. Bact. 40: 581.

DEOXYCHOLATE CITRATE AGAR, PH EUR

A selective and differential medium for the isolation of Gram-negative enteric micro-organisms according to PH EUR (Agar Medium J).

Dehydrated media

Code Number:	500 g: DCE20500, 5 kg: DCE25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,3 (approx.) at 25 °C

Direction: Suspend **70 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Mix well before pouring.

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: DCE30100, 500 ml: DCE30500
Plated media:	55 mm: DCE50055, 90 mm: DCE50090
Colour:	Brownish
pH (at 25 °C):	7,2 – 7,4

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

II. DEHYDRATED CULTURE MEDIA

FORMULA in g/l

Meat peptone	10,00
Beef extract	10,00
Lactose monohydrate	10,00
Sodium citrate	20,00
Sodium deoxycholate	5,00
Ferric citrate	1,00
Neutral red	0,02
Agar	14,00

Note: The typical composition can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Partially inhibited, rose-red colonies	
<i>Salmonella typhimurium</i>	ATCC 14028	Good, colourless colonies with black centre	
<i>Proteus mirabilis</i>	ATCC 29906	Partially inhibited, colourless colonies with black centre without swarming	
<i>Enterococcus faecalis</i>	ATCC 29212	Inhibited	

References: European Pharmacopoeia

DEOXYCHOLATE LACTOSE AGAR

A selective and differential medium for the enumeration and isolation of coliform micro-organisms.

Dehydrated media

Code Number:	500 g: DCL20500, 5 kg: DCL25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,2 (approx.) at 25 °C

Direction: Suspend **45 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Mix well before pouring.

Warning!

The medium is heat sensitive.

No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: DCL30100, 500 ml: DCL30500
Plated media:	55 mm: DCL50055, 90 mm: DCL50090
Colour:	Brownish
pH (at 25 °C):	7,1 – 7,3

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	14,500
Lactose	10,000
Sodium chloride	5,000
Sodium citrate	2,000
Sodium deoxycholate	0,500
Neutral red	0,033
Agar	13,000

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good, rose-red colonies	
<i>Proteus mirabilis</i>	ATCC 29906	Good growth, colourless colonies without swarming	
<i>Enterococcus faecalis</i>	ATCC 29212	Inhibited	

References: APHA (1992) Compendium of Methods for the Microbiological Examinations of Foods, 3rd ed.

DEXTROSE BROTH

A general purpose enrichment medium that is also suitable for dextrose fermentation studies.

Dehydrated media

Code Number:	500 g: DEB20500, 5 kg: DEB25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,3 (approx.) at 25 °C

Direction: Suspend **20 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into final containers. Durham tubes may be added to the tubes in order to detect gas production. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: DEB30100, 500 ml: DEB30500
Tubed media:	100 x 12 mm: DEB40001 (1 ml), 100 x 15 mm: DEB40005 (5 ml)
Colour:	Yellowish
pH (at 25 °C):	7,2 – 7,4

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Peptones	10
Glucose	5
Sodium chloride	5

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good (gas production)	
<i>Staphylococcus aureus</i>	ATCC 29213	Good (without gas production)	

II. DEHYDRATED CULTURE MEDIA

DEXTROSE TRYPTONE AGAR

A differential medium for the detection and enumeration of mesophilic and thermophilic aerob micro-organisms.

Dehydrated media

Code Number:	500 g: DTR20500, 5 kg: DTR25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	6,9 (approx.) at 25 °C

Direction: Suspend **28 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: DTR30100, 500 ml: DTR30500
Plated media:	55 mm: DTR50055, 90 mm: DTR50090
Colour:	Purple
pH (25 °C):	6,8 – 7,0

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Tryptone	10,00
Glucose	5,00
Bromocresol purple	0,04
Agar	13,00

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Bacillus stearothermophilus</i>	ATCC 12980	Good, yellow colonies	

References: Williams (1936) Food Res. 1: 217.

DEXTROSE TRYPTONE BROTH

A differential medium for the detection of mesophilic and thermophilic aerob micro-organisms.

Dehydrated media

Code Number:	500 g: DTB20500, 5 kg: DTB25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	6,9 (approx.) at 25 °C

Direction: Suspend **15 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into final containers and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: DTB30100, 500 ml: DTB30500
Tubed media:	150 x 15 mm: DTB40010 (10 ml)
Colour:	Purple
pH (at 25 °C):	6,8 – 7,0

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Tryptone	10,00
Glucose	5,00
Bromocresol purple	0,04

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Bacillus stearothermophilus</i>	ATCC 12980	Good, colour change to yellow	

References: Williams (1936) Food Res. 1: 217.

DG18 AGAR BASE

A selective medium with low water activity for the enumeration and isolation of yeasts and moulds, especially the xerophilic moulds.

Dehydrated media

Code Number:	500 g: D1820500, 5 kg: D1825000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	5,6 (approx.) at 25 °C

Direction: Fill up **175 ml of Glycerol Supplement (GLC80500)** to one litre with distilled water. Suspend **31 g of dehydrated medium** and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Mix well before pouring.

Prepared media

Bottled media:	100 ml: D1830100, 500 ml: D1830500
Plated media:	55 mm: D1850055, 90 mm: D1850090
Colour:	Yellowish
pH (25 °C):	5,5 – 5,7

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	5,000
Glucose	10,000
Magnesium sulphate	0,500
Chloramphenicol	0,100
Dichloran	0,002
Potassium phosphate, monobasic	1,000
Agar	14,400

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 48 h
<i>Saccharomyces cerevisiae</i>	ATCC 9763	Good	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	

References: Hocking and Pitt (1980) J. Appl. Envir. Micr. 39: 488.
ISO 21527-2: 2008

II. DEHYDRATED CULTURE MEDIA

DIAGNOSTIC SENSITIVITY TEST AGAR

A dual purpose medium for the isolation and antimicrobial susceptibility testing of micro-organisms.

Dehydrated media

Code Number:	500 g: DST20500, 5 kg: DST25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,4 (approx.) at 25 °C

Direction: Suspend 41 g in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: DST30100, 500 ml: DST30500
Plated media:	55 mm: DST50055, 90 mm: DST50090
Colour:	Yellowish
pH (25 °C):	7,3 – 7,5

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	10,00000
Veal heart extract	10,00000
Glucose	2,00000
Sodium chloride	3,00000
Adenine sulphate	0,01000
Guanine hydrochloride	0,01000
Uracil	0,01000
Xanthine	0,01000
Thiamine HCl	0,00003
Buffers	3,00000
Agar	13,00000

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Pseudomonas aeruginosa</i>	ATCC 27853	Good	
<i>Enterococcus faecalis</i>	ATCC 29212	Good	

References: Ericsson et al. (1971) Acta Path. Microbiol. Scan. B. Suppl. 217.

DIASALM MEDIUM BASE

A semi-solid selective medium for the detection of motile *Salmonella* spp.

Dehydrated media

Code Number:	500 g: DIM20500, 5 kg: DIM25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
Final pH:	5,5 (approx.) at 25 °C

Direction: Fill up 20 ml of DIASALM-MSRV Magnesium Chloride Solution (DSM80500) to 500 ml with distilled water. Suspend 20 g of dehydrated medium and heat with frequent agitation until the medium boils well. Cool to 50 °C and add aseptically the contents of one vial of Novobiocin (5 mg) Supplement (DSN80004-05) reconstituted with 4 ml of sterile distilled water. Mix well before pouring.

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: DIM30100, 500 ml: DIM30500
Colour:	Green
pH (at 25 °C):	5,4 – 5,6

Direction: Supplement the melted bottled media according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA OF ONE LITRE OF THE COMPLETE MEDIUM in g/l

Peptones	27,000
Sucrose	7,500
Lactose	0,500
Magnesium chloride, anhydrous	10,930
Sodium thiosulphate	0,800
Ferrous ammonium sulphate	0,200
Bromocresol purple	0,080
Malachite green	0,037
Buffers	1,200
Agar	2,700

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Salmonella typhimurium</i>	ATCC 14028	Good, colour motile zone	
<i>Pseudomonas aeruginosa</i>	ATCC 27853	Inhibited	

References: Van der Zee and Van Netten (1992) Proc. Symp. "Salmonella and Salmonellosis". Ploufragan: 69.

DNASE AGAR

A differential medium for the detection of deoxyribonuclease activity of micro-organisms.

Dehydrated media

Code Number:	500 g: DNA20500, 5 kg: DNA25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,3 (approx.) at 25 °C

Direction: Suspend 40 g in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: DNA30100, 500 ml: DNA30500
Plated media:	55 mm: DNA50055, 90 mm: DNA50090
Colour:	Yellowish
pH (25 °C):	7,2 – 7,4

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Tryptose	20
Sodium chloride	5
Deoxyribonucleic acid	2
Agar	13

II. DEHYDRATED CULTURE MEDIA

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Staphylococcus aureus</i>	ATCC 29213	Good, with clear zone (flooded with 1N HCl)	
<i>Staphylococcus epidermidis</i>	ATCC 14990	Good, without clear zone (flooded with 1N HCl)	

References: Jeffries et al. (1957) J. Bact. 73: 590.

DNASE AGAR WITH MANNITOL

A differential medium for the detection of deoxyribonuclease activity of micro-organisms.

Dehydrated media

Code Number:	500 g: DNM20500, 5 kg: DNM25000
Colour:	Pinkish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,3 (approx.) at 25 °C

Direction: Suspend **50 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: DNM30100, 500 ml: DNM30500
Plated media:	55 mm: DNM50055, 90 mm: DNM50090
Colour:	Red
pH (25 °C):	7,2 – 7,4

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Tryptose	20,00
Mannitol	10,00
Sodium chloride	5,00
Deoxyribonucleic acid	2,00
Phenol red	0,02
Agar	13,00

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Staphylococcus aureus</i>	ATCC 29213	Good, yellow colonies with yellow halo	
<i>Staphylococcus epidermidis</i>	ATCC 14990	Good, red colonies with red halo	

References: Jeffries et al. (1957) J. Bact. 73: 590.

DNASE AGAR WITH METHYL GREEN

A differential medium for the detection of deoxyribonuclease activity of micro-organisms.

Dehydrated media

Code Number:	500 g: DNG20500, 5 kg: DNG25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,3 (approx.) at 25 °C

Direction: Suspend **40 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: DNG30100, 500 ml: DNG30500
Plated media:	55 mm: DNG50055, 90 mm: DNG50090
Colour:	Green
pH (25 °C):	7,2 – 7,4

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Tryptose	20,00
Sodium chloride	5,00
Deoxyribonucleic acid	2,00
Methyl green	0,05
Agar	13,00

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Staphylococcus aureus</i>	ATCC 29213	Good, with colourless halo	
<i>Staphylococcus epidermidis</i>	ATCC 14990	Good, without halo	

References: Jeffries et al. (1957) J. Bact. 73: 590.

DNASE AGAR WITH TOLUIDIN BLUE

A differential medium for the detection of deoxyribonuclease activity of micro-organisms.

Dehydrated media

Code Number:	500 g: DNT20500, 5 kg: DNT25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,3 (approx.) at 25 °C

Direction: Suspend **40 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: DNT30100, 500 ml: DNT30500
Plated media:	55 mm: DNT50055, 90 mm: DNT50090
Colour:	Blue
pH (25 °C):	7,2 – 7,4

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

II. DEHYDRATED CULTURE MEDIA

FORMULA in g/l

Tryptose	20,0
Sodium chloride	5,0
Deoxyribonucleic acid	2,0
Toluidine blue	0,1
Agar	13,0

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Staphylococcus aureus</i>	ATCC 29213	Good, with pink halo	
<i>Staphylococcus epidermidis</i>	ATCC 14990	Good, without halo	

References: Jeffries et al. (1957) J. Bact. 73: 590.

DRIGALSKI GLUCOSE AGAR

A glucose containing selective and differential medium for detection and enumeration of Enterobacteriaceae.

Dehydrated media

Code Number:	500 g: DAC20500, 5 kg: DAC25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
Final pH:	7,3 (approx.) at 25 °C

Direction: Suspend **47 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Mix well before pouring.

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: DAC30100, 500 ml: DAC30500
Plated media:	55 mm: DAC50055, 90 mm: DAC50090
Colour:	Green
pH (25 °C):	7,2 – 7,4

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	18,400
Bile salt	1,500
Glucose	10,000
Sodium chloride	2,000
Bromothymol blue	0,150
Crystal violet	0,002
Agar	15,000

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good, yellow colonies	
<i>Proteus mirabilis</i>	ATCC 29906	Good, yellow colonies without swarming	
<i>Enterococcus faecalis</i>	ATCC 29212	Inhibited	

References: Ewing (1986) Edwards and Ewing's identifications of the enterobacteriaceae, 4th ed.

DRIGALSKI LACTOSE AGAR

A lactose containing selective and differential medium for detection and enumeration of coliforms.

Dehydrated media

Code Number:	500 g: DAS20500, 5 kg: DAS25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
Final pH:	7,3 (approx.) at 25 °C

Direction: Suspend **66 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Mix well before pouring.

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: DAS30100, 500 ml: DAS30500
Plated media:	55 mm: DAS50055, 90 mm: DAS50090
Colour:	Green
pH (25 °C):	7,2 – 7,4

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	17,400
Bile salt	1,500
Sucrose	17,000
Lactose	13,000
Sodium chloride	2,000
Bromothymol blue	0,150
Crystal violet	0,002
Agar	15,000

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good, yellow colonies	
<i>Proteus mirabilis</i>	ATCC 29906	Good, blue colonies without swarming	
<i>Enterococcus faecalis</i>	ATCC 29212	Inhibited	

References: Ewing (1986) Edwards and Ewing's identifications of the enterobacteriaceae, 4th ed.

II. DEHYDRATED CULTURE MEDIA

DTM AGAR BASE

A highly selective medium for the isolation of dermatophytes.

Dehydrated media

Code Number:	500 g: DTM20500, 5 kg: DTM25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	5,5 (approx.) at 25 °C

Direction: Suspend 20 g in 500 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the contents of one vial of DTM Selective Supplement (DTS80004), reconstituted with 4 ml of 1:1 mixture of ethanol and sterile distilled water. Mix well before pouring.

Prepared media

Bottled media:	100 ml: DTM30100, 500 ml: DTM30500
Plated media:	55 mm: DTM50055, 90 mm: DTM50090
Tubed media:	150 x 15 mm: DTM40006 (6 ml, slant)
Colour:	Orange red
pH (25 °C):	5,4 – 5,6

Direction: Supplement the melted bottled media according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes or tubes. Media in Petri-dishes and tubes are ready to use.

FORMULA in g/l

Peptones	10,0
Glucose	10,0
Phenol red	0,2
Agar	20,0

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled and tubed media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 48 h
<i>Candida albicans</i>	ATCC 10231	Good	
<i>Aspergillus brasiliensis</i>	ATCC 16404	Inhibited	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	

References: Taplin et al. (1969) Arch. Dermatol. 99: 203.

EC BROTH

A selective and differential medium for the detection of coliforms.

Dehydrated media

Code Number:	500 g: ECB20500, 5 kg: ECB25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	6,8 (approx.) at 25 °C

Direction: Suspend 40 g in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into test tubes fitted with Durham tube and sterilise by autoclaving at 115 °C for 15 minutes. Cool quickly!

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: ECB30100, 500 ml: ECB30500
Tubed media:	150 x 15 mm: ECB40010 (10 ml)
Colour:	Yellowish
pH (at 25 °C):	6,7 – 6,9

Direction: Dispense the bottled media aseptically into sterile test tubes fitted with Durham tube. Media in tubes are ready to use.

FORMULA in g/l

Peptones	23,0
Bile salts	1,5
Lactose	5,0
Sodium chloride	5,0
Buffers	5,5

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good with intense gas production	
<i>Enterobacter aerogenes</i>	ATCC 13048	Good with gas production	
<i>Enterococcus faecalis</i>	ATCC 29213	Inhibited	

References: Hajna and Perry (1943) Am. J. Public. Health. 33: 550.

EDWARDS AGAR BASE

A selective medium for the isolation and enumeration of streptococci especially *Streptococcus agalactiae*.

Dehydrated media

Code Number:	500 g: EDA20500, 5 kg: EDA25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,4 (approx.) at 25 °C

Direction: Suspend 41 g in 950 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically 50 ml of sterile defibrinated sheep blood. Mix well before pouring.

Prepared media

Bottled media:	100 ml: EDA30100, 500 ml: EDA30500
Plated media:	55 mm: EDA50055, 90 mm: EDA50090
Colour of bottled agar:	Purplish
Colour of plated agar:	Ruby red
pH (at 25 °C):	7,3 – 7,5

Direction: Supplement the melted bottled media according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	20,000
Sodium chloride	5,000
Esculin	1,000
Thallos acetate	0,300
Crystal violet	0,001
Agar	14,700

Note: The typical formula can be adjusted to obtain optimal performance.

II. DEHYDRATED CULTURE MEDIA

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Streptococcus agalactiae</i>	ATCC 49619	Good, blue colonies	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	

References: Edwards (1933) J. Comp. Path. Therap. 46: 211.

EE BROTH, PH EUR – USP

A selective medium for the cultivation of Enterobacteriaceae according to PH EUR (Broth Medium E – Enterobacteriaceae Enrichment Broth, Mossel – Harmonised).

Dehydrated media

Code Number:	500 g: EEB20500, 5 kg: EEB25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
Final pH:	7,2 (approx.) at 25 °C

Direction: Suspend **45 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into final containers and sterilise at 100 °C for 30 minutes. Cool quickly!

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: EEB30100, 500 ml: EEB30500
Tubed media:	150 x 15 mm: EEB40010 (10 ml)
Colour:	Green
pH (at 25 °C):	7,1 – 7,3

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Gelatin peptone	10,000
Bacteriological bile	20,000
Glucose monohydrate	5,000
Brilliant green	0,015
Potassium phosphate, monobasic	2,000
Sodium phosphate, dibasic, dihydrate	8,000

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good, colour change to yellow	
<i>Staphylococcus aureus</i>	ATCC 29213	Inhibited	

References: Mossel et al. (1963) J. Appl. Bact. 26: 444.
European Pharmacopoeia

ELLIKER BROTH

A selective medium for the cultivation of streptococci and lactobacilli.

Dehydrated media

Code Number:	500 g: ELB20500, 5 kg: ELB25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	6,8 (approx.) at 25 °C

Direction: Suspend **49 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into final containers and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: ELB30100, 500 ml: ELB30500
Tubed media:	150 x 15 mm: ELB40010 (10 ml)
Colour:	Yellowish
pH (at 25 °C):	6,7 – 6,9

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Peptones	25,5
Glucose	5,0
Lactose	5,0
Sucrose	5,0
Sodium chloride	4,0
Sodium acetate	1,5
Gelatin	2,5
Ascorbic acid	0,5

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Lactobacillus casei</i>	ATCC 7469	Good	
<i>Streptococcus pyogenes</i>	ATCC 19615	Good	

References: McLaughlin (1946) J. Bacteriol. 51: 560.

ENDO AGAR BASE, DEV

A selective and differential medium for the detection of coliforms and other enteric bacteria according to DEV.

Dehydrated media

Code Number:	500 g: EDE20500, 5 kg: EDE25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	6,9 (approx.) at 25 °C

Direction: Suspend **58 g** in one litre of distilled water. Add **5 ml of Endo Basic Fuchsin Solution, DEV (FBS80045)**. Mix well and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Mix well again before pouring.

Prepared media

Bottled media:	100 ml: EDE30100, 500 ml: EDE30500
Plated media:	55 mm: EDE50055, 90 mm: EDE50090
Colour:	Pale pink
pH (25 °C):	6,8 – 7,0

II. DEHYDRATED CULTURE MEDIA

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	20,5
Lactose	10,0
Sodium chloride	5,0
Sodium sulphite	2,5
Agar	20,0

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good, dark red colonies with green metallic sheen	
<i>Salmonella typhimurium</i>	ATCC 14028	Good, colourless colonies	
<i>Enterococcus faecalis</i>	ATCC 29212	Inhibited	

References: DIN 38411

ENDO AGAR BASE

A selective and differential medium for the detection of coliforms and other enteric bacteria.

Dehydrated media

Code Number:	500 g: END20500, 5 kg: END25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,4 (approx.) at 25 °C

Direction: Suspend **42 g** in one litre of distilled water. Add **5 ml of Endo Basic Fuchsin Solution (FBS80060)**. Mix well and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Mix well again before pouring.

Prepared media

Bottled media:	100 ml: END30100, 500 ml: END30500
Plated media:	55 mm: END50055, 90 mm: END50090
Colour:	Pale pink
pH (25 °C):	7,3 – 7,5

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	12,0
Lactose	10,0
Sodium sulphite	2,5
Buffers	2,5
Agar	15,0

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good, dark red colonies with green metallic sheen	
<i>Salmonella typhimurium</i>	ATCC 14028	Good, colourless colonies	
<i>Enterococcus faecalis</i>	ATCC 29212	Inhibited	

References: APHA (1998) Standard Methods for the Examination of Water and Wastewater. 20th ed.

ENDO LES AGAR BASE

A selective and differential medium for the enumeration of coliforms by membrane filtration.

Dehydrated media

Code Number:	500 g: ELA20500, 5 kg: ELA25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,2 (approx.) at 25 °C

Direction: Suspend **50 g** in one litre of distilled water. Add **5 ml of Endo Basic Fuchsin Solution (FBS80060)**. Mix well and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Mix well again before pouring.

Prepared media

Bottled media:	100 ml: ELA30100, 500 ml: ELA30500
Plated media:	55 mm: ELA50055, 90 mm: ELA50090
Colour:	Pale pink
pH (25 °C):	7,1 – 7,3

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	15,00
Lactose	10,00
Sodium chloride	3,70
Sodium sulphite	1,60
Sodium deoxycholate	0,10
Sodium lauryl sulphate	0,05
Buffers	4,50
Agar	15,00

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good, dark red colonies with green metallic sheen	
<i>Salmonella typhimurium</i>	ATCC 14028	Good, colourless colonies	
<i>Enterococcus faecalis</i>	ATCC 29212	Inhibited	

References: McCarthy et al. (1961) Water Sewage Works 108: 238.

II. DEHYDRATED CULTURE MEDIA

ENDO M BROTH BASE

A selective and differential medium for one-step method of the enumeration of coliforms by membrane filtration.

Dehydrated media

Code Number:	500 g: ENB20500, 5 kg: ENB25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,2 (approx.) at 25 °C

Direction: Suspend **48 g** in one litre of distilled water. Add **10 ml of Endo Basic Fuchsin Solution (FBS80060)**. Mix well and heat with frequent agitation until the medium boils well. Cool and dispense aseptically into final containers.

Warning!

The medium is heat sensitive. No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: ENB30100, 500 ml: ENB30500
Tubed media:	100 x 12 mm: ENB40002 (2 ml)
Colour:	Pinkish red
pH (at 25 °C):	7,1 – 7,3

Direction: Supplement the bottled media according to the direction of the dehydrated media and dispense aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Peptones	22,50
Lactose	12,50
Sodium chloride	5,00
Sodium sulphite	2,10
Sodium deoxycholate	0,10
Sodium lauryl sulphate	0,05
Buffers	5,75

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth on membrane filter	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good, dark red colonies with green metallic sheen	
<i>Salmonella typhimurium</i>	ATCC 14028	Good, colourless colonies	
<i>Enterococcus faecalis</i>	ATCC 29212	Inhibited	

References: APHA (1998) Standard Methods for the Examination of Water and Wastewater, 20th ed.

EOSIN METHYLENE BLUE AGAR, USP

A selective and differential medium for the isolation and differentiation of Gram-negative enteric bacteria according to USP.

Dehydrated media

Code Number:	500 g: EMB20500, 5 kg: EMB25000
Colour:	Pinkish purple
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,0 (approx.) at 25 °C

Direction: Suspend **36 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: EMB30100, 500 ml: EMB30500
Plated media:	55 mm: EMB50055, 90 mm: EMB50090
Colour:	Dark purple
pH (25 °C):	6,9 – 7,1

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	10,500
Lactose	10,000
Eosin Y	0,400
Methylene blue	0,065
Buffers	2,000
Agar	13,000

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good, dark blue colonies with metallic sheen	
<i>Proteus mirabilis</i>	ATCC 29906	Good, colourless colonies without swarming	
<i>Enterococcus faecalis</i>	ATCC 29212	Inhibited	

References: Levine (1918) J. Infect. Dis. 23: 43.
United States Pharmacopoeia

NEW PRODUCT

EOSIN METHYLENE BLUE LACTOSE SUCROSE AGAR

A selective and differential medium for the isolation and differentiation of Gram-negative enteric bacteria.

Dehydrated media

Code Number:	500 g: EMC20500, 5 kg: EMC25000
Colour:	Pinkish purple
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,0 (approx.) at 25 °C

Direction: Suspend **36 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: EMC30100, 500 ml: EMC30500
Plated media:	55 mm: EMC50055, 90 mm: EMC50090
Colour:	Dark purple
pH (25 °C):	6,9 – 7,1

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	10,500
Lactose	5,000
Sucrose	5,000
Eosin Y	0,400
Methylene blue	0,065
Buffers	2,000
Agar	13,000

II. DEHYDRATED CULTURE MEDIA

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good, dark blue colonies with metallic sheen	
<i>Salmonella typhimurium</i>	ATCC 4028	Good, colourless colonies, without swarming	
<i>Enterococcus faecalis</i>	ATCC 29212	Inhibited	

References: APHA (1950) Diagnostic Procedures and Reagents, 2nd ed.

ESCULIN AGAR

A differential medium for the differentiation of bacteria on the basis of esculin hydrolysis.

Dehydrated media

Code Number:	500 g: ESA20500, 5 kg: ESA25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,2 (approx.) at 25 °C

Direction: Suspend **35 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Dispense into test tubes and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media:

Bottled media:	100 ml: ESA30100 500 ml: ESA30500
Tubed media:	100 x 12 mm: ESA40003 (3 ml)
Colour:	Yellowish
pH (25 °C)	7,1 – 7,3

Direction: Dispense the melted bottled media aseptically into sterile test tubes. Media in tubes are ready to use.

FORMULA in g/l

Peptones	18
Ferric citrate	1
Esculin	1
Agar	15

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the tubed media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Enterococcus faecalis</i>	ATCC 29212	Positive, colour change to black	
<i>Streptococcus pyogenes</i>	ATCC 19615	Negative, without colour change	

References: Blazevic and Ederer (1975) Principles of Biochemical Tests in Diag. Microbiol.

ESCULIN BROTH

A differential medium for the differentiation of bacteria on the basis of esculin hydrolysis.

Dehydrated media

Code Number:	500 g: ESB20500, 5 kg: ESB25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,2 (approx.) at 25 °C

Direction: Suspend **12 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into test tubes and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: ESB30100, 500 ml: ESB30500
Tubed media:	100 x 12 mm: ESB40003 (3 ml)
Colour:	Yellowish
pH (at 25 °C):	7,1 – 7,3

Direction: Dispense the bottled media aseptically into sterile test tubes. Media in tubes are ready to use.

FORMULA in g/l

Peptones	10
Esculin	1
Ferric citrate	1

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Enterococcus faecalis</i>	ATCC 29212	Positive, colour change to black	
<i>Streptococcus pyogenes</i>	ATCC 19615	Negative, without colour change	

References: Blazevic and Ederer (1975) Principles of Biochemical Tests in Diag. Microbiol.

ETHYL VIOLET AZIDE (EVA) BROTH

A selective medium for the presumptive identification of enterococci.

Dehydrated media

Code Number:	500 g: EVA20500, 5 kg: EVA25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,0 (approx.) at 25 °C

Direction: Suspend **36 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into final containers and sterilise by autoclaving at 115 °C for 15 minutes.

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: EVA30100, 500 ml: EVA30500
Tubed media:	150 x 15 mm: EVA40010 (10 ml)
Colour:	Greyish
pH (at 25 °C):	6,9 – 7,1

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

II. DEHYDRATED CULTURE MEDIA

FORMULA in g/l

Peptones	20,000
Glucose	5,000
Sodium chloride	5,000
Sodium azide	0,4000
Ethyl violet	0,0008
Buffers	5,6000

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Enterococcus faecalis</i>	ATCC 51299	Good	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	

References: Litsky et al. (1953) Am. J. Pub. Health. 43: 873.

NEW PRODUCT

EUGON LT 100 AGAR BASE

A neutralising medium for the preparation and enrichment of test samples in the cosmetic industries.

Dehydrated media

Code Number:	500 g: EUA20500, 5 kg: EUA25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,0 (approx.) at 25 °C

Direction: Suspend 45 g in one litre of distilled water. Add 5 ml of TWEEN 80 Supplement (TWS80500) and 1 ml of TRITON X-100 Supplement (TXS80100). Mix well and keep the suspension at about 40 - 50 °C until the lecithin dissolves completely (20–30 min). The dissolution is completed, when the medium is yellowish and slightly turbid, but exempt from any precipitate. Heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Warning!

Mix thoroughly before pouring!

Prepared media

Bottled media:	100 ml: EUA30100, 500 ml: EUA30500
Plated media in normal Petri-dishes:	55 mm: EUA50055, 90 mm: EUA50090
Plated media in contact Petri-dishes:	65 mm: EUA50065
Colour:	Yellowish, homogeneous turbid
pH (25 °C):	6,9 – 7,1

Direction: Dispense the melted bottled media aseptically into sterile final containers.

Warning! Mix thoroughly before pouring! Media in Petri-dishes are ready to use.

FORMULA in g/l

Casein peptone	15,6
Soya peptone	5,0
Glucose	5,5
Sodium chloride	4,0
Sodium sulphite	0,2
L-Cysteine	0,7
Lecithin	1,0
Agar	13,0

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good	
<i>Pseudomonas aeruginosa</i>	ATCC 27853	Good	
<i>Staphylococcus aureus</i>	ATCC 29213	Good	
<i>Candida albicans</i>	ATCC 10231	Good	
<i>Aspergillus brasiliensis</i>	ATCC 16404	Good	

References: ISO 21148

NEW PRODUCT

EUGON LT 100 BROTH BASE

A neutralising medium for the preparation and enrichment of test samples in the cosmetic industries.

Dehydrated media

Code Number:	500 g: EUB20500, 5 kg: EUB25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,0 (approx.) at 25 °C

Direction: Suspend 32 g in one litre of distilled water. Add 5 ml of TWEEN 80 Supplement (TWS80500) and 1 ml of TRITON X-100 Supplement (TXS80100). Mix well and keep the suspension at about 40–50 °C until the lecithin dissolves completely (20–30 min). The dissolution is completed, when the medium is yellowish and slightly turbid, but exempt from any precipitate. Dispense into final containers. Sterilise by autoclaving at 121 °C for 15 minutes.

Warning!

Mix thoroughly before use!

Prepared media

Bottled media:	100 ml: EUB30100, 500 ml: EUB30500
Tube media:	150 x 15 mm: EUB40010 (10 ml)
Colour:	Yellowish, homogeneous turbid
pH (at 25 °C):	6,9 – 7,1

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

Warning!

At the bottom of the containers some separation of TWEEN might be observed which has no effect on the quality of the medium. Shaking the containers it disappears.

FORMULA in g/l

Casein peptone	15,6
Soya peptone	5,0
Glucose	5,5
Sodium chloride	4,0
Sodium sulphite	0,2
L-Cysteine	0,7
Lecithin	1,0

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

II. DEHYDRATED CULTURE MEDIA

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good	
<i>Pseudomonas aeruginosa</i>	ATCC 27853	Good	
<i>Staphylococcus aureus</i>	ATCC 29213	Good	
<i>Candida albicans</i>	ATCC 10231	Good	
<i>Aspergillus brasiliensis</i>	ATCC 16404	Good	

References: ISO 21148

FALKOW BROTH

See: Culture Media for Amino Acid Decomposition Studies (page 137)

FluoroBio® BGLB

A selective and differential medium for the detection of coliforms by a fluorogenic procedure.

Dehydrated media

Code Number:	500 g: BBM20500, 5 kg: BBM25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,4 (approx.) at 25 °C

Direction: Suspend **40 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into test tubes fitted with Durham tube and sterilise by autoclaving at 115 °C for 15 minutes. Cool quickly!

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: BBM30100, 500 ml: BBM30500
Tubed media:	150 x 15 mm: BBM40010 (10 ml)
Colour:	Green
pH (at 25 °C):	7,3 – 7,5

Direction: Dispense the bottled media aseptically into sterile test tubes fitted with Durham tube. Media in tubes are ready to use.

FORMULA in g/l

Peptones	10,000
Bacteriological bile	20,000
Lactose	10,000
MUG	0,100
Brilliant green	0,0133

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good, with gas production, colour change to yellow, fluorescence at 366 nm	
<i>Enterobacter aerogenes</i>	ATCC 13048	Good, with gas production, without colour change	
<i>Staphylococcus aureus</i>	ATCC 29213	Inhibited	

References: APHA (1986) Standard Methods for the Examination of Water and Wastewater 15th ed.

Kilian and Bulow (1984) Acta Path. Micr. Scand. Sect. B. 84: 245.

FluoroBio® CLED

A differential medium for the isolation and enumeration of micro-organisms from urine. Differentiation of *E. coli* colonies is possible by a fluorogenic procedure.

Dehydrated media

Code Number:	500 g: CLM20500, 5 kg: CLM25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,3 (approx.) at 25 °C

Direction: Suspend **37 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: CLM30100, 500 ml: CLM30500
Plated media:	55 mm: CLM50055, 90 mm: CLM50090
Colour:	Turquoise green
pH (25 °C):	7,2 – 7,4

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	11,900
L-Cystine	0,128
Lactose	10,000
MUG	0,100
Bromothymol blue	0,020
Agar	15,000

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good, yellow colonies, fluorescence at 366 nm	
<i>Proteus mirabilis</i>	ATCC 29906	Good, blue colonies without swarming	
<i>Enterococcus faecalis</i>	ATCC 29212	Good, small yellow colonies	

References: Mackey et al. (1966) Br. Med. J. 1: 1173.

Kilian and Bulow (1984) Acta Path. Micr. Scand. Sect. B. 84: 245.

FluoroBio® EC

A selective and differential medium for the detection of coliforms by a fluorogenic procedure.

Dehydrated media

Code Number:	500 g: ECM20500, 5 kg: ECM25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	6,8 (approx.) at 25 °C

Direction: Suspend **40 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into test tubes fitted with Durham tube and sterilise by autoclaving at 115 °C for 15 minutes. Cool quickly!

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

II. DEHYDRATED CULTURE MEDIA

Prepared media

Bottled media:	100 ml: ECM30100, 500 ml: ECM30500
Tubed media:	150 x 15 mm: ECM40010 (10 ml)
Colour:	Yellowish
pH (at 25 °C):	6,7 – 6,9

Direction: Dispense the bottled media aseptically into sterile test tubes fitted with Durham tube. Media in tubes are ready to use.

FORMULA in g/l

Peptones	22,9
Bile salts	1,5
Lactose	5,0
Sodium chloride	5,0
MUG	0,1
Buffers	5,5

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good, with intense gas production, fluorescence at 366 nm	
<i>Enterobacter aerogenes</i>	ATCC 13048	Good, with gas production	
<i>Enterococcus faecalis</i>	ATCC 29213	Inhibited	

References: Hajna and Perry (1943) Am. J. Public. Health. 33: 550.
Kilian and Bulow (1984) Acta Path. Micr. Scand. Sect. B. 84: 245.

FluoroBio® ECD

A selective and differential medium for the detection of *Escherichia coli* by a fluorogenic procedure.

Dehydrated media

Code Number:	500 g: EDM20500, 5 kg: EDM25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,0 (approx.) at 25 °C

Direction: Suspend **51 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: EDM30100, 500 ml: EDM30500
Plated media:	55 mm: EDM50055, 90 mm: EDM50090
Colour:	Yellowish
pH (25 °C):	6,9 – 7,1

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	20,0
Bile salts	1,5
Tryptophan	1,0
Lactose	5,0
Sodium chloride	5,0
MUG	0,1
Buffers	5,4
Agar	13,0

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good, fluorescence at 366 nm	
<i>Salmonella typhimurium</i>	ATCC 14028	Good	
<i>Enterococcus faecalis</i>	ATCC 29212	Inhibited	

References: Hajna és Perry (1943) Am. J. Public. Health. 33: 550.
Kilian and Bulow (1984) Acta Path. Micr. Scand. Sect. B. 84: 245.

FluoroBio® LSB

A selective enrichment medium for the detection of coliforms by a fluorogenic procedure.

Dehydrated media

Code Number:	500 g: LSM20500, 5 kg: LSM25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	6,8 (approx.) at 25 °C

Direction: Suspend **35 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into test tubes fitted with Durham tube and sterilise by autoclaving at 115 °C for 15 minutes.

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: LSM30100, 500 ml: LSM30500
Tubed media:	150 x 15 mm: LSM40010 (10 ml)
Colour:	Yellowish
pH (at 25 °C):	6,7 – 6,9

Direction: Dispense the bottled media aseptically into sterile test tubes fitted with Durham tube. Media in tubes are ready to use.

FORMULA in g/l

Peptones	19,5
Lactose	5,0
Sodium chloride	5,0
Sodium lauryl sulphate	0,1
MUG	0,1
Buffers	5,4

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good, with gas production, fluorescence at 366 nm	
<i>Salmonella typhimurium</i>	ATCC 14028	Good, without gas production	
<i>Enterococcus faecalis</i>	ATCC 29213	Inhibited	

References: APHA (1976) Compendium of Methods for the Microbiological Examination of Foods
Kilian and Bulow (1984) Acta Path. Micr. Scand. Sect. B. 84: 245.

II. DEHYDRATED CULTURE MEDIA

FluoroBio® MACCONKEY AGAR

A selective and differential medium for the detection of coliforms and enteric pathogens by a fluorogenic procedure.

Dehydrated media

Code Number:	500 g: MCM20500, 5 kg: MCM25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,1 (approx.) at 25 °C

Direction: Suspend **52 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: MCM30100, 500 ml: MCM30500
Plated media:	55 mm: MCM50055, 90 mm: MCM50090
Colour:	Purplish red
pH (25 °C):	7,0 – 7,2

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	20,500
Bile salts No.3	1,500
Lactose	10,000
Sodium chloride	5,000
MUG	0,100
Neutral red	0,030
Crystal violet	0,001
Agar	15,000

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good, violet-red colonies with precipitate halo, fluorescence at 366 nm	
<i>Proteus mirabilis</i>	ATCC 29906	Good, colourless colonies without swarming	
<i>Enterococcus faecalis</i>	ATCC 29212	Inhibited	

References: MacConkey (1900) The Lancet
Kilian and Bulow (1984) Acta Path. Micr. Scand. Sect. B. 84: 245.

FluoroBio® MACCONKEY BROTH

A selective and differential medium for the detection of coliforms by a fluorogenic procedure.

Dehydrated media

Code Number:	500 g: MNM20500, 5 kg: MNM25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,3 (approx.) at 25 °C

Direction: Suspend **35 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into test tubes fitted with Durham tube and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: MNM30100, 500 ml: MNM30500
Tubed media:	150 x 15 mm: MNM40010 (10 ml)
Colour:	Purple
pH (at 25 °C):	7,2 – 7,4

Direction: Dispense the bottled media aseptically into sterile test tubes fitted with Durham tube. Media in tubes are ready to use.

FORMULA in g/l

Gelatin peptone	20,00
Bacteriological bile	5,00
Lactose monohydrate	10,00
MUG	0,10
Bromocresol purple	0,01

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good, with gas production, colour change to yellow, fluorescence at 366 nm	
<i>Proteus mirabilis</i>	ATCC 29906	Good, without gas production and colour change	
<i>Enterococcus faecalis</i>	ATCC 29212	Inhibited	

References: European Pharmacopoeia
Kilian and Bulow (1984) Acta Path. Micr. Scand. Sect. B. 84: 245.

FluoroBio® VRBL

A lactose containing selective and differential medium for the detection and enumeration of coliforms by a fluorogenic procedure.

Dehydrated media

Code Number:	500 g: VBM20500, 5 kg: VBM25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
Final pH:	7,4 (approx.) at 25 °C

Direction: Suspend **41,5 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Mix well before pouring.

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: VBM30100, 500 ml: VBM30500
Plated media:	55 mm: VBM50055, 90 mm: VBM50090
Colour:	Reddish purple
pH (25 °C):	7,3 – 7,5

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

II. DEHYDRATED CULTURE MEDIA

FORMULA in g/l

Peptones	10,000
Bile salts	1,500
Lactose	10,000
Sodium chloride	5,000
MUG	0,100
Neutral red	0,030
Crystal violet	0,002
Agar	14,900

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good, purplish red colonies with precipitate halo, fluorescence at 366 nm	
<i>Proteus mirabilis</i>	ATCC 29906	Good, colourless colonies without swarming	
<i>Enterococcus faecalis</i>	ATCC 29212	Inhibited	

References: APHA (1978) Standard Method for the Examination of Dairy Product. 14th ed. Kilian and Bulow (1984) Acta Path. Micr. Scand. Sect. B. 84: 245.

GBS AGAR BASE

A differential medium for the isolation and detection of Group B streptococci.

Dehydrated media

Code Number:	500 g: GBS20500, 5 kg: GBS25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,5 (approx.) at 25 °C

Direction: Suspend **47 g** in 950 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically **50 ml of sterile inactivated horse serum** (i.e. serum held at 56 °C for 30 minutes). Mix well before pouring.

Prepared media

Bottled media:	100 ml: GBS30100, 500 ml: GBS30500
Plated media:	55 mm: GBS50055, 90 mm: GBS50090
Colour:	Yellowish
pH (at 25 °C):	7,4 – 7,6

Direction: Supplement the melted bottled media according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	23
Starch soluble	55
Buffers	7
Agar	12

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Streptococcus agalactiae</i>	ATCC 13813	Good, orange – red pigmented colonies	
<i>Enterococcus faecalis</i>	ATCC 29212	Good, without pigmentation	

References: Islam (1977) The Lancet: 256.

GC AGAR BASE

A highly nutritious medium for the isolation and cultivation of fastidious micro-organisms especially *Neisseria* and *Haemophilus* spp.

Dehydrated media

Code Number:	500 g: GCA20500, 5 kg: GCA25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,2 (approx.) at 25 °C

Direction for Thayer Martin Agar: Suspend **19,5 g** in 460 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically **35 ml of sterile defibrinated blood** and "chocolate" by heating at 80 °C for 10 min. Cool to 50 °C. Dissolve the contents of **one vial of Growth Factor Mixture Hydration Fluid** with 5 ml of sterile distilled water and add aseptically to the **Growth Factor Mixture (GFM80005)**. Mix well and add aseptically to the medium. Mix well before pouring.

Direction for Selective Thayer Martin Agar: Dissolve the contents of **one vial of GC Selective Supplement, VCN (VCN80004)** or **GC Selective Supplement, VCNT (VCT80004)** with 4 ml of sterile distilled water and add aseptically to the above at 50 °C. Mix well before pouring.

Prepared media

Bottled media:	100 ml: GCA30100, 500 ml: GCA30500
Plated Thayer-Martin Agar:	55 mm: GCA50055-01, 90 mm: GCA50090-01
Plated Thayer-Martin Agar, Selective, VCN:	55 mm: GCA50055-02, 90 mm: GCA50090-02
Plated Thayer-Martin Agar, Selective, VCNT:	55 mm: GCA50055-03, 90 mm: GCA50090-03
Colour of bottled media:	Yellowish
Colour of plated media:	Chocolate brown
pH (at 25 °C):	7,1 – 7,3

Direction: Supplement the melted bottled media according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Nutrient substrate (peptones, extracts)	15
Sodium chloride	5
Starch soluble	1
Buffers	5
Agar	13

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Haemophilus influenzae</i>	ATCC 49766	Good	
<i>Escherichia coli</i>	ATCC 25922	Inhibited (in case of selective media)	
<i>Staphylococcus aureus</i>	ATCC 29213	Inhibited (in case of selective media)	

References: Thayer and Martin (1966) Public Health Rep. 81: 559.

II. DEHYDRATED CULTURE MEDIA

GIOLITTI-CANTONI BROTH BASE

A selective enrichment medium for the selective cultivation of *Staphylococcus aureus*.

Dehydrated media

Code Number:	500 g: GCB20500, 5 kg: GCB25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,0 (approx.) at 25 °C

Direction: Suspend 27 g in 500 ml of distilled water and heat gently to dissolve the medium completely. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically 30 drops (1,5 ml) of Potassium Tellurite Solution, Sterile (PTS80030). Mix well and dispense aseptically into sterile final containers.

Prepared media

Bottled media:	100 ml: GCB30100, 500 ml: GCB30500
Tubed media:	150 x 15 mm: GCB40010 (10 ml)
Colour:	Yellowish
pH (at 25 °C):	6,9 – 7,1

Direction: Supplement the bottled media according to the direction of the dehydrated media and dispense aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Peptones	19,8
Mannitol	20,0
Sodium chloride	5,0
Sodium pyruvate	3,0
Glycine	1,2
Lithium chloride	5,0

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 48 h
<i>Staphylococcus aureus</i>	ATCC 29213	Good, colour change to black	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	

References: Giolitti and Cantoni (1966) J. Appl. Bact. 29: 395.

GLUTAMATE BROTH BASE, MODIFIED

A synthetic differential medium for the enumeration of coliforms in water.

Dehydrated media

Code Number:	500 g: MMG20500, 5 kg: MMG25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,2 (approx.) at 25 °C

Direction: Dissolve 2,5 g of ammonium chloride and 6,4 g of sodium glutamate in one litre of distilled water. Add 11,4 g of dehydrated medium and heat gently to dissolve the medium completely. Dispense into test tubes fitted with Durham tube and sterilise by autoclaving at 115 °C for 10 minutes. Cool quickly!

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: MMG30100, 500 ml: MMG30500
Tubed media:	100 x 12 mm: MMG40010 (10 ml)
Colour:	Purple
pH (at 25 °C):	7,1 – 7,3

Direction: Dispense the bottled media aseptically into sterile test tubes fitted with Durham tube. Media in tubes are ready to use.

FORMULA in g/l

Lactose	10,000
Amino acids	0,064
Sodium formate	0,250
Minerals	0,111
Vitamins	0,003
Bromocresol purple	0,020
Buffers	0,950

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good, with gas production, colour change to yellow	
<i>Salmonella typhimurium</i>	ATCC 14028	Good, without gas production and colour change	

References: PHLS (1968) J. Hyg. Camb. 66: 67-82.

GN BROTH

A selective medium for the enrichment of *Salmonella* and *Shigella* spp.

Dehydrated media

Code Number:	500 g: GNB20500, 5 kg: GNB25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,0 (approx.) at 25 °C

Direction: Suspend 39 g in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into final containers and sterilise by autoclaving at 115 °C for 15 minutes. Cool quickly!

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: GNB30100, 500 ml: GNB30500
Tubed media:	150 x 15 mm: GNB40010 (10 ml)
Colour:	Yellowish
pH (at 25 °C):	6,9 – 7,1

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

II. DEHYDRATED CULTURE MEDIA

FORMULA in g/l

Peptones	20,0
Mannitol	2,0
Glucose	1,0
Sodium chloride	5,0
Sodium citrate	5,0
Sodium deoxycholate	0,5
Buffers	5,5

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Salmonella typhimurium</i>	ATCC 14028	Good	
<i>Shigella sonnei</i>	ATCC 25931	Good	
<i>Enterococcus faecalis</i>	ATCC 29212	Inhibited	

References: Hajna (1955) Public Health Lab. 13: 59.

GSP AGAR BASE

A selective and differential medium for the detection and differentiation of *Pseudomonas* and *Aeromonas* spp.

Dehydrated media

Code Number:	500 g: GSP20500, 5 kg: GSP25000
Colour:	Pinkish
Appearance:	Homogeneous hygroscopic powder
Final pH:	7,4 (approx.) at 25 °C

Direction: Suspend 23 g in 500 ml of distilled water and heat with frequent agitation until the medium boils well. Cool quickly to 50 °C and add aseptically the contents of one vial of GSP Selective Supplement (GSU80004) reconstituted with 4 ml of sterile distilled water. Mix well before pouring.

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: GSP30100, 500 ml: GSP30500
Plated media:	55 mm: GSP50055, 90 mm: GSP50090
Colour:	Red
pH (25 °C):	7,3 – 7,5

Direction: Supplement the melted bottled media according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Starch soluble	20,00
Sodium glutamate	10,00
Magnesium sulphate	0,50
Phenol red	0,36
Buffers	2,00
Agar	13,10

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Aeromonas hydrophila</i>	ATCC 7966	Good, yellow colonies	
<i>Pseudomonas aeruginosa</i>	ATCC 27853	Good, red colonies	
<i>Staphylococcus aureus</i>	ATCC 29213	Inhibited	

References: Kielwen et al. (1969) Arch. f. Lebensmittelhyg. 20: 131.

HAEMOPHILUS TEST AGAR BASE

A standard medium for the susceptibility testing of *Haemophilus influenzae*.

Dehydrated media

Code Number:	500 g: HTM20500, 5 kg: HTM25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,3 (approx.) at 25 °C

Direction: Suspend 21,5 g in 500 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the contents of one vial of Haemophilus Supplement (HTS80004) reconstituted with 4 ml of sterile distilled water. Mix well before pouring.

Prepared media

Bottled media:	100 ml: HTM30100, 500 ml: HTM30500
Plated media:	55 mm: HTM50055, 90 mm: HTM50090
Colour:	Yellowish
pH (25 °C):	7,2 – 7,4

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Mueller-Hinton II Agar	38
Yeast extract	5

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Haemophilus influenzae</i>	ATCC 49766	Good	

References: Jorgensen et al. (1987) J. Clin. Micro. 25: 2105.

HEKTOEN ENTERIC AGAR

A selective and differential medium for the isolation of enteric micro-organisms, especially *Salmonella* and some *Shigella* spp.

Dehydrated media

Code Number:	500 g: HEA20500, 5 kg: HEA25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
Final pH:	7,5 (approx.) at 25 °C

Direction: Suspend 77 g in one litre of distilled water and heat with frequent agitation until the medium boils well. Mix well before pouring.

II. DEHYDRATED CULTURE MEDIA

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: HEA30100, 500 ml: HEA30500
Plated media:	55 mm: HEA50055, 90 mm: HEA50090
Colour:	Greenish
pH (at 25 °C):	7,4 – 7,6

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	15,300
Bile salts	9,000
Lactose	12,000
Sucrose	12,000
Salicin	2,000
Sodium chloride	5,000
Sodium thiosulphate	5,000
Ferric citrate	1,500
Acid fuchsin	0,100
Bromothymol blue	0,065
Agar	15,000

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Partially inhibited, salmon coloured colonies	
<i>Salmonella typhimurium</i>	ATCC 14028	Good, greenish-blue colonies with black centre	
<i>Shigella sonnei</i>	ATCC 25931	Good, greenish-blue colonies	
<i>Enterococcus faecalis</i>	ATCC 29212	Inhibited	

References: King and Metzger (1968) Appl. Microbiol. 16: 577.

HUGH-LEIFSON OF MEDIUM BASE

A semi-solid medium base for the carbohydrate decomposition studies.

Dehydrated media

Code Number:	500 g: SUG20500, 5 kg: SUG25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,3 (approx.) at 25 °C

Direction: Suspend **12 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add the filter sterilised sugar (10 g/l) solution to be examined to the medium. Dispense aseptically into sterile test tubes.

Prepared media

Bottled media:	100 ml: SUG30100, 500 ml: SUG30500
Tubed media:	100 x 12 mm: SUG40004 (4 ml)
Colour:	Purple
pH (at 25 °C):	7,2 – 7,4

Direction: Supplement the bottled media according to the direction of the dehydrated media and dispense aseptically into sterile tubes. Media in tubes are ready to use.

FORMULA in g/l

Peptones	3,00
Sodium chloride	5,00
Bromocresol purple	0,03
Buffers	1,00
Agar	3,00

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the tubed media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth with 10 g/l lactose	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Positive: Colour change to yellow	
<i>Salmonella typhimurium</i>	ATCC 14028	Negative: No colour change	

References: Hugh and Leifson (1953) J. Bact. 66: 24.

INDOLE MOTILITY ORNITHINE (IMO) MEDIUM

A semi-solid differential medium for the differentiation of bacteria on the basis of the indole production, motility and the ornithine decarboxylase activity.

Dehydrated media

Code Number:	500 g: IMO20500, 5 kg: IMO25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	6,6 (approx.) at 25 °C

Direction: Suspend **26 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Dispense into test tubes and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: IMO30100, 500 ml: IMO30500
Tubed media:	100 x 12 mm: IMO40002 (2 ml)
Colour:	Purple
pH (at 25 °C):	6,5 – 6,7

Direction: Dispense the melted bottled media aseptically into test tubes. Media in tubes are ready to use.

FORMULA in g/l

Peptones	16,00
Glucose	1,00
L-Ornithine	5,00
Bromocresol purple	0,03
Buffers	1,00
Agar	3,00

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the tubed media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Reactions			Incubation time: 24 h
		Ornithine	Motility	Indole	
<i>Escherichia coli</i>	ATCC 25922	+ (violet colour)	+	+	
<i>Enterobacter aerogenes</i>	ATCC 13048	+ (violet colour)	+	–	
<i>Klebsiella pneumoniae</i>	ATCC 13883	– (yellow col-our)	–	–	

References: Ederer and Clark (1970) Appl. Microbiol. 2: 849.

II. DEHYDRATED CULTURE MEDIA

IRON SULPHITE AGAR

A differential medium for the detection of thermophilic anaerobes, producing hydrogen sulphite.

Dehydrated media

Code Number:	500 g: ISA20500, 5 kg: ISA25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,1 (approx.) at 25 °C

Direction: Suspend **40 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Dispense into test tubes and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: ISA30100, 500 ml: ISA30500
Tubed media:	150 x 15 mm: ISA40010 (10 ml)
Colour:	Yellowish
pH (25 °C):	7,0 – 7,2

Direction: Dispense the melted bottled media aseptically into sterile tubes. Media in tubes are ready to use.

FORMULA in g/l

Peptones	25
Sodium metabisulphite	1
Ferric ammonium citrate	1
Agar	13

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the tubed media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 48 h
<i>Clostridium perfringens</i>	ATCC 13124	Good, colour change to black (under anaerobic conditions)	

References: ISO 15213

K AGAR BASE

A selective medium for the detection of *Alicyclobacillus* spp.

Dehydrated media

Code Number:	500 g: KSA20500, 5 kg: KSA25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	6,8 (approx.) at 25 °C

Direction: Suspend **12 g** in 500 ml of distilled water. Add **0,5 ml of TWEEN 80 Supplement (TWS80100)** and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool quickly to 50 °C and add aseptically **1 vial of K Agar Malic Acid Solution (KMS80005)**. Mix well before pouring.

Warning!

Once acidified with malic acid, the medium should not be reheated.

Prepared media

Bottled media:	100 ml: KSA30100, 500 ml: KSA30500
Plated media:	55 mm: KSA50055, 90 mm: KSA50090
Colour:	Yellowish
pH (25 °C) of bottled media:	6,6 – 7,0
pH (25 °C) of plated media:	3,6 – 3,8

Direction: Supplement the melted bottled media according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	8
Glucose	1
Agar	15

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 72 h
<i>Alicyclobacillus acidoterrestris</i>	ATCC 49028	Good	

KANAMYCIN ESCULIN AZIDE AGAR

A selective and differential medium for the isolation of enterococci.

Dehydrated media

Code Number:	500 g: KEA20500, 5 kg: KEA25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,0 (approx.) at 25 °C

Direction: Suspend **48 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 115 °C for 15 minutes.

Warning!

The medium is heat sensitive. No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: KEA30100, 500 ml: KEA30500
Plated media:	55 mm: KEA50055, 90 mm: KEA50090
Colour:	Yellowish
pH (25 °C):	7,1 – 7,3

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	25,30
Sodium chloride	5,00
Sodium citrate	1,00
Ferric ammonium citrate	0,50
Sodium azide	0,15
Esculin	1,00
Kanamycin	0,02
Agar	15,00

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Enterococcus faecalis</i>	ATCC 29212	Good, blackening around the colonies	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	

References: Mossel et al. (1978) Arch. Lebensmittel-hyg. 29: 121.

II. DEHYDRATED CULTURE MEDIA

KANAMYCIN ESCULIN AZIDE BROTH

A selective and differential medium for the isolation of enterococci.

Dehydrated media

Code Number:	500 g: KEB20500, 5 kg: KEB25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,0 (approx.) at 25 °C

Direction: Suspend 33 g in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into final containers and sterilise by autoclaving at 115 °C for 15 minutes.

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: KEB30100, 500 ml: KEB30500
Tubed media:	150 x 15 mm: KEB40010 (10 ml)
Colour:	Yellowish
pH (at 25 °C):	6,9 – 7,1

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Peptones	25,30
Sodium chloride	5,00
Sodium citrate	1,00
Ferric ammonium citrate	0,50
Sodium azide	0,15
Esculin	1,00
Kanamycin	0,02

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Enterococcus faecalis</i>	ATCC 29212	Good, colour change to black	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	

References: Mossel et al. (1978) Arch. Lebensmittel-hyg. 29: 121.

KF STREPTOCOCCUS AGAR BASE

A selective medium for the isolation and enumeration of enterococci.

Dehydrated media

Code Number:	500 g: KFA20500, 5 kg: KFA25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,2 (approx.) at 25 °C

Direction: Suspend 36 g in 500 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 115 °C for 15 minutes. Cool to 50 °C and add aseptically 10 drops (0,5 ml) TTC Solution, Sterile (TTC80030). Mix well before pouring.

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: KFA30100, 500 ml: KFA30500
Plated media:	55 mm: KFA50055, 90 mm: KFA50090
Colour:	Purple
pH (25 °C):	7,1 – 7,3

Direction: Supplement the melted bottled media according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	20,600
Maltose	20,000
Lactose	1,000
Sodium chloride	5,000
Sodium azide	0,400
Bromocresol purple	0,015
Sodium glycerophosphate	10,000
Agar	15,000

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 48 h
<i>Enterococcus faecalis</i>	ATCC 25922	Good, dark red colonies	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	

References: Kenner et al. (1961) Appl. Microbiol. 9: 15.

KIMMIG AGAR BASE

A non-selective medium for the cultivation, isolation, identification and strain preservation of fungi.

Dehydrated media

Code Number:	500 g: KIM20500, 5 kg: KIM25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	6,5 (approx.) at 25 °C

Direction: Suspend 50 g in one litre of distilled water. Add 5 ml of Glycerol Supplement (GLC80100) and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Mix well and pour into Petri-dishes or tubes (cooling in slanted position).

Prepared media

Bottled media:	100 ml: KIM30100, 500 ml: KIM30500
Plated media:	55 mm: KIM50055, 90 mm: KIM50090
Tubed media:	100 x 15 mm: KIM40005 (5 ml, slant)
Colour:	Yellowish
pH (25 °C):	6,4 – 6,6

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes or tubes (cooling in slanted position). Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	15
Glucose	19
Sodium chloride	1
Agar	15

II. DEHYDRATED CULTURE MEDIA

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the tubed media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 48 h
<i>Candida albicans</i>	ATCC 10231	Good	

References: Kimmig and Rieth (1993) *Arzneimittelforsch* 3: 267.

KING A AGAR BASE, USP

A differential medium for the detection of *Pseudomonas aeruginosa* on the basis of pigment production according to USP. KING A agar enhances the production of pyocyanin and inhibits the formation of fluorescein.

Dehydrated media

Code Number:	500 g: KAA20500, 5 kg: KAA25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,1 (approx.) at 25 °C

Direction: Suspend **44 g** in one litre of distilled water. Add **10 ml of Glycerol supplement (GLC80100)** and heat with frequent agitation until the medium boils well. Dispense into test tubes and sterilise by autoclaving at 121 °C for 15 minutes. Allow to cool in slanted position.

Prepared media

Bottled media:	100 ml: KAA30100, 500 ml: KAA30500
Tubed media:	100 x15 mm: KAA40005 (5 ml, slant)
Colour:	Yellowish
pH (at 25 °C):	7,0 – 7,2

Direction: Dispense the melted bottled media aseptically into sterile test tubes. Allow to cool in slanted position. Media in tubes are ready to use.

FORMULA in g/l

Peptones	19,6
Potassium sulphate	10,0
Magnesium chloride	1,4
Agar	13,0

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the tubed media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Pseudomonas aeruginosa</i>	ATCC 27853	Good, yellow – green pigmentation without fluorescence at 366 nm	

References: King et al. (1954) *J. Lab. and Clin. Med.* 44: 301.
United States Pharmacopoeia

KING B AGAR BASE, USP

A differential medium for the detection of *Pseudomonas aeruginosa* on the basis of pigment production according to USP. KING B agar enhances the production of fluorescein and inhibits the formation of pyocyanin.

Dehydrated media

Code Number:	500 g: KAB20500, 5 kg: KAB25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,1 (approx.) at 25 °C

Direction: Suspend **36 g** in one litre of distilled water. Add **10 ml of Glycerol supplement (GLC80100)** and heat with frequent agitation until the medium boils well. Dispense into test tubes and sterilise by autoclaving at 121 °C for 15 minutes. Allow to cool in slanted position.

Prepared media

Bottled media:	100 ml: KAB30100, 500 ml: KAB30500
Tubed media:	100 x15 mm: KAB40005 (5 ml, slant)
Colour:	Yellowish
pH (at 25 °C):	7,0 – 7,2

Direction: Dispense the melted bottled media aseptically into sterile test tubes. Allow to cool in slanted position. Media in tubes are ready to use.

FORMULA in g/l

Peptones	20,0
Magnesium sulphate	1,5
Buffers	1,5
Agar	13,0

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the tubed media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Pseudomonas aeruginosa</i>	ATCC 27853	Good, yellow – green pigmentation, fluorescence at 366 nm	

References: King et al. (1954) *J. Lab. and Clin. Med.* 44: 301.
United States Pharmacopoeia

KLIGLER IRON AGAR

A differential medium for the differentiation of bacteria on the basis of carbohydrate fermentation and hydrogen sulphide production.

Dehydrated media

Code Number:	500 g: KIA20500, 5 kg: KIA25000
Colour:	Pinkish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,4 (approx.) at 25 °C

Direction: Suspend **56 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Dispense into test tubes and sterilise by autoclaving at 121 °C for 15 minutes. Allow to cool in slanted position to form slants with deep butt.

Prepared media

Bottled media:	100 ml: KIA30100, 500 ml: KIA30500
Tubed media:	100 x 12 mm: KIA40003 (3 ml, slant with deep butt)
Colour:	Onion red
pH (at 25 °C):	7,3 – 7,5

II. DEHYDRATED CULTURE MEDIA

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the tubed media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Reactions				Incubation time: 24 h
		Slant	Butt	Gas	H ₂ S	
<i>Escherichia coli</i>	ATCC 25922	yellow	yellow	+	–	
<i>Salmonella typhimurium</i>	ATCC 14028	red	yellow	+	+	
<i>Shigella sonnei</i>	ATCC 25931	red	yellow	–	–	

References: Kligler (1917) Am. J. Pub. Hlth. 7: 1042.
ISO 13737

KLIMMER AGAR

A selective medium for the detection and enumeration of coliforms.

Dehydrated media

Code Number:	500 g: KLA20500, 5 kg: KLA25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
Final pH:	7,3 (approx.) at 25 °C

Direction: Suspend **46 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Mix well before pouring.

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: KLA30100, 500 ml: KLA30500
Plated media:	55 mm: KLA50055, 90 mm: KLA50090
Colour:	Green
pH (25 °C):	7,2 – 7,4

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	15,20
Lactose	12,00
Sodium chloride	3,60
Acriflavine	0,06
Bromothymol blue	0,20
Agar	15,00

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good, yellow colonies	
<i>Salmonella typhimurium</i>	ATCC 14028	Good, green colonies	
<i>Staphylococcus aureus</i>	ATCC 29213	Inhibited	

KOSER CITRATE BROTH

A differential medium for the differentiation of bacteria on the basis of citrate utilisation.

Dehydrated media

Code Number:	500 g: KSB20500, 5 kg: KSB25000
Colour:	White
Appearance:	Homogeneous powder
pH before autoclaving:	6,7 (approx.) at 25 °C

Direction: Suspend **6 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into test tubes and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: KSB30100, 500 ml: KSB30500
Tubed media:	100 x 12 mm: KSB40003 (3 ml)
Colour:	Pale pink
pH (at 25 °C):	6,6 – 6,8

Direction: Dispense the bottled media aseptically into test tubes. Media in tubes are ready to use.

FORMULA in g/l

Sodium citrate	3,000
Magnesium sulphate	0,200
Phenol red	0,015
Buffers	2,800

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Enterobacter aerogenes</i>	ATCC 13048	Positive, colour change to red	
<i>Escherichia coli</i>	ATCC 25922	Negative, without colour change	

References: Koser (1923) J. Bacteriol. 8: 493.

LACTOSE (1%) PHENOL RED BROTH

A differential medium for the cultivation and presumptive identification of coliforms.

Dehydrated media

Code Number:	500 g: LFB20500, 5 kg: LFB25000
Colour:	Pinkish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,2 (approx.) at 25 °C

Direction: Suspend **25 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into test tubes fitted with Durham tube and sterilise by autoclaving at 115 °C for 15 minutes. Cool quickly!

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: LFB30100, 500 ml: LFB30500
Tubed media:	150 x 15 mm: LFB40010 (10 ml) 100 x 15 mm: LFB40005 (5 ml)
Colour:	Red
pH (at 25 °C):	7,1 – 7,3

II. DEHYDRATED CULTURE MEDIA

Direction: Dispense the bottled media aseptically into sterile test tubes fitted with Durham tube. Media in tubes are ready to use.

FORMULA in g/l

Peptones	10,00
Lactose	10,00
Sodium chloride	5,00
Phenol red	0,01

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good, with gas production, colour change to yellow	
<i>Salmonella typhimurium</i>	ATCC 14028	Good, without gas production and colour change	

References: Murray et al. (1995) Manual of Clinical Microbiology, 6th ed.

LACTOSE BROTH, PH EUR

A differential medium for the cultivation and presumptive identification of coliforms according to PH EUR (Broth Medium D).

Dehydrated media

Code Number:	500 g: LAB20500, 5 kg: LAB25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	6,9 (approx.) at 25 °C

Direction: Suspend **13 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into test tubes fitted with Durham tube and sterilise by autoclaving at 121°C for 15 minutes. Cool quickly!

Prepared media

Bottled media:	100 ml: LAB30100, 500 ml: LAB30500
Tubed media:	150 x 15 mm: LAB40010 (10 ml)
Colour:	Yellowish
pH (at 25 °C):	6,8 – 7,0

Direction: Dispense the bottled media aseptically into sterile test tubes fitted with Durham tube. Media in tubes are ready to use.

FORMULA in g/l

Gelatin peptone	5
Beef extract	3
Lactose monohydrate	5

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good, with gas production	
<i>Salmonella typhimurium</i>	ATCC 14028	Good, without gas production	

References: European Pharmacopoeia

LACTOSE PEPTONE BROTH, DEV

A differential medium for the cultivation and enumeration of coliforms.

Dehydrated media

Code Number:	500 g: LPB20500, 5 kg: LPB25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,2 (approx.) at 25 °C

Direction: Suspend **35 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into test tubes fitted with Durham tube and sterilise by autoclaving at 121°C for 15 minutes. Cool quickly!

Prepared media

Bottled media:	100 ml: LPB30100, 500 ml: LPB30500
Tubed media:	150 x 15 mm: LPB40010 (10 ml)
Colour:	Purple
pH (at 25 °C):	7,1 – 7,3

Direction: Dispense the bottled media aseptically into sterile test tubes fitted with Durham tube. Media in tubes are ready to use.

FORMULA in g/l

Peptones	20,00
Lactose	10,00
Sodium chloride	5,00
Bromocresol purple	0,02

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good, with gas production, colour change to yellow	
<i>Salmonella typhimurium</i>	ATCC 14028	Good, without gas production and colour change	

References: DEV (1963) Bundesgesetzbl., Teil I: 2613444.

LACTOSE SULPHITE BROTH BASE, PH EUR

A differential medium for the determination of H₂S production by *Clostridium perfringens* according to PH EUR (Broth Medium R).

Dehydrated media

Code Number:	500 g: LSU20500, 5 kg: LSU25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,1 (approx.) at 25 °C

Direction: Suspend **10,15 g** in 500 ml of distilled water and heat gently to dissolve the medium completely. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically **10 drops (0,5 ml) of Sodium Metabisulphite Solution, Sterile (SMS80030)** and **10 drops (0,5 ml) of Ferric Ammonium Citrate Solution, Sterile (FAC80030)**. Mix well and dispense aseptically into sterile test tubes fitted with Durham tube.

Prepared media

Bottled media:	100 ml: LSU30100, 500 ml: LSU30500
Tubed media:	150 x 15 mm: LSU40010 (10 ml)
Colour:	Yellowish
pH (at 25 °C):	7,0 – 7,2

II. DEHYDRATED CULTURE MEDIA

Direction: Supplement the bottled media according to the direction of the dehydrated media and dispense aseptically into sterile test tubes fitted with Durham tube. Media in tubes are ready to use.

FORMULA in g/l

Casein pepton	5,0
Yeast extract	2,5
L-Cysteine	0,3
Lactose monohydrate	10,0
Sodium chloride	2,5

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at 2 – 8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 48 h
<i>Clostridium perfringens</i>	ATCC 13124	Good, colour change to black (under anaerobic conditions)	

References: European Pharmacopoeia

LAURIA-BERTANI BROTH

A non-selective medium for molecular genetic studies.

Dehydrated media

Code Number:	500 g: LBB20500, 5 kg: LBB25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,5 (approx.) at 25 °C

Direction: Suspend **25 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into final containers and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: LBB30100, 500 ml: LBB30500
Tubed media:	150 x 15 mm: LBB40010 (10 ml)
Colour:	Yellowish
pH (at 25 °C):	7,4 – 7,6

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Casein pepton	10
Yeast extract	5
Sodium chloride	10

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good	
<i>Staphylococcus aureus</i>	ATCC 29213	Good	

LAURYL SULPHATE BROTH

A selective enrichment medium for the detection of coliforms.

Dehydrated media

Code Number:	500 g: LSB20500, 5 kg: LSB25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	6,8 (approx.) at 25 °C

Direction: Suspend **35 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into test tubes fitted with Durham tube and sterilise by autoclaving at 115 °C for 15 minutes.

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: LSB30100, 500 ml: LSB30500
Tubed media:	150 x 15 mm: LSB40010 (10 ml)
Colour:	Yellowish
pH (at 25 °C):	6,7 – 6,9

Direction: Dispense the bottled media aseptically into sterile test tubes fitted with Durham tube. Media in tubes are ready to use.

FORMULA in g/l

Tryptose	19,5
Lactose	5,0
Sodium chloride	5,0
Sodium lauryl sulphate	0,1
Buffers	5,4

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good, with gas production	
<i>Salmonella typhimurium</i>	ATCC 14028	Good, without gas production	
<i>Enterococcus faecalis</i>	ATCC 29213	Inhibited	

References: APHA (1976) Compendium of Methods for the Microbiological Examination of Foods



LAURYL TRYPTOSE MANNITOL BROTH

A selective enrichment medium for the detection and enumeration of coliforms according to ISO standards.

Dehydrated media

Code Number:	500 g: LTM20500, 5 kg: LTM25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	6,8 (approx.) at 25 °C

Direction: Suspend **36 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into test tubes fitted with Durham tube and sterilise by autoclaving at 115 °C for 15 minutes.

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

II. DEHYDRATED CULTURE MEDIA

Prepared media

Bottled media:	100 ml: LTM30100, 500 ml: LTM30500
Tubed media:	150 x 15 mm: LTM40010 (10 ml)
Colour:	Yellowish
pH (at 25 °C):	6,7 – 6,9

Direction: Dispense the bottled media aseptically into sterile test tubes fitted with Durham tube. Media in tubes are ready to use.

FORMULA in g/l

Tryptose	20,0
L-Tryptophan	0,2
Mannitol	5,0
Sodium chloride	5,0
Sodium lauryl sulphate	0,1
Buffers	5,7

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good, with gas production, indole positive	
<i>Salmonella typhimurium</i>	ATCC 14028	Good, without gas production, indole negative	
<i>Enterococcus faecalis</i>	ATCC 29213	Inhibited	

References: ISO 4831; ISO 7251

LEGIONELLA (CYE) AGAR BASE

A selective medium for the isolation of Legionella spp.

Dehydrated media

Code Number:	500 g: CYE20500, 5 kg: CYE25000
Colour:	Black
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	6,9 (approx.) at 25 °C

Direction for 100 ml agars: Suspend **2,5 g** in 95 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C.

Add 5 ml sterile distilled water to **one vial of Legionella BCYE Growth Supplement with Cysteine (LGF80005-01)** or **Legionella BCYE Growth Supplement without Cysteine (LWC80005-01)**. Shake well and add to the medium base. Mix well before pouring.

Direction for 100 ml selective agars: Suspend **2,5 g** in 90 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C.

Add 5 ml sterile distilled water to **one vial of Legionella BCYE Growth Supplement with Cysteine (LGF80005-01)**. Shake well and add to the medium base. Add 5 ml sterile distilled water to **one vial of Legionella Selective Supplement, BMPA (BMP80005-01)** or **Legionella selective supplement, GVPC (GVP80005-01)** or **Legionella selective supplement, MWY (MWY80005-01)**. Shake well and add to the medium base. Mix well before pouring.

Direction for 500 ml agars: Suspend **12,5 g** in 490 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C.

Add 5 ml sterile distilled water to **one vial of Legionella BCYE Growth Supplement with Cysteine (LGF80005-02)** or **Legionella BCYE Growth Supplement without Cysteine (LWC80005-02)**. Shake well and add to the medium base. Repeat the wash-out with 5 ml sterile distilled water one more time.

Mix well before pouring.

Direction for 500 ml selective agars: Suspend **12,5 g** in 480 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C.

Add 5 ml sterile distilled water to **one vial of Legionella BCYE Growth Supplement with Cysteine (LGF80005-02)**. Shake well and add to the medium base. Repeat the wash-out with 5 ml sterile distilled water one more time. Add 5 ml sterile distilled water to **one vial of Legionella Selective Supplement, BMPA (BMP80005-02)** or **Legionella selective supplement, GVPC (GVP80005-02)** or **Legionella selective supplement, MWY (MWY80005-02)**. Shake well and add to the medium base. Repeat the wash-out with 5 ml sterile distilled water one more time.

Mix well before pouring.

Prepared media

Bottled media:	100 ml: CYE30100, 500 ml: CYE30500
Plated Legionella BCYE agar with cysteine:	55 mm: CYE50055-01, 90 mm: CYE50090-01
Plated Legionella BCYE agar without cysteine:	55 mm: CYE50055-02, 90 mm: CYE50090-02
Plated Legionella BCYE agar, BMPA:	55 mm: CYE50055-03, 90 mm: CYE50090-03
Plated Legionella BCYE agar, MWY:	55 mm: CYE50055-04, 90 mm: CYE50090-04
Plated Legionella BCYE agar, GVPC:	55 mm: CYE50055-05, 90 mm: CYE50090-05
Colour:	Black
pH (25 °C):	6,8 – 7,0

Direction: Supplement the melted bottled media according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Yeast extract	10
Charcoal	2
Agar	13

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Legionella pneumophila</i>	ATCC 33152	Good, greyish-white colonies	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	
<i>Staphylococcus aureus</i>	ATCC 29213	Inhibited	

References: Feeley et al. (1979) J. Clin. Microb. 10: 437.

Dennis et al. (1984) Am. Soc. Microbiol. Pp. 294.

LETHEN AGAR BASE

A highly nutritious medium that neutralizes quaternary ammonium compounds, for sampling of environmental surfaces that have been treated with disinfectants.

Dehydrated media

Code Number:	500 g: LTA20500, 5 kg: LTA25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,2 (approx.) at 25 °C

II. DEHYDRATED CULTURE MEDIA

Direction: Suspend **58 g** in one litre of distilled water. Add **5 ml of TWEEN 80 Supplement (TWS80100)**. Mix well and keep the suspension at about 50 °C until the lecithin dissolved completely (20–30 min). The dissolution is completed, when the medium is Yellowish and slightly turbid, but exempt from any precipitate. Heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: LTA30100, 500 ml: LTA30500
Plated media:	55 mm: LTA50055, 90 mm: LTA50090
Contact Petri-dish:	LTA50065
Colour:	Yellowish, homogeneous turbid
pH (25 °C):	7,1 – 7,3

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	32,2
Sodium chloride	5,0
Sodium bisulphite	0,1
Lecithin	0,7
Agar	20,0

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Staphylococcus aureus</i>	ATCC 29213	Good	

References: FDA (1992) Microbiological Methods for Cosmetics. Chapter 23.

LETHEN BROTH BASE

A highly nutritious medium that neutralizes quaternary ammonium compounds, for sampling of environmental surfaces that have been treated with disinfectants.

Dehydrated media

Code Number:	500 g: LTB20500, 5 kg: LTB25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,2 (approx.) at 25 °C

Direction: Suspend **38 g** in one litre of distilled water. Add **5 ml of TWEEN 80 Supplement (TWS80100)**. Mix well and keep the suspension at about 50 °C until the lecithin dissolved completely (20–30 min). The dissolution is completed, when the medium is yellowish and slightly turbid, but exempt from any precipitate. Dispense into final containers and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: LTB30100, 500 ml: LTB30500
Tubed media:	150 x 15 mm: LTB40010 (10 ml)
Colour:	Yellowish, homogeneous turbid
pH (at 25 °C):	7,1 – 7,3

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Peptones	32,2
Sodium chloride	5,0
Sodium bisulphite	0,1
Lecithin	0,7

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Staphylococcus aureus</i>	ATCC 29213	Good	

References: FDA (1992) Microbiological Methods for Cosmetics. Chapter 23.

LEUCONOSTOC AGAR

A differential medium for the cultivation of *Leuconostoc* spp.

Dehydrated media

Code Number:	500 g: LEA20500, 5 kg: LEA25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	6,0 (approx.) at 25 °C

Direction: Suspend **184 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: LEA30100, 500 ml: LEA30500
Plated media:	55 mm: LEA50055, 90 mm: LEA50090
Colour:	Yellowish
pH (25 °C):	5,9 – 6,1

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	15,8
Sucrose	150,0
Sodium chloride	1,0
Magnesium sulphate	0,2
Buffers	2,0
Agar	15,0

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Leuconostoc mesenteroides</i>	ATCC 14935	Good	

References: Atlas and Parks (1993) Handbook of Microbiological Media

II. DEHYDRATED CULTURE MEDIA

LINDEN-GRAIN BROTH

A sterility test medium for the cultivation of environmental micro-organisms, e.g. from beverage bottles.

Dehydrated media

Code Number:	500 g: LGB20500, 5 kg: LGB25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	4,2 (approx.) at 25 °C

Direction: Suspend **29,5 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into final containers and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: LGB30100, 500 ml: LGB30500
Colour:	Yellowish
pH (at 25 °C):	4,1 – 4,3

Direction: Dispense the bottled media aseptically into sterile final containers.

FORMULA in g/l

Peptones	5,5
Glucose	20,0
Ammonium sulphate	2,0
Magnesium sulphate	1,0
Buffers	1,0

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Candida albicans</i>	ATCC 10231	Good	
<i>Saccharomyces cerevisiae</i>	ATCC 9763	Good	

LISTERIA ENRICHMENT BROTH

A selective enrichment medium for the detection of *Listeria monocytogenes*.

Dehydrated media

Code Number:	500 g: LEN20500, 5 kg: LEN25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,3 (approx.) at 25 °C

Direction: Suspend **36 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into final containers and sterilise by autoclaving at 115 °C for 15 minutes.

Warning!

The medium is heat sensitive.

No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: LEN30100, 500 ml: LEN30500
Tubed media:	150 x 15 mm: LEN40010 (10 ml)
Colour:	Yellowish
pH (at 25 °C):	7,2 – 7,4

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Peptones	26,000
Glucose	2,500
Sodium chloride	5,000
Cycloheximide	0,050
Nalidixic acid	0,040
Acriflavine	0,015
Buffers	2,400

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Listeria monocytogenes</i>	ATCC 19115	Good	
<i>Staphylococcus aureus</i>	ATCC 29213	Inhibited	

References: Lovett et al. (1987) J. Food Protection 50: 188.

LISTERIA ENRICHMENT BROTH BASE, UVM – FRASER

A selective enrichment medium for the isolation of *Listeria* spp.

Dehydrated media

Code Number:	500 g: LEF20500, 5 kg: LEF25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,2 (approx.) at 25 °C

Direction: Suspend **27,5 g** in 500 ml of distilled water and heat gently to dissolve the medium completely. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the contents of **one vial of supplements below** reconstituted with 4 ml of 1:1 mixture of ethanol and sterile distilled water.

- **for Fraser Broth:** Listeria Selective Supplement, Fraser (LSF80004)
 - **for Half Fraser Broth:** Listeria Selective Supplement, Half Fraser (LSH80004)
 - **for UVM I Broth:** Listeria Selective Supplement, UVM I (LU180004)
 - **for UVM II Broth:** Listeria Selective Supplement, UVM II (LU280004)
- Mix well. Dispense aseptically into sterile final containers.

Prepared media

Bottled media:	100 ml: LEF30100, 500 ml: LEF30500
Tubed Listeria Enrichment Broth, Fraser:	150 x 15 mm: LEF40010-TF (10 ml)
Tubed Listeria Enrichment Broth, Half Fraser:	150 x 15 mm: LEF40010-HF (10 ml)
Tubed Listeria Enrichment Broth, UVM I:	150 x 15 mm: LEF40010-U1 (10 ml)
Tubed Listeria Enrichment Broth, UVM II:	150 x 15 mm: LEF40010-U2 (10 ml)
Colour:	Yellowish
pH (at 25 °C):	7,1 – 7,3

Direction: Supplement the bottled media according to the direction of the dehydrated media and dispense aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Proteose peptone	5
Tryptone	5
Beef extract	5
Yeast extract	5
Sodium chloride	20
Lithium chloride	3
Esculin	1
Sodium phosphate, dibasic	10
Potassium phosphate, monobasic	1

II. DEHYDRATED CULTURE MEDIA

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Listeria monocytogenes</i>	ATCC 19115	Good, in Fraser broths colour change to black	
<i>Staphylococcus aureus</i>	ATCC 29213	Inhibited	

References: Fraser and Sperber (1988) J. Food Protect. 51: 762.

ISO 11290-1: 1997

APHA (2001) Compendium of Methods for the Microbiological Examination of Foods, 4th ed.

LISTERIA ENRICHMENT BROTH, BUFFERED

A selective enrichment medium for the detection of *Listeria monocytogenes*.

Dehydrated media

Code Number:	500 g: LEB20500, 5 kg: LEB25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,3 (approx.) at 25 °C

Direction: Suspend **47 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into final containers and sterilise by autoclaving at 115 °C for 15 minutes.

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: LEB30100, 500 ml: LEB30500
Tubed media:	150 x 15 mm: LEB40010 (10 ml)
Colour:	Yellowish
pH (at 25 °C):	7,2 – 7,4

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Peptones	26,000
Glucose	2,500
Sodium chloride	5,000
Cycloheximide	0,050
Nalidixic acid	0,040
Acriflavine	0,015
Buffers	13,500

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Listeria monocytogenes</i>	ATCC 19115	Good	
<i>Staphylococcus aureus</i>	ATCC 29213	Inhibited	

References: Lovett et al. (1987) J. Food Protection 50: 188.

NEW PRODUCT

LISTERIA ENRICHMENT BROTH, FRASER

A selective enrichment medium for the isolation of *Listeria monocytogenes*.

Dehydrated media

Code Number:	500 g: LEF20500-TF, 5 kg: LEF25000-TF
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,2 (approx.) at 25 °C

Direction: Suspend **55 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into final containers and sterilise by autoclaving at 115 °C for 15 minutes.

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: LEF30100-TF, 500 ml: LEF30500-TF
Tubed media:	150 x 15 mm: LEF40010-TF (10 ml)
Colour:	Yellowish
pH (at 25 °C):	7,1 – 7,3

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Protease peptone	5,000
Tryptone	5,000
Beef extract	5,000
Yeast extract	5,000
Sodium chloride	20,000
Lithium chloride	3,000
Ferric ammonium citrate	0,500
Esculin	1,000
Acriflavine	0,025
Nalidixic acid	0,020
Sodium hydrogen phosphate, dibasic	9,500
Potassium hydrogen phosphate, monobasic	1,000

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Listeria monocytogenes</i>	ATCC 19115	Good, colour change to black	
<i>Staphylococcus aureus</i>	ATCC 29213	Inhibited	

References: Fraser and Sperber (1988) J. Food Protect. 51: 762.

ISO 11290-1: 1997

APHA (2001) Compendium of Methods for the Microbiological Examination of Foods, 4th ed.

NEW PRODUCT

LISTERIA ENRICHMENT BROTH, HALF-FRASER

A selective enrichment medium for the isolation of *Listeria monocytogenes*.

Dehydrated media

Code Number:	500 g: LEF20500-HF, 5 kg: LEF25000-HF
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,2 (approx.) at 25 °C

II. DEHYDRATED CULTURE MEDIA

Direction: Suspend **55 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into final containers and sterilise by autoclaving at 115 °C for 15 minutes.

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: LEF30100-HF, 500 ml: LEF30500-HF
Tubed media:	150 x 15 mm: LEF40010-HF (10 ml)
Colour:	Yellowish
pH (at 25 °C):	7,1 – 7,3

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Proteose peptone	5,0000
Tryptone	5,0000
Beef extract	5,0000
Yeast extract	5,0000
Sodium chloride	20,0000
Lithium chloride	3,0000
Ferric ammonium citrate	0,5000
Esculin	1,0000
Acriflavine	0,0125
Nalidixic acid	0,0100
Sodium hydrogen phosphate, dibasic	9,5000
Potassium hydrogen phosphate, monobasic	1,0000

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Listeria monocytogenes</i>	ATCC 19115	Good, colour change to black	
<i>Staphylococcus aureus</i>	ATCC 29213	Inhibited	

References: Fraser and Sperber (1988) J. Food Protect. 51: 762.

ISO 11290-1: 1997

APHA (2001) Compendium of Methods for the Microbiological Examination of Foods, 4th ed.

LISTERIA SELECTIVE AGAR BASE, OXFORD

A selective and differential medium for the detection of *Listeria monocytogenes*.

Dehydrated media

Code Number:	500 g: LA020500, 5 kg: LA025000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,0 (approx.) at 25 °C

Direction: Suspend **29,5 g** in 500 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the contents of **one vial of Listeria Selective Supplement, Oxford (LS080004)** reconstituted with 4 ml of 1:1 mixture of ethanol and sterile distilled water. Mix well before pouring.

Prepared media

Bottled media:	100 ml: LA030100, 500 ml: LA030500
Plated media:	55 mm: LA050055, 90 mm: LA050090
Colour:	Yellowish
pH (25 °C):	6,9 – 7,1

Direction: Supplement the melted bottled media according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Nutrient substrate (peptones, extracts)	23,5
Starch soluble	1,0
Lithium chloride	15,0
Sodium chloride	5,0
Ferric ammonium citrate	0,5
Esculin	1,0
Agar	13,0

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 48 h
<i>Listeria monocytogenes</i>	ATCC 19115	Good, black colonies	
<i>Staphylococcus aureus</i>	ATCC 29213	Inhibited	

References: Curtis et al. (1989) Letters in Appl. Microbiol. 8: 95.

LISTERIA SELECTIVE AGAR BASE, PALCAM

A selective and differential medium for the detection of *Listeria monocytogenes*.

Dehydrated media

Code Number:	500 g: LAP20500, 5 kg: LAP25000
Colour:	Pinkish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,2 (approx.) at 25 °C

Direction: Suspend **36 g** in 500 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the contents of **one vial of Listeria Selective Supplement, Palcam (LSP80004)** reconstituted with 4 ml of sterile distilled water. Mix well before pouring.

Prepared media

Bottled media:	100 ml: LAP30100, 500 ml: LAP30500
Plated media:	55 mm: LAP50055, 90 mm: LAP50090
Colour:	Orange
pH (25 °C):	7,1 – 7,3

Direction: Supplement the melted bottled media according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Nutrient substrate (peptones, extracts)	26,00
Mannitol	10,00
Starch soluble	1,00
Glucose	0,50
Lithium chloride	15,00
Sodium chloride	5,00
Ferric ammonium citrate	0,60
Esculin	0,80
Phenol red	0,08
Agar	13,00

Note: The typical formula can be adjusted to obtain optimal performance.

II. DEHYDRATED CULTURE MEDIA

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 48 h
<i>Listeria monocytogenes</i>	ATCC 19115	Good, brown – black colonies with black halo	
<i>Staphylococcus aureus</i>	ATCC 29213	Inhibited	

References: van Netten et al. (1989) Int. J. Food Micro. 8: 299.

LIVER BROTH

An enrichment medium for the cultivation of anaerobe bacteria.

Dehydrated media

Code Number:	500 g: LVB20500, 5 kg: LVB25000
Colour:	Brownish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,0 (approx.) at 25 °C

Direction: Suspend **112 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into final container and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: LVB30100, 500 ml: LVB30500
Tubed media:	150 x 15 mm: LVB40010 (10 ml)
Colour:	Yellowish brown
pH (at 25 °C):	6,9 – 7,1

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Liver extract	100
Peptones	10
Starch soluble	1
Buffers	1

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 48 h
<i>Clostridium perfringens</i>	ATCC 13124	Good (under anaerobic conditions)	

References: APHA (2001) Compendium of Methods for the Microbiological Examination of Foods, 4th ed.

LOEFFLER MEDIUM BASE

A non-selective medium for the cultivation and isolation of *Corynebacterium* spp.

Dehydrated media

Code Number:	500 g: LOE20500, 5 kg: LOE25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,6 (approx.) at 25 °C

Direction: Suspend **26 g** in 250 ml of distilled water and heat gently to dissolve the medium completely. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add **750 ml of sterile bovine serum**. Mix thoroughly and dispense into sterile test tubes. Inspissate for serum coagulation in slanted position at 85 °C for 120 min.

Prepared media

Bottled media:	100 ml: LOE30100, 500 ml: LOE30500
Tubed media:	100 x 15 mm: LOE40005 (5 ml, slant)
Colour of bottled media:	Yellowish, transparent
Colour of tubed media:	White, turbid
pH (at 25 °C):	7,5 – 7,7

Direction: Supplement the bottled media according to the direction of the dehydrated media. Mix thoroughly and dispense into sterile test tubes. Inspissate for serum coagulation in slanted position at 85 °C for 120 min. Media in tubes are ready to use.

FORMULA in g/l

Nutrient substrate (peptones, extracts)	16
Glucose	7
Sodium chloride	3

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the tubed media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 96 h
<i>Corynebacterium diphtheriae</i>	ATCC 11913	Good	

References: Loeffler (1897) Zentralbl. Bacteriol. 2: 102.

LOEWENSTEIN-JENSEN MEDIUM BASE

A strongly selective medium for the cultivation of *Mycobacterium tuberculosis* and other *Mycobacterium* spp.

Dehydrated media

Code Number:	500 g: LJM20500, 5 kg: LJM25000
Colour:	Greenish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,1 (approx.) at 25 °C

Direction: Suspend **38 g** in 590 ml of distilled water. Add **12 ml of Glycerol Supplement (GLC80100)**. Mix well and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically 1000 ml of sterile mixed whole egg. Mix gently until the mixture is homogeneous but exempt from air bubbles. Dispense aseptically into sterile test tubes. Coagulate and inspissate in slanted position at 85 °C for 45 min.

Prepared media

Tubed media:	100 x 15 mm: LJM40005 (5 ml, slant)
Colour:	Light green
pH (at 25 °C):	7,0 – 7,2

Direction: Media in tubes are ready to use.

FORMULA in g/l

Potato flour	30,00
L-Asparagine	3,60
Sodium citrate	0,60
Magnesium sulphate	0,24
Malachite green	0,40
Buffer	3,16

Note: The typical formula can be adjusted to obtain optimal performance.

II. DEHYDRATED CULTURE MEDIA

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the tubed media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 2 weeks
<i>Mycobacterium tuberculosis</i>	ATCC 25618	Acceptable	

References: Jensen (1932) Zentralbl. Bakteriol. Parastenkd. Infektionskr. Hyg. Abt. I Orig. 125: 222.

LURIA AGAR

A non-selective medium for molecular genetic studies.

Dehydrated media

Code Number:	500 g: LBA20500, 5 kg: LBA25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,3 (approx.) at 25 °C

Direction: Suspend **38 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: LBA30100, 500 ml: LBA30500
Plated media:	55 mm: LBA50055, 90 mm: LBA50090
Colour:	Yellowish
pH (25 °C):	7,2 – 7,4

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Casein peptone	10
Yeast extract	5
Sodium chloride	10
Agar	13

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good	
<i>Staphylococcus aureus</i>	ATCC 29213	Good	

References: Miller (1972) Experiments in Molecular Genetics.

LYSINE IRON (LIA) AGAR

A differential medium for the differentiation of bacteria on the basis of lysine decarboxylase activity and hydrogen sulphite production.

Dehydrated media

Code Number:	500 g: LIA20500, 5 kg: LIA25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	6,7 (approx.) at 25 °C

Direction: Suspend **33 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Dispense into test tubes and sterilise by autoclaving at 121 °C for 15 minutes. Allow to cool in slanted position to form slants with deep butts.

Prepared media

Bottled media:	100 ml: LIA30100, 500 ml: LIA30500
Tubed media:	100 x 12 mm: LIA40003 (3 ml, slant with deep butt)
Colour:	Purple
pH (at 25 °C):	6,6 – 6,8

Direction: Dispense the melted bottled media aseptically into sterile test tubes. Media in tubes are ready to use.

FORMULA in g/l

Peptones	8,00
L-Lysine	10,00
Glucose	1,00
Ferric citrate	0,50
Sodium thiosulphate	0,04
Bromocresol purple	0,02
Agar	13,50

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the tubed media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Reactions		Incubation time: 24 h
		Slant	Butt	
<i>Proteus mirabilis</i>	ATCC 29906	red	yellow	–
<i>Salmonella typhimurium</i>	ATCC 14028	purple	purple	+
<i>Citrobacter freundii</i>	ATCC 8090	purple	yellow	+

References: Edwards and Fife (1961) Appl. Microbiol. 9: 478.

M17 AGAR

A selective medium for the cultivation and enumeration of lactic streptococci.

Dehydrated media

Code Number:	500 g: M1A20500, 5 kg: M1A25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	6,9 (approx.) at 25 °C

Direction: Suspend **55 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: M1A30100, 500 ml: M1A30500
Plated media:	55 mm: M1A50055, 90 mm: M1A50090
Colour:	Yellowish
pH (at 25 °C):	6,8 – 7,0

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	17,25
Lactose	5,00
Magnesium sulphate	0,25
Ascorbic acid	0,50
Sodium glycerophosphate	19,00
Agar	13,00

II. DEHYDRATED CULTURE MEDIA

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 30 °C	Growth	Incubation time: 48 h
<i>Streptococcus lactis</i>	ATCC 19435	Good	

References: Terzaghi and Sandine (1975) Applied Microbiol. 29: 807.

M17 BROTH

A selective medium for the cultivation and enumeration of lactic streptococci.

Dehydrated media

Code Number:	500 g: M1B20500, 5 kg: M1B25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	6,9 (approx.) at 25 °C

Direction: Suspend **42 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into final containers and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: M1B30100, 500 ml: M1B30500
Tubed media:	150 x 15 mm: M1B40010 (10 ml)
Colour:	Yellowish
pH (at 25 °C):	6,8 – 7,0

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Peptones	17,25
Lactose	5,00
Magnesium sulphate	0,25
Ascorbic acid	0,50
Sodium glycerophosphate	19,00

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 30 °C	Growth	Incubation time: 48 h
<i>Streptococcus lactis</i>	ATCC 19435	Good	

References: Terzaghi and Sandine (1975) Applied Microbiol. 29: 807.

MACCONKEY AGAR BASE, SORBITOL

A selective and differential medium for the detection of *Escherichia coli* 0157.

Dehydrated media

Code Number:	500 g: MCS20500, 5 kg: MCS25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,1 (approx.) at 25 °C

Direction: Suspend **26 g** in 500 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the contents of **one vial of Cefixime Tellurite Supplement (CTS80004)** reconstituted with 4 ml of sterile distilled water. Mix well before pouring.

Prepared media

Bottled media:	100 ml: MCS30100, 500 ml: MCS30500
Plated media:	55 mm: MCS50055, 90 mm: MCS50090
Colour:	Purplish red
pH (25 °C):	7,0 – 7,2

Direction: Supplement the melted bottled media according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	20,500
Bile salts No.3	1,500
Sorbitol	10,000
Sodium chloride	5,000
Neutral red	0,030
Crystal violet	0,001
Agar	15,000

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i> 0157	ATCC 35150	Good, colourless colonies	
<i>Escherichia coli</i>	ATCC 25922	Good, purplish red colonies	

References: ISO 16654

MACCONKEY AGAR No.3

A selective and differential medium for the detection of coliforms and enteric pathogens.

Dehydrated media

Code Number:	500 g: MCA20500, 5 kg: MCA25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,1 (approx.) at 25 °C

Direction: Suspend **52 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: MCA30100, 500 ml: MCA30500
Plated media:	55 mm: MCA50055, 90 mm: MCA50090
Colour:	Purplish red
pH (25 °C):	7,0 – 7,2

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	20,500
Bile salts No.3	1,500
Lactose	10,000
Sodium chloride	5,000
Neutral red	0,030
Crystal violet	0,001
Agar	15,000

II. DEHYDRATED CULTURE MEDIA

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good, purplish red colonies with precipitate halo	
<i>Proteus mirabilis</i>	ATCC 29906	Good, colourless colonies without swarming	
<i>Enterococcus faecalis</i>	ATCC 29212	Inhibited	

References: MacConkey (1900) The Lancet

MACCONKEY AGAR WITHOUT CRYSTAL VIOLET

A selective and differential medium for the detection of coliforms and enteric pathogens as well as some *Staphylococcus* spp.

Dehydrated media

Code Number:	500 g: MWC20500, 5 kg: MWC25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,1 (approx.) at 25 °C

Direction: Suspend **52 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: MWC30100, 500 ml: MWC30500
Plated media:	55 mm: MWC50055, 90 mm: MWC50090
Colour:	Purplish red
pH (25 °C):	7,0 – 7,2

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	20,500
Bile salts No.3	1,500
Lactose	10,000
Sodium chloride	5,000
Neutral red	0,030
Agar	15,000

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good, purplish red colonies with precipitate halo	
<i>Proteus mirabilis</i>	ATCC 29906	Good, colourless colonies without swarming	
<i>Staphylococcus aureus</i>	ATCC 29213	Moderate, colourless colonies	
<i>Enterococcus faecalis</i>	ATCC 29212	Inhibited	

References: MacConkey (1900) The Lancet

MACCONKEY AGAR WITHOUT SALT

A selective and differential medium for the isolation and enumeration of micro-organisms from urine. The medium is electrolyte deficient to prevent the swarming of the most *Proteus* spp.

Dehydrated media

Code Number:	500 g: MWS20500, 5 kg: MWS25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,1 (approx.) at 25 °C

Direction: Suspend **47 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: MWS30100, 500 ml: MWS30500
Plated media:	55 mm: MWS50055, 90 mm: MWS50090
Colour:	Purplish red
pH (25 °C):	7,0 – 7,2

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	20,500
Bile salts No.3	1,500
Lactose	10,000
Neutral red	0,030
Crystal violet	0,001
Agar	15,000

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good, purplish red colonies with precipitate halo	
<i>Proteus mirabilis</i>	ATCC 29906	Good, colourless colonies without swarming	
<i>Enterococcus faecalis</i>	ATCC 29212	Inhibited	

References: MacConkey (1900) The Lancet

MACCONKEY AGAR, PH EUR - USP

A selective and differential medium for the detection of coliforms and enteric pathogens according to PH EUR (Agar Medium H – Harmonised).

Dehydrated media

Code Number:	500 g: MCE20500, 5 kg: MCE25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,1 (approx.) at 25 °C

Direction: Suspend **50 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: MCE30100, 500 ml: MCE30500
Plated media:	55 mm: MCE50055, 90 mm: MCE50090
Colour:	Purplish red
pH (25 °C):	7,0 – 7,2

II. DEHYDRATED CULTURE MEDIA

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Gelatin peptone	17,000
Peptones	3,000
Bacteriological bile	1,500
Lactose monohydrate	10,000
Sodium chloride	5,000
Neutral red	0,030
Crystal violet	0,001
Agar	13,500

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good, purplish red colonies with precipitate halo	
<i>Proteus mirabilis</i>	ATCC 29906	Good, colourless colonies without swarming	
<i>Enterococcus faecalis</i>	ATCC 29212	Inhibited	

References: European Pharmacopoeia

MACCONKEY BROTH, PH EUR - USP

A selective and differential medium for the detection of coliforms according to PH EUR (Broth Medium G – Harmonised).

Dehydrated media

Code Number:	500 g: MBE20500, 5 kg: MBE25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,3 (approx.) at 25 °C

Direction: Suspend **35 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into test tubes fitted with Durham tube and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: MBE30100, 500 ml: MBE30500
Tubed media:	150 x 15 mm: MBE40010 (10 ml)
Colour:	Purple
pH (at 25 °C):	7,2 – 7,4

Direction: Dispense the bottled media aseptically into sterile test tubes fitted with Durham tube. Media in tubes are ready to use.

FORMULA in g/l

Gelatin peptone	20,00
Bacteriological bile	5,00
Lactose monohydrate	10,00
Bromocresol purple	0,01

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good, with gas production, colour change to yellow	
<i>Proteus mirabilis</i>	ATCC 29906	Good, without gas production and colour change	
<i>Enterococcus faecalis</i>	ATCC 29212	Inhibited	

References: European Pharmacopoeia

MALACHITE GREEN BROTH BASE

A selective medium for the cultivation of *Pseudomonas aeruginosa*.

Dehydrated media

Code Number:	500 g: MIB20500, 5 kg: MIB25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,6 (approx.) at 25 °C

Direction: Suspend **4,2 g** in 500 ml of distilled water and heat gently to dissolve the medium completely. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically **10 drops (0,5 ml) of Malachite Green Solution, Sterile (MSO80030)**. Mix well and dispense aseptically into sterile final containers.

Prepared media

Bottled media:	100 ml: MIB30100, 500 ml: MIB30500
Tubed media:	150 x 15 mm: MIB40010 (10 ml)
Colour:	Green
pH (at 25 °C):	7,5 – 7,7

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Peptones	8,0
Buffers	0,4

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Pseudomonas aeruginosa</i>	ATCC 27853	Good	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	

References: Habs and Kirschner (1943) Z. Hyg. 124: 557.

MALONATE AGAR

A differential medium for the differentiation of bacteria on the basis of their ability to utilize malonate.

Dehydrated media

Code Number:	500 g: MAA20500, 5 kg: MAA25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	6,7 (approx.) at 25 °C

II. DEHYDRATED CULTURE MEDIA

Direction: Suspend **25 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Dispense into test tubes and sterilise by autoclaving at 121 °C for 15 minutes. Allow to cool in slanted position.

Prepared media

Bottled media:	100 ml: MAA30100 500 ml: MAA30500
Tubed media:	100 x 12 mm: MAA40002 (2 ml – slant)
Colour:	Green
pH (25 °C):	6,6 – 6,8

Direction: Dispense the melted bottled media aseptically into sterile test tubes. Allow to cool in slanted position. Media in tubes are ready to use.

FORMULA in g/l

Yeast extract	1,00
Sodium malonate	3,00
Sodium chloride	2,00
Ammonium sulphate	2,00
Bromothymol blue	0,03
Buffers	1,00
Agar	16,00

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the tubed media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Enterobacter aerogenes</i>	ATCC 13048	Positive, colour change to blue	
<i>Escherichia coli</i>	ATCC 25922	Negative, without colour change	

References: Lenette et al. (1985) Manual of Clinical Microbiology, 4th ed.

MALONATE BROTH

A differential medium for the differentiation of bacteria on the basis of their ability to utilize malonate.

Dehydrated media

Code Number:	500 g: MAD20500, 5 kg: MAD25000
Colour:	Beige
Appearance:	Homogeneous powder
pH before autoclaving:	6,7 (approx.) at 25 °C

Direction: Suspend **10 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into test tubes and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: MAD30100, 500 ml: MAD30500
Tubed media:	100 x 12 mm: MAD40003 (3 ml)
Colour:	Green
pH (at 25 °C):	6,6 – 6,8

Direction: Dispense the bottled media aseptically into test tubes. Media in tubes are ready for use.

FORMULA in g/l

Yeast extract	2,00
Sodium malonate	3,00
Sodium chloride	2,00
Ammonium-sulphate	2,00
Bromothymol blue	0,03
Buffers	1,00

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Enterobacter aerogenes</i>	ATCC 13048	Positive, colour change to blue	
<i>Escherichia coli</i>	ATCC 25922	Negative, without colour change	

References: Lenette et al. (1985) Manual of Clinical Microbiology, 4th ed.

MALT EXTRACT AGAR

A selective medium for the detection, isolation and enumeration of yeasts and moulds.

Dehydrated media

Code Number:	500 g: MEA20500, 5 kg: MEA25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	5,4 (approx.) at 25 °C

Direction: Suspend **50 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 115 °C for 10 minutes. If adjustment of pH is necessary to pH 3,5, cool to 50 °C and add aseptically **Lactic Acid Solution (LAS80100)** to the medium in the necessary quantity. Mix well before pouring.

Warning!

The medium is heat sensitive.

No further sterilisation is necessary or desirable.

Once acidified with lactic acid, the medium should not be reheated.

The ready medium is slightly turbid, but exempt from any precipitation.

Prepared media

Bottled media:	100 ml: MEA30100, 500 ml: MEA30500
Plated media:	55 mm: MEA50055, 90 mm: MEA50090
Colour:	Yellowish, slightly turbid
pH (25 °C)	5,3 – 5,5

Direction: If adjustment of pH is necessary, complete according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	5
Malt extract	30
Agar	15

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 25 °C	Growth	Incubation time: 48 h
<i>Candida albicans</i>	ATCC 10231	Good	
<i>Bacillus cereus (if the pH=3.5)</i>	ATCC 11778	Inhibited	

References: Galloway and Burgess (1952) Applied Mycology and Bacteriology 3rd ed.

II. DEHYDRATED CULTURE MEDIA

MALT EXTRACT BROTH

A selective medium for the cultivation of yeasts and moulds.

Dehydrated media

Code Number:	500 g: MBR20500, 5 kg: MBR25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	5,4 (approx.) at 25 °C

Direction: Suspend **20 g** in one litre of distilled water and heat gently to dissolve the medium completely. If adjustment of pH is necessary to pH 3,5, cool to 50 °C and add aseptically **Lactic Acid Solution (LAS80100)** to the medium in the necessary quantity. Dispense into final containers and sterilise by autoclaving at 115 °C for 10 minutes.

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: MBR30100, 500 ml: MBR30500
Tubed media:	150 x 15 mm: MBR40010 (10 ml)
Colour:	Yellowish
pH (at 25 °C):	5,3 – 5,5

Direction: If adjustment of pH is necessary, complete according to the direction of the dehydrated media and dispense aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Peptones	5
Malt extract	15

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 25 °C	Growth	Incubation time: 48 h
<i>Candida albicans</i>	ATCC 10231	Good	
<i>Bacillus cereus (if the pH=3.5)</i>	ATCC 11778	Inhibited	

References: Galloway and Burgess (1952) Applied Mycology and Bacteriology, 3rd ed.

MANNITOL LYSINE BRILLIANT GREEN AGAR

A selective and differential medium for the isolation of *Salmonella* spp. other than *S. typhi*.

Dehydrated media

Code Number:	500 g: MLA20500, 5 kg: MLA25000
Colour:	Yellowish green
Appearance:	Homogeneous hygroscopic powder
Final pH:	6,8 (approx.) at 25 °C

Direction: Suspend **54 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Cool quickly! Mix well before pouring.

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: MLA30100, 500 ml: MLA30500
Plated media:	55 mm: MLA50055, 90 mm: MLA50090
Colour:	Brownish
pH (at 25 °C):	6,7 – 6,9

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	22,0000
L-lysine	5,0000
Mannitol	3,0000
Sodium chloride	4,0000
Sodium thiosulphate	4,0000
Ferric ammonium citrate	1,0000
Brilliant green	0,0125
Violet red	0,0100
Agar	15,0000

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Salmonella typhimurium</i>	ATCC 14028	Good, mauve coloured colonies with black centre	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	
<i>Enterococcus faecalis</i>	ATCC 29212	Inhibited	

References: Inoue et al. (1968) Jap. J. Vet. Sci. 30.

NEW PRODUCT

MANNITOL MOTILITY NITRATE (MMN) MEDIUM

A semi-solid differential medium for the differentiation of bacteria on the basis of mannitol fermentation, motility and nitrate reduction.

Dehydrated media

Code Number:	500 g: MMN20500, 5 kg: MMN25000
Colour:	Pinkish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,6 (approx.) at 25 °C

Direction: Suspend **22 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Dispense into test tubes and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: MMN30100, 500 ml: MMN30500
Tubed media:	100 x 12 mm: MMN40003 (3 ml)
Colour:	Orange red
pH (at 25 °C):	7,5 – 7,7

Direction: Dispense the melted bottled media aseptically into sterile test tubes. Media in tubes are ready to use.

FORMULA in g/l

Peptones	10,00
Mannitol	7,50
Potassium nitrate	1,00
Phenol red	0,04
Agar	3,50

II. DEHYDRATED CULTURE MEDIA

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Reactions		Incubation time: 24 h	
		Mannitol	Motility	Nitrate	
<i>Escherichia coli</i>	ATCC 25922	+	+	+	
<i>Klebsiella pneumoniae</i>	ATCC 13883	–	+	+	
<i>Proteus mirabilis</i>	ATCC 29906	+	–	+	

References: Pickett (1980) Nonfermentative Gram-negative bacilli. Scientific Developments Press, Los Angeles.

MANNITOL SALT AGAR, PH EUR – USP

A selective and differential medium for the isolation and presumptive identification of pathogenic staphylococci according to PH EUR (Mannitol Salt Agar – Harmonised).

Dehydrated media

Code Number:	500 g: MSA20500, 5 kg: MSA25000
Colour:	Pinkish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,5 (approx.) at 25 °C

Direction: Suspend **110 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: MSA30100, 500 ml: MSA30500
Plated media:	55 mm: MSA50055, 90 mm: MSA50090
Colour:	Orange-red
pH (25 °C):	7,4 – 7,6

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Casein peptone	5,000
Meat peptone	5,000
Beef extract	1,000
D-Mannitol	10,000
Sodium chloride	75,000
Phenol red	0,025
Agar	14,000

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Staphylococcus aureus</i>	ATCC 29213	Good, yellow colonies with yellow halo	
<i>Staphylococcus epidermidis</i>	ATCC 12228	Good, red colonies without halo	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	

References: Chapman (1945) J. Bact. 50: 201.; European Pharmacopoeia

MAXIMUM RECOVERY DILUENT

A protective and isotonic diluent for maximum recovery of micro-organisms.

Dehydrated media

Code Number:	500 g: MRD20500, 5 kg: MRD25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,0 (approx.) at 25 °C

Direction: Suspend **9,5 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into final containers and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: MRD30100, 500 ml: MRD30500
Tubed media:	150 x 15 mm: MRD40010 (10 ml)
Colour:	Yellowish
pH (at 25 °C):	6,9 – 7,1

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Peptones	1,0
Sodium chloride	8,5

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good	

References: Straker and Stokes (1957) J. Appl. Bact. 26: 493.

MEAT EXTRACT BROTH

A general purpose medium for the cultivation of micro-organisms.

Dehydrated media

Code Number:	500 g: MEX20500, 5 kg: MEX25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,0 (approx.) at 25 °C

Direction: Suspend **8 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into final containers and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: MEX30100, 500 ml: MEX30500
Tubed media:	150 x 15 mm: MEX40010 (10 ml)
Colour:	Yellowish
pH (at 25 °C):	6,9 – 7,1

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Peptones	5
Beef extract	3

Note: The typical formula can be adjusted to obtain optimal performance.

II. DEHYDRATED CULTURE MEDIA

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good	
<i>Staphylococcus aureus</i>	ATCC 29213	Good	

References: APHA (1980) Standard Methods for the Examination of Water and Wastewater. 15th ed.

MEMBRANE LAURYL SULPHATE (MLSB) BROTH

A selective medium for the enumeration of coliforms and *Escherichia coli*.

Dehydrated media

Code Number:	500 g: MLS20500, 5 kg: MLS25000
Colour:	Pinkish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,4 (approx.) at 25 °C

Direction: Suspend 76 g in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into test tubes and sterilise by autoclaving at 121 °C for 15 minutes. Cool quickly!

Prepared media

Bottled media:	100 ml: MLS30100, 500 ml: MLS30500
Tubed media:	100 x 12 mm: MLS40002 (2 ml)
Colour:	Orange red
pH (at 25 °C):	7,3 – 7,5

Direction: Dispense the bottled media aseptically into sterile test tubes. Media in tubes are ready to use.

FORMULA in g/l

Peptones	44,8
Lactose	30,0
Sodium lauryl sulphate	1,0
Phenol red	0,2

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good, yellow colonies on the membrane	
<i>Bacillus subtilis</i>	ATCC 6633	Inhibited	

References: Burnhan (1967) Proc. Soc. Wat. Treat Exam 16: 40.

NEW PRODUCT

M-FC AGAR BASE

A selective and differential medium for the detection and enumeration of faecal coliforms by membrane filtration.

Dehydrated media

Code Number:	500 g: MFC20500, 5 kg: MFC25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,4 (approx.) at 25 °C

Direction: Suspend 26 g in 500 ml of distilled water and heat with frequent agitation until the medium becomes transparent (about 90 °C). Add the content of one vial of Rosolic Acid Supplement (RAS80005) reconstituted with 5 ml of sterile distilled water. Continue heating with frequent agitation until the medium boils well. Mix well before pouring.

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: MFC30100, 500 ml: MFC30500
Plated media:	55 mm: MFC50055, 90 mm: MFC50090
Colour of bottled media:	Dark blue
Colour of plated media:	Reddish purple
pH (25 °C):	7,2 – 7,4

Direction: Supplement the melted bottled media according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	18,0
Bile salts	1,5
Lactose	12,4
Sodium chloride	5,0
Aniline blue	0,1
Agar	15,0

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good, blue colonies	
<i>Salmonella typhimurium</i>	ATCC 14028	Good, grey colonies	
<i>Enterococcus faecalis</i>	ATCC 29212	Inhibited	

References: Geldreich et al. (1965) J. Am. Water Works Assoc. 57: 208.

NEW PRODUCT

M-FC BROTH BASE

A selective and differential medium for the detection and enumeration of faecal coliforms by membrane filtration.

Dehydrated media

Code Number:	500 g: MFB20500, 5 kg: MFB25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,4 (approx.) at 25 °C

Direction: Suspend 18,5 g in 500 ml of distilled water. Add the content of one vial of Rosolic Acid Supplement (RAS80005) reconstituted with 5 ml of sterile distilled water. Mix well and heat with frequent agitation until the medium boils well.

II. DEHYDRATED CULTURE MEDIA

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: MFB30100, 500 ml: MFB30500
Tubed media:	100 x 12 mm: MFB40002 (2 ml)
Colour of bottled media:	Dark blue
Colour of tubed media:	Reddish purple
pH (at 25 °C):	7,3 – 7,5

Direction: Supplement the bottled media according to the direction of the dehydrated media and dispense aseptically into sterile test tubes. Media in tubes are ready to use.

FORMULA in g/l

Peptones	18,0
Bile salts	1,5
Lactose	12,4
Sodium chloride	5,0
Aniline blue	0,1

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good, colour change to blue	
<i>Salmonella typhimurium</i>	ATCC 14028	Good, colour change to grey	
<i>Enterococcus faecalis</i>	ATCC 29212	Inhibited	

References: Geldreich et al. (1965) J. Am. Water Works Assoc. 57: 208.

M-GREEN AGAR

A selective end differential medium for the detection of yeasts and moulds according to the ISO 10718.

Dehydrated media

Code Number:	500 g: MGA20500, 5 kg: MGA25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	4,6 (approx.) at 25 °C

Direction: Suspend **87 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 115 °C for 15 minutes.

Warning!

- The medium is heat sensitive. No further sterilisation is necessary or desirable.
- The low pH softens the agar, therefore the consistency is not suitable for inoculation, but sufficient to keep the membrane filter.

Prepared media

Bottled media:	100 ml: MGA30100, 500 ml: MGA30500
Plated media:	55 mm: MGA50055, 90 mm: MGA50090
Colour:	Green
pH (25 °C):	4,5 – 4,7

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

Warning!

Melt and cool the medium quickly!
Prolonged heating diminish the gel strength of the agar.

FORMULA in g/l

Casein peptone	5,000
Meat peptone	5,000
Yeast extract	9,000
Glucose (anhydrous)	50,000
Magnesium sulphate	2,100
Diastase	0,050
Thiamine HCl	0,050
Bromocresol green	0,026
Potassium phosphate	2,000
Agar	13,800

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 25 °C	Growth	Incubation time: 48 h
<i>Saccharomyces cerevisiae</i>	ATCC 9763	Good	
<i>Aspergillus niger</i>	ATCC 16404	Good	

References: ISO 10718

M-GREEN BROTH

A selective end differential medium for the detection of yeasts and moulds according to the ISO 10718.

Dehydrated media

Code Number:	500 g: MGB20500, 5 kg: MGB25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	4,6 (approx.) at 25 °C

Direction: Suspend **73,2 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into final containers and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: MGB30100, 500 ml: MGB30500
Tubed media:	100 x 10 mm: SDB40002 (2 ml)
Colour:	Green
pH (at 25 °C):	4,5 – 4,7

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Casein peptone	5,000
Meat peptone	5,000
Yeast extract	9,000
Glucose (anhydrous)	50,000
Magnesium sulphate	2,100
Diastase	0,050
Thiamine HCl	0,050
Bromocresol green	0,026
Potassium phosphate	2,000

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

II. DEHYDRATED CULTURE MEDIA

Quality Control:

Test strains	Incubation temp: 25 °C	Growth	Incubation time: 48 h
<i>Saccharomyces cerevisiae</i>	ATCC 9763	Good	
<i>Aspergillus niger</i>	ATCC 16404	Good	

References: ISO 10718

MOELLER BROTH

See: Culture Media for Amino Acid Decomposition Studies (page 137)

NEW PRODUCT

MOTILITY INDOLE LYSINE (MIL) MEDIUM

A semi-solid differential medium for the differentiation of bacteria on the basis of motility, indole production, lysine deaminase and lysine decarboxylase activity.

Dehydrated media

Code Number:	500 g: MIL20500, 5 kg: MIL25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	6,6 (approx.) at 25 °C

Direction: Suspend 36 g in one litre of distilled water and heat with frequent agitation until the medium boils well. Dispense into test tubes and sterilise by autoclaving at 121°C for 15 minutes.

Prepared media

Bottled media:	100 ml: MIL30100, 500 ml: MIL30500
Tubed media:	100 x 12 mm: MIL40003 (3 ml)
Colour:	Purple
pH (at 25 °C):	6,5 – 6,7

Direction: Dispense the melted bottled media aseptically into test tubes. Media in tubes are ready to use.

FORMULA in g/l

Peptones	22,50
L-Lysine	10,00
Glucose	1,00
Ferric ammonium citrate	0,50
Bromocresol purple	0,02
Agar	2,00

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Reactions			Incubation time: 24 h	
		Lysine decarboxylase	Lysine deaminase	Motility	Indole	
<i>Escherichia coli</i>	ATCC 25922	+	–	+	+	
<i>Proteus mirabilis</i>	ATCC 29906	–	+	+	–	
<i>Salmonella typhimurium</i>	ATCC 14028	+	–	+	–	
<i>Shigella sonnei</i>	ATCC 25931	–	–	–	–	

References: Reller and Mirrett (1975) J. Clin. Microbiol. 2: 247.

MOTILITY INDOLE UREA (MIU) MEDIUM

A semi-solid differential medium for the differentiation of bacteria on the basis of motility, indole production and urease activity.

Dehydrated media

Code Number:	500 g: MIU20500-M
	packaging: 380 g medium base + 120 g urea
	5 kg: MIU25000
	packaging: 3,8 kg medium base + 1,2 kg urea

Appearance of agar base:	Pinkish homogeneous hygroscopic powder
Appearance of urea:	White pellet
pH before autoclaving:	6,5 (approx.) at 25 °C
pH after autoclaving:	6,8 (approx.) at 25 °C

Direction: Suspend 32 g medium base and 10 g urea in one litre of distilled water and heat with frequent agitation until the medium boils well. Distribute into test tubes and sterilise by autoclaving at 115 °C for 15 minutes. Cool quickly!

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: MIU30100, 500 ml: MIU30500
Tubed media:	100 x 15 mm: MIU40005 (5 ml)
Colour:	Pinkish
pH (at 25 °C):	6,6 – 7,0

Direction: Dispense the melted bottled media aseptically into test tubes. Media in tubes are ready to use.

FORMULA OF ONE LITRE OF THE COMPLETE MEDIUM in g/l

Peptones	11,000
Sodium chloride	5,000
Urea	20,000
Phenol red	0,012
Buffers	3,000
Agar	3,000

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Reactions			Incubation time: 24 h
		Urea	Motility	Indole	
<i>Proteus mirabilis</i>	ATCC 29906	+	(red)	+	–
<i>Escherichia coli</i>	ATCC 25922	–	(yellow)	+	+
<i>Shigella sonnei</i>	ATCC 25931	–	(yellow)	–	–

References: Roland et al. (1947) Ann. Inst. Pasteur 73: 914.
Christensen (1946) J. Bact. 52: 461.

MOTILITY MEDIUM

A semi-solid differential medium for the differentiation of bacteria on the basis of motility.

Dehydrated media

Code Number:	500 g: MOA20500, 5 kg: MOA25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,4 (approx.) at 25 °C

II. DEHYDRATED CULTURE MEDIA

Direction: Suspend **22 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Dispense into test tubes and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: MOA30100, 500 ml: MOA30500
Tubed media:	100 x 12 mm: MOA40003 (3 ml)
Colour:	Yellowish
pH (at 25 °C):	7,3 – 7,5

Direction: Dispense the melted bottled media aseptically into test tubes. Media in tubes are ready to use.

FORMULA in g/l

Peptones	13,00
Sodium chloride	5,00
2,3,5-Triphenyltetrazolium chloride	0,05
Agar	4,00

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Positive, motility	
<i>Shigella sonnei</i>	ATCC 25931	Negative, without motility	

References: Tittsler and Sandholzer (1936) J. Bacteriol. 31: 575.

NEW PRODUCT

MOTILITY NITRATE (MN) MEDIUM BASE

A semi-solid differential medium for the differentiation of bacteria on the basis of motility and nitrate reduction.

Dehydrated media

Code Number:	500 g: MON20500, 5 kg: MON25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,4 (approx.) at 25 °C

Direction: Suspend **19 g** in one litre of distilled water. Add **5 ml of Glycerol Supplement (GLC80100)** and heat with frequent agitation until the medium boils well. Dispense into test tubes and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: MON30100, 500 ml: MON30500
Tubed media:	100 x 12 mm: MON40003 (3 ml)
Colour:	Yellowish
pH (at 25 °C):	7,3 – 7,5

Direction: Dispense the melted bottled media aseptically into sterile test tubes. Media in tubes are ready to use.

FORMULA in g/l

Peptones	14
Potassium nitrate	1
Sodium chloride	1
Agar	3

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Reactions	Incubation time: 48 h
		Motility	Nitrate reduction
<i>Clostridium perfringens</i>	ATCC 13124	+	–
<i>Clostridium sporogenes</i>	ATCC 11437	–	+

References: Pickett (1980) Nonfermentative Gram-negative bacilli. Scientific Developments Press, Los Angeles.

M-PA-B AGAR

A selective and differential medium for the selective recovery and enumeration of *Pseudomonas aeruginosa* from heavily contaminated samples.

Dehydrated media

Code Number:	500 g: MPB20500, 5 kg: MPB25000
Colour:	Pinkish
Appearance:	Homogeneous hygroscopic powder
Final pH:	7,2 (approx.) at 25 °C

Direction: Suspend **39 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Cool quickly. Mix well before pouring.

Warning!

The medium is heat-sensitive.

No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: MPB30100, 500 ml: MPB30500
Plated media:	55 mm: MPB50055, 90 mm: MPB50090
Colour:	Red
pH (25 °C):	7,1 – 7,3

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Yeast extract	2,000
L-Lysine	5,000
Xylose	1,250
Lactose	1,250
Sucrose	1,250
Sodium chloride	5,000
Sodium thiosulphate	5,000
Magnesium sulphate	1,500
Ferric ammonium citrate	0,800
Nalidixic acid	0,037
Sulfapyridine	0,170
Cycloheximide	0,150
Kanamycin	0,008
Phenol red	0,080
Agar	15,500

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

II. DEHYDRATED CULTURE MEDIA

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Pseudomonas aeruginosa</i>	ATCC 27853	Good, brown – dark brown colonies	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	

References: Levin and Cabelli (1972) Appl. Microbiol. 24: 864.

M-PA-C AGAR

A selective and differential medium for the selective recovery and enumeration of *Pseudomonas aeruginosa* from slightly contaminated samples.

Dehydrated media

Code Number:	500 g: MPA20500, 5 kg: MPA25000
Colour:	Pinkish
Appearance:	Homogeneous hygroscopic powder
Final pH:	7,2 (approx.) at 25 °C

Direction: Suspend 38 g in one litre of distilled water and heat with frequent agitation until the medium boils well. Cool quickly. Mix well before pouring.

Warning!

The medium is heat-sensitive.
No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: MPA30100, 500 ml: MPA30500
Plated media:	55 mm: MPA50055, 90 mm: MPA50090
Colour:	Red
pH (25 °C):	7,1 – 7,3

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Yeast extract	2,000
L-Lysine	5,000
Xylose	1,250
Lactose	1,250
Sucrose	1,250
Sodium chloride	5,000
Sodium thiosulphate	5,000
Magnesium sulphate	1,500
Ferric ammonium citrate	0,800
Nalidixic acid	0,037
Kanamycin	0,008
Phenol red	0,080
Agar	14,800

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Pseudomonas aeruginosa</i>	ATCC 27853	Good, brown – dark brown colonies	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	

References: Levin and Cabelli (1972) Appl. Microbiol. 24: 864.

MRS AGAR BASE

A low selective medium for the isolation and cultivation of *Lactobacillus* spp. according to ISO 15214.

Dehydrated media

Code Number:	500 g: MRA20500, 5 kg: MRA25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	5,7 (approx.) at 25 °C

Direction: Suspend 63 g in one litre of distilled water. Add 10 ml of MRS Supplement (MRC80100). Mix well and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Warning!

To ensure the homogeneity shake well the supplement before use.

Prepared media

Bottled media:	100 ml: MRA30100, 500 ml: MRA30500
Plated media:	55 mm: MRA50055, 90 mm: MRA50090
Colour:	Yellowish
pH (at 25 °C):	5,6 – 5,8

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA OF ONE LITRE OF THE COMPLETE MEDIUM in g/l

Casein peptone	10,00
Meat extract	10,00
Yeast extract	4,00
Glucose	20,00
Sodium acetate	3,00
Ammonium citrate	2,00
Magnesium sulphate x 7H ₂ O	0,20
Manganese sulphate x 4 H ₂ O	0,05
Potassium phosphate, dibasic	2,00
TWEEN 80	1,08
Agar	14,75

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 72 h
<i>Lactobacillus acidophilus</i>	ATCC 4356	Good (under micro-aerobic conditions)	
<i>Escherichia coli</i>	ATCC 25922	Moderate growth	

References: DeMan, Rogosa and Sharpe (1960) J. Appl. Bact. 23: 30.; ISO 15214

MRS BROTH BASE

A low selective medium for the cultivation of *Lactobacillus* spp.

Dehydrated media

Code Number:	500 g: MRB20500, 5 kg: MRB25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	6,2 (approx.) at 25 °C

Direction: Suspend 50 g in one litre of distilled water. Add 10 ml of MRS Supplement (MRC80100). Mix well and heat gently to dissolve the medium completely. Dispense into final containers and sterilise by autoclaving at 121 °C for 15 minutes.

II. DEHYDRATED CULTURE MEDIA

Warning!

To ensure the homogeneity shake well the supplement before use.

Prepared media

Bottled media:	100 ml: MRB30100, 500 ml: MRB30500
Tubed media:	150 x 15 mm: MRB40010 (10 ml)
Colour:	Yellowish
pH (at 25 °C):	6,1 – 6,3

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Peptones	25,50
Glucose	20,00
Ammonium-citrate	2,00
Magnesium sulphate	0,20
Manganese sulphate	0,05
Buffers	2,25

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 72 h
<i>Lactobacillus acidophilus</i>	ATCC 4356	Good (under micro-aerobic conditions)	

References: DeMan, Rogosa and Sharpe (1960) J. Appl. Bact. 23: 30.

MRSA SCREEN AGAR BASE

A selective medium for the presumptive identification of MRSA.

Dehydrated media

Code Number:	500 g: MRS20500, 5 kg: MRS25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,4 (approx.) at 25 °C

Direction: Suspend **39 g** in 500 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the contents of **one vial of MRSA Selective Supplement (MSS80004)** reconstituted with 4 ml of sterile distilled water. Mix well before pouring.

Prepared media

Bottled media:	100 ml: MRS30100, 500 ml: MRS30500
Plated media:	55 mm: MRS50055, 90 mm: MRS50090
Colour:	Yellowish
pH (25 °C):	7,3 – 7,5

Direction: Supplement the melted bottled media according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	19,5
Starch soluble	1,5
Sodium chloride	40,0
Agar	17,0

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 48 h
MRSA	ATCC 33591	Good	
MSSA	ATCC 29213	Inhibited	

MRVP BROTH

A differential medium for the differentiation of bacteria on the basis of methyl red and Voges-Proskauer reactions.

Dehydrated media

Code Number:	500 g: MVP20500, 5 kg: MVP25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,0 (approx.) at 25 °C

Direction: Suspend **17 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into test tubes and sterilise by autoclaving at 121 °C for 15 minutes. Cool quickly!

Prepared media

Bottled media:	100 ml: MVP30100, 500 ml: MVP30500
Tubed media:	100 x 12 mm: MVP40002 (2 ml)
Colour:	Yellowish
pH (at 25 °C):	6,9 – 7,1

Direction: Dispense the bottled media aseptically into sterile test tubes. Media in tubes are ready to use.

FORMULA in g/l

Peptones	7
Glucose	5
Buffers	5

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Reactions	
		Methyl red	Voges-Proskauer
<i>Escherichia coli</i>	ATCC 25922	+	–
<i>Enterobacter aerogenes</i>	ATCC 13048	–	+

References: Voges and Proskauer (1898) Z. Hyg. 28: 20.

MUELLER-HINTON AGAR, FUNGI

A standard medium for antimycotical susceptibility testing. The addition of methylene blue enhances zone edge definition.

Dehydrated media

Code Number:	500 g: MHF20500, 5 kg: MHF25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,4 (approx.) at 25 °C

Direction: Suspend **58 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

II. DEHYDRATED CULTURE MEDIA

Prepared media

Bottled media:	100 ml: MHF30100, 500 ml: MHF30500
Plated media:	55 mm: MHF50055, 90 mm: MHF50090
Colour:	Bluish
pH (25 °C):	7,3 – 7,5

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	19,5000
Glucose	20,0000
Starch soluble	1,5000
Methylene blue	0,0005
Agar	17,0000

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 25 °C	Growth	Incubation time: 48 h
<i>Candida albicans</i>	ATCC 10231	Good	

References: Mueller and Hinton (1941) Proc. Soc. Exp. Biol. Med. 48: 330.

MUELLER-HINTON II AGAR

An antimicrobial susceptibility testing medium which fits the requirements of NCCLS. The medium has extremely low concentrations of thymine and thymidine as well as appropriate levels of calcium and magnesium ions.

Dehydrated media

Code Number:	500 g: MHT20500, 5 kg: MHT25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,3 (approx.) at 25 °C

Direction for Mueller-Hinton II Agar: Suspend **38 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Direction for Mueller-Hinton II Blood Agar, EUCAST: Suspend **38 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically **50 ml of sterile defibrinated horse blood and 0,02 g β-NAD**. Mix well before pouring.

Prepared media

Bottled media:	100 ml: MHT30100, 500 ml: MHT30500
Plated Mueller-Hinton Agar:	90 mm Petri-dish, 25 ml: MHT50090-01
Plated Mueller-Hinton II Blood Agar, EUCAST:	90 mm Petri-dish, 25 ml: MHT50090-04
Colour of blood free agar:	Yellowish
Colour of blood agar:	Ruby red
pH (at 25 °C):	7,2 – 7,4

Direction: If necessary, supplements may be added to the melted bottled media according to the direction of the dehydrated media. Dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	19,5
Starch soluble	1,5
Agar	17,0

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Conditions, Mueller-Hinton II Agar:

Incubation temperature:	37 °C	Incubation time:	16 h
Test strains		Growth	Zone diameter
<i>Escherichia coli</i>	ATCC25922	Good	
Ampicillin	10 µg		16 – 22 mm
Gentamicin	10 µg		19 – 26 mm
Tigecycline	15 µg		20 – 27 mm
Trimeth.-Sulfam.	1,25/23,75 µg		23 – 29 mm
<i>Enterococcus faecalis</i>	ATCC29212	Good	
Trimeth.-Sulfam.	1,25/23,75 µg		≥ 20 mm
<i>Pseudomonas aeruginosa</i>	ATCC27853	Good	
Gentamicin	10 µg		16 – 21 mm
Tobramycin	10 µg		19 – 25 mm
<i>Staphylococcus aureus</i>	ATCC29213	Good	
Oxacillin	1 µg		18 – 24 mm
Gentamicin	10 µg		19 – 27 mm
Cefoxitin	30 µg		23 – 29 mm
Trimeth.-Sulfam.	1,25/23,75 µg		24 – 32 mm

Conditions, Mueller-Hinton II Blood Agar, EUCAST:

Incubation temperature:	37 °C	Incubation time:	16 h
Test strains		Growth	Zone diameter
<i>Streptococcus pneumoniae</i>	ATCC49619	Good	
Oxacillin	1 µg		8 – 14 mm
Trimeth. Sulfam.	1,25/23,75 µg		20 – 26 mm

References: Mueller and Hinton (1941) Proc. Soc. Exp. Biol. Med. 48: 330.

MUELLER-HINTON II BROTH

An antimicrobial susceptibility testing medium, which may be used in internationally recognised standard procedures. The medium has extremely low concentrations of thymine and thymidine as well as appropriate levels of calcium and magnesium ions.

Dehydrated media

Code Number:	500 g: MHC20500, 5 kg: MHC25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,4 (approx.) at 25 °C

Direction: Suspend **21 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into final containers and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: MHC30100, 500 ml: MHC30500
Tubed media:	150 x 15 mm: MHC40010 (10 ml)
Colour:	Yellowish
pH (at 25 °C):	7,3 – 7,5

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Peptones	19,5
Starch soluble	1,5

II. DEHYDRATED CULTURE MEDIA

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good	
<i>Enterococcus faecalis</i>	ATCC 29212	Good	
<i>Pseudomonas aeruginosa</i>	ATCC 27853	Good	
<i>Staphylococcus aureus</i>	ATCC 29213	Good	

References: Mueller and Hinton (1941) Proc. Soc. Exp. Biol. Med. 48: 330.

MYCOPLASMA (PPLO) AGAR BASE

A highly nutritious medium base for preparation of Mycoplasma (PPLO) Medium.

Dehydrated media

Code Number:	500 g: MYA20500, 5 kg: MYA25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,8 (approx.) at 25 °C

Direction: Suspend **17,5 g** in 500 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add enrichments (horse serum, specially prepared yeast extract). For a selective medium (which inhibits bacteria) add inhibitors (thallium acetate and antibiotics). Mix well before pouring.

Prepared media

Bottled media:	100 ml: MYA30100, 500 ml: MYA30500
Colour:	Yellowish
pH (25 °C)	7,7 – 7,9

Direction: Supplement the melted bottled media according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes.

FORMULA in g/l

Nutrient substrate (heart infusion, peptones)	16
Sodium chloride	5
Agar	14

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 7 days
<i>Mycoplasma pneumoniae</i>	ATCC 15531	Good	

References: Morton et al. (1951) Am. J. Syphil. Gonorrh. Vener. Dis. 35: 361.

MYCOPLASMA (PPLO) BROTH BASE

A highly nutritious medium base for the preparation of Mycoplasma (PPLO) Broth.

Dehydrated media

Code Number:	500 g: MYB20500, 5 kg: MYB25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,8 (approx.) at 25 °C

Direction: Suspend **10,5 g** in 500 ml of distilled water and heat gently to dissolve the medium completely. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add enrichments (horse serum, specially prepared yeast extract). For a selective medium (which inhibits bacteria) add inhibitors (thallium acetate and antibiotics). Mix well and dispense aseptically into sterile final container.

Prepared media

Bottled media:	100 ml: MYB30100, 500 ml: MYB30500
Colour:	Yellowish
pH (25 °C)	7,7 – 7,9

Direction: Supplement the melted bottled media according to the direction of the dehydrated media and dispense aseptically into sterile final containers.

FORMULA in g/l

Nutrient substrate (heart infusion, peptones)	16
Sodium chloride	5

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 7 days
<i>Mycoplasma pneumoniae</i>	ATCC 15531	Good	

References: Morton et al. (1951) Am. J. Syphil. Gonorrh. Vener. Dis. 35: 361.

NEUTRALISING FLUID BASE, PH EUR

An inactivating solution for the neutralisation of activity of antimicrobial agents according to PH EUR.

Dehydrated media

Code Number:	500 g: NSE20500, 5 kg: NSE25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,0 (approx.) at 25 °C

Direction: Suspend **20,1 g** in 970 ml of distilled water. Add **30 ml of TWEEN 80 Supplement (TWS80500)**. Mix well and keep the suspension at about 50 °C until the lecithin dissolved completely (20–30 min). The dissolution is completed, when the medium is yellowish and slightly turbid, but exempt from any precipitate. Dispense into final containers and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: NSE30100, 500 ml: NSE30500
Tubed media:	150 x 15 mm: NSE40010 (10 ml)
Colour:	Yellowish, homogeneous turbid
pH (at 25 °C):	6,9 – 7,1

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Peptone	1,0
Sodium chloride	4,3
L-Histidine	1,0
Lecithin	3,0
Potassium phosphate, monobasic	3,6
Sodium phosphate, dibasic	7,2

Note: The typical formula can be adjusted to obtain optimal performance.

II. DEHYDRATED CULTURE MEDIA

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Staphylococcus aureus</i>	ATCC 29213	Good	

References: European Pharmacopoeia

NITRATE BROTH

A differential medium for the differentiation of bacteria on the basis of nitrate reduction.

Dehydrated media

Code Number:	500 g: NIT20500, 5 kg: NIT25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,4 (approx.) at 25 °C

Direction: Suspend **12 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into test tubes fitted with Durham tube and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: NIT30100, 500 ml: NIT30500
Tubed media:	150 x 15 mm: NIT40004 (4 ml)
Colour:	Yellowish
pH (at 25 °C):	7,3 – 7,5

Direction: Dispense the bottled media aseptically into sterile tubes fitted with Durham tube. Media in tubes are ready to use.

FORMULA in g/l

Peptones	10
Potassium nitrate	2

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Pseudomonas aeruginosa</i>	ATCC 27853	Positive (gas production + positive Griess-Ilosvay test)	
<i>Enterococcus faecalis</i>	ATCC 29212	Negative (without gas production + negative Griess-Ilosvay test)	

References: MacFaddin (1980) Biochemical Tests for the Identification of Medical Bacteria, 2nd ed.

NUTRIENT AGAR, DEV

A non-selective medium for the determination of total microbial count of water according to DEV.

Dehydrated media

Code Number:	500 g: NUD20500, 5 kg: NUD25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,3 (approx.) at 25 °C

Direction: Suspend **43 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: NUD30100, 500 ml: NUD30500
Plated media:	55 mm: NUD50055, 90 mm: NUD50090
Colour:	Yellowish
pH (25 °C):	7,2 – 7,4

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Meat peptone	10
Meat extract	10
Sodium chloride	5
Agar	18

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good	
<i>Staphylococcus aureus</i>	ATCC 29213	Good	

References: DEV

NUTRIENT AGAR

A non-selective general purpose medium for the cultivation of non-fastidious micro-organisms.

Dehydrated media

Code Number:	500 g: NUA20500, 5 kg: NUA25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,4 (approx.) at 25 °C

Direction: Suspend **29 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: NUA30100, 500 ml: NUA30500
Plated media:	55 mm: NUA50055, 90 mm: NUA50090
Colour:	Yellowish
pH (25 °C):	7,3 – 7,5

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	11
Sodium chloride	5
Agar	13

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

II. DEHYDRATED CULTURE MEDIA

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good	
<i>Staphylococcus aureus</i>	ATCC 29213	Good	

References: APHA (1917) Standard Methods of Water Analysis, 3rd ed.

NUTRIENT BROTH

A general purpose medium for the cultivation of non-fastidious micro-organisms.

Dehydrated media

Code Number:	500 g: NUB20500, 5 kg: NUB25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,4 (approx.) at 25 °C

Direction: Suspend **16 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into final containers and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: NUB30100, 500 ml: NUB30500
Tubed media:	150 x 15 mm: NUB40010 (10 ml)
Colour:	Yellowish
pH (at 25 °C):	7,3 – 7,5

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Peptones	11
Sodium chloride	5

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good	
<i>Staphylococcus aureus</i>	ATCC 29213	Good	

References: APHA (1985) Standard Methods for the Examination of Water and Wastewater

NUTRIENT BROTH No.2

A general purpose medium for the cultivation of micro-organisms.

Dehydrated media

Code Number:	500 g: NUN20500, 5 kg: NUN25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,4 (approx.) at 25 °C

Direction: Suspend **25 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into final containers and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: NUN30100, 500 ml: NUN30500
Tubed media:	150 x 15 mm: NUN40010 (10 ml)
Colour:	Yellowish
pH (at 25 °C):	7,3 – 7,5

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Peptones	20
Sodium chloride	5

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good	
<i>Staphylococcus aureus</i>	ATCC 29213	Good	

References: British Pharmacopoeia (1980)

NUTRIENT BROTH, DEV

A general purpose medium for the determination of total microbial count of water according to DEV.

Dehydrated media

Code Number:	500 g: NBD20500, 5 kg: NBD25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,3 (approx.) at 25 °C

Direction: Suspend **25 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into final containers and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: NBD30100, 500 ml: NBD30500
Tubed media:	150 x 15 mm: NBD40010 (10 ml)
Colour:	Yellowish
pH (at 25 °C):	7,2 – 7,4

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Peptones	10
Meat extract	10
Sodium chloride	5

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good	
<i>Staphylococcus aureus</i>	ATCC 29213	Good	

References: DEV

II. DEHYDRATED CULTURE MEDIA

NUTRIENT GELATIN MEDIUM

A differential medium for detection of gelatinase production by proteolytic micro-organisms.

Dehydrated media

Code Number:	500 g: GEM20500, 5 kg: GEM25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	6,8 (approx.) at 25 °C

Direction: Suspend **128 g** in one litre of distilled water and heat with frequent agitation until the medium dissolves completely. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: GEM30100, 500 ml: GEM30500
Colour:	Yellowish
pH (25 °C):	6,7 – 6,9

Direction: Dispense the melted bottled media aseptically into sterile final containers.

FORMULA in g/l

Peptones	8
Gelatin	120

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 168 h
<i>Staphylococcus aureus</i>	ATCC 29213	Good, with gelatin liquefaction	
<i>Escherichia coli</i>	ATCC 25922	Good, without gelatin liquefaction	

References: APHA (1960) Standard Methods for the Examination of Water and Sewage.

NUTRIENT YEAST GLUCOSE (NYDA) AGAR

A non-selective general purpose medium for the cultivation of micro-organisms.

Dehydrated media

Code Number:	500 g: NYG20500, 5 kg: NYG25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,4 (approx.) at 25 °C

Direction: Suspend **30 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: NYG30100, 500 ml: NYG30500
Plated media:	55 mm: NYG50055, 90 mm: NYG50090
Colour:	Yellowish
pH (25 °C):	7,3 – 7,5

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	7
Yeast extract	5
Glucose	1
Sodium chloride	4
Agar	13

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good	
<i>Staphylococcus aureus</i>	ATCC 29213	Good	
<i>Saccharomyces cerevisiae</i>	ATCC 9763	Good	

References: Turner et al. (1984)

ORANGE SERUM AGAR

A selective medium for the cultivation and enumeration of micro-organisms in citrus juice concentrates.

Dehydrated media

Code Number:	500 g: OSA20400
packaging: 400 g of agar base + 2 litre of sterile, filtered, pH adjusted orange juice	5 kg: OSA24000
packaging: 4 kg of agar base + 20 litre of sterile, filtered, pH adjusted orange juice	
Appearance of agar base:	Yellowish, homogeneous hygroscopic powder
Appearance of orange juice:	Orange coloured liquid
pH before autoclaving:	5,5 (approx.) at 25 °C

Direction: Suspend **20 g agar base** in 400 ml of distilled water. Mix well and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50–60 °C and add aseptically **100 ml of Orange juice**. Mix well before pouring.

Warning!

For sufficient accuracy it is enough to apply the 100 ml scale on the bottle of the Orange juice.

Prepared media

Bottled media:	100 ml: OSA30100, 500 ml: OSA30500
Plated media:	55 mm: OSA50055, 90 mm: OSA50090
Colour:	Orange
pH (at 25 °C):	5,4 – 5,6

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	18
Glucose	4
Buffers	3
Agar	15

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 30 °C	Growth	Incubation time: 72 h
<i>Lactobacillus acidophilus</i>	ATCC 4356	Good (under micro-aerobic conditions)	
<i>Saccharomyces cerevisiae</i>	ATCC 25922	Good	

References: APHA (2001) Compendium of Methods for Microbiological Examination of Foods, 4th ed.

II. DEHYDRATED CULTURE MEDIA

ORANGE SERUM BROTH

A selective medium for the cultivation of micro-organisms in citrus juice concentrates.

Dehydrated media

Code Number:	500 g: OSB20500
packaging: 500 g of broth base + 4 litre of sterile, filtered, pH adjusted orange juice	5 kg: OSB25000
packaging: 5 kg of broth base + 40 litre of sterile, filtered, pH adjusted orange juice	
Appearance of broth base:	Yellowish, homogeneous hygroscopic powder
Appearance of orange juice:	Orange coloured liquid
pH before autoclaving:	5,5 (approx.) at 25 °C

Direction: Suspend **12,5 g broth base** in 400 ml of distilled water. Mix well and heat gently to dissolve the medium completely. Add **100 ml of Orange juice**. Mix well and dispense into final containers. Sterilise by autoclaving at 115 °C for 15 minutes.

Warning!

For sufficient accuracy it is enough to apply the 100 ml scale on the bottle of the Orange juice. The medium is heat sensitive. No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: OSB30100, 500 ml: OSB30500
Tubed media:	150 x 15 mm: OSB40010 (10 ml)
Colour:	Yellowish
pH (at 25 °C):	5,4 – 5,6

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Peptones	18
Glucose	4
Buffers	3

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 30 °C	Growth	Incubation time: 72 h
<i>Lactobacillus acidophilus</i>	ATCC 4356	Good (under micro-aerobic conditions)	
<i>Saccharomyces cerevisiae</i>	ATCC 9763	Good	

References: APHA (2001) Compendium of Methods for Microbiological Examination of Foods, 4th ed.

OXYTETRACYCLINE GLUCOSE YEAST EXTRACT AGAR BASE

A selective medium for the enumeration of yeasts and moulds.

Dehydrated media

Code Number:	500 g: OGY20500, 5 kg: OGY25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,0 (approx.) at 25 °C

Direction: Suspend **19 g** in 500 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the contents of **one vial of OGYE Selective Supplement (OGS80004)** reconstituted with 4 ml of sterile distilled water. Mix well before pouring.

Prepared media

Bottled media:	100 ml: OGY30100, 500 ml: OGY30500
Plated media:	55 mm: OGY50055, 90 mm: OGY50090
Colour:	Yellowish
pH (25 °C)	6,9 – 7,1

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Yeast extract	5,0000
Glucose	20,0000
Vitamin H	0,0001
Agar	13,0000

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 25 °C	Growth	Incubation time: 48 h
<i>Aspergillus brasiliensis</i>	ATCC 16404	Good	
<i>Saccharomyces cerevisiae</i>	ATCC 9763	Good	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	

References: Mossel et al. (1970) Appl. Bact. 35: 454.

ÖNÖZ AGAR

A selective and differential medium for the isolation of enteric micro-organisms, especially *Salmonella* and some *Shigella* spp.

Dehydrated media

Code Number:	500 g: ONO20500, 5 kg: ONO25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
Final pH:	7,1 (approx.) at 25 °C

Direction: Suspend **81 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Cool quickly! Mix well before pouring.

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: ONO30100, 500 ml: ONO30500
Plated media:	55 mm: ONO50055, 90 mm: ONO50090
Colour:	Green
pH (at 25 °C):	7,0 – 7,2

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

II. DEHYDRATED CULTURE MEDIA

FORMULA in g/l

Peptones	16,50000
Bile salts	3,82500
L-Phenylalanine	5,00000
Sucrose	13,00000
Lactose	11,50000
Sodium citrate	9,30000
Sodium thiosulphate	4,25000
Ferric citrate	0,50000
Magnesium sulphate	0,40000
Metachrome yellow	0,47000
Aniline blue	0,25000
Neutral red	0,02200
Brilliant green	0,00166
Buffers	1,00000
Agar	15,00000

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Partially inhibited, blue colonies	
<i>Salmonella typhimurium</i>	ATCC 14028	Good, black colonies with yellowish halo	
<i>Proteus mirabilis</i>	ATCC 29906	Good, dark brown colonies with brown halo	
<i>Enterococcus faecalis</i>	ATCC 29212	Inhibited	

References: Önöz (1978) Zbl. Bakt. Hyg. A240: 16.

PEPTONE WATER, ALKALINE

A non-selective medium for the enrichment of *Vibrio* spp.

Dehydrated media

Code Number:	500 g: PEW20500-22, 5 kg: PEW25000-22
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	8,4 (approx.) at 25 °C

Direction: Suspend **20 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into final containers and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: PEW30100-22, 500 ml: PEW30500-22
Tubed media:	100 x 12 mm: PEW40010-22 (10 ml)
Colour:	Yellowish
pH (at 25 °C):	8,3 – 8,5

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Peptones	10
Sodium chloride	10

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Vibrio cholerae</i>	ATCC 14033	Good	

References: Shread et al. (1991) Soc. Gen. Microbiol. 8: 184.

PEPTONE WATER, BUFFERED, PH EUR - USP

An enrichment medium for testing microbial contamination according to PH EUR (Buffered Sodium Chloride Peptone Solution pH 7.0 - Harmonised).

Dehydrated media

Code Number:	500 g: PBE20500, 5 kg: PBE25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,0 (approx.) at 25 °C

Direction: Suspend **16 g** in one litre of distilled water and heat gently to dissolve the medium completely.

Surface-active agents or inactivators of antimicrobial agents may be added to this solution, such as: **TWEEN 80 Supplement (TWS80100)** 1 g/l to 10 g/l.

Dispense into final containers and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: PBE30100, 500 ml: PBE30500
Tubed media:	150 x 15 mm: PBE40010 (10 ml)
Colour:	Yellowish
pH (at 25 °C):	7,1 – 7,3

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use. If addition of supplement [e. g. **TWEEN 80 Supplement (TWS80100)**] is necessary, complete according to the direction of dehydrated media.

FORMULA in g/l

Peptones	1,0
Sodium chloride	4,3
Potassium phosphate, monobasic	3,6
Sodium phosphate, dibasic	7,1

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Salmonella typhimurium</i>	ATCC 14028	Good	

References: European Pharmacopoeia

PEPTONE WATER, BUFFERED

A pre-enrichment medium for isolation of *Salmonella* spp.

Dehydrated media

Code Number:	500 g: PWB20500, 5 kg: PWB25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,2 (approx.) at 25 °C

Direction: Suspend **20 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into final containers and sterilise by autoclaving at 121 °C for 15 minutes.

II. DEHYDRATED CULTURE MEDIA

Prepared media

Bottled media:	100 ml: PWB30100, 500 ml: PWB30500
Tubed media:	150 x 15 mm: PWB40010 (10 ml)
Colour:	Yellowish
pH (at 25 °C):	7,1 – 7,3

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Peptones	10,0
Sodium chloride	5,0
Potassium phosphate, monobasic	1,5
Sodium phosphate, dibasic (Equivalent to 9.0 g of Sodium phosphate dibasic dodecahydrate)	3,5

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Salmonella typhimurium</i>	ATCC 14028	Good	

References: APHA (1976) Compendium of Methods for the Microbiological Examination of Foods
ISO 6579, ISO 22964, ISO 6887, ISO 19250

PEPTONE WATER, DOUBLE BUFFERED

A pre-enrichment medium for isolation of *Salmonella* spp.

Dehydrated media

Code Number:	500 g: PWD20500, 5 kg: PWD25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,2 (approx.) at 25 °C

Direction: Suspend **25 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into final containers and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: PWD30100, 500 ml: PWD30500
Tubed media:	150 x 15 mm: PWD40010 (10 ml)
Colour:	Yellowish
pH (at 25 °C):	7,1 – 7,3

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Peptones	10
Sodium chloride	5
Potassium phosphate, monobasic	3
Sodium phosphate, dibasic (Equivalent to 18.0 g of Sodium phosphate dibasic dodecahydrate)	7

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Salmonella typhimurium</i>	ATCC 14028	Good	

References: ISO 6579

PEPTONE WATER

A liquid medium base for carbohydrate decomposition studies.

Dehydrated media

Code Number:	500 g: PEW20500, 5 kg: PEW25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,2 (approx.) at 25 °C

Direction: Suspend **15 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into test tubes and sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the filter sterilised solution of the indicator (bromocresol purple or andrade) and sugar (10 g/l) to be examined to the medium.

Prepared media

Bottled media:	100 ml: PEW30100, 500 ml: PEW30500
Tubed media:	100 x 12 mm: PEW40002 (2 ml)
Colour:	Yellowish
pH (at 25 °C):	7,1 – 7,3

Direction: Dispense the bottled media aseptically into sterile test tubes and supplement according to the direction of dehydrated media. Supplement the tubed media according to the direction of the dehydrated media.

FORMULA in g/l

Peptones	10
Sodium chloride	5

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth with 10 g/l lactose and BCP	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Positive: Colour change to yellow	
<i>Salmonella typhimurium</i>	ATCC 14028	Negative: No colour change	

References: Cruikshank (1968) Med. Microbiology 11th ed.

PEPTONE WATER WITH BROMOCRESOL PURPLE

A liquid medium base for carbohydrate decomposition studies.

Dehydrated media

Code Number:	500 g: PAW20500-00, 5 kg: PAW25000-00
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,2 (approx.) at 25 °C

Direction: Suspend **15 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into test tubes and sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the filter sterilised solution of the sugar (10 g/l) to be examined to the medium.

II. DEHYDRATED CULTURE MEDIA

Prepared media

Bottled media:	100 ml: PAW30100-00, 500 ml: PAW30500-00
Tubed media:	100 x 12 mm: PAW40002-00 (2 ml)
Colour:	Purple
pH (at 25 °C):	7,1 – 7,3

Direction: Dispense the bottled media aseptically into test tubes and supplement according to the direction of the dehydrated media. Supplement the tubed media according to the direction of the dehydrated media.

FORMULA in g/l

Peptones	10,00
Sodium chloride	5,00
Bromocresol purple	0,03

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth with 10 g/l lactose	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Positive: Colour change to yellow	
<i>Salmonella typhimurium</i>	ATCC 14028	Negative: No colour change	

References: Cruikshank (1968) Med. Microbiology 11th ed.

PERFRINGENS (OPSP) AGAR BASE

A selective and differential medium for the enumeration of *Clostridium perfringens*.

Dehydrated media

Code Number:	500 g: POB20500, 5 kg: POB25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,3 (approx.) at 25 °C

Direction: Suspend 23,5 g in 500 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the contents of **one vial each of Perfringens Selective Supplements, OPSP, A + B (POS80004)** both reconstituted with 4 ml of sterile distilled water. Mix well before pouring.

Prepared media

Bottled media:	100 ml: POB30100, 500 ml: POB30500
Tubed media:	55 mm: POB50055, 90 mm: POB50090
Colour:	Yellowish
pH (25 °C):	7,2 – 7,4

Direction: Supplement the melted bottled media according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	33,5
Ferric ammonium citrate	1,0
Sodium metabisulphite	1,0
Buffers	1,5
Agar	10,0

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 44 °C	Growth	Incubation time: 48 h
<i>Clostridium perfringens</i>	ATCC 13124	Good, black colonies (under anaerobic conditions)	

References: Harmon et al. (1971) J. Appl. Microbiol. 22: 688.

Sahidi and Fergusson (1971) J. Appl. Microbiol. 21: 500.

PERFRINGENS (TSC+SFP) AGAR BASE

A selective and differential medium for the enumeration and presumptive identification of *Clostridium perfringens*.

Dehydrated media

Code Number:	500 g: PAB20500, 5 kg: PAB25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,6 (approx.) at 25 °C

Direction for TSC/SFP Agar: Suspend 22,5 g in 470 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically 25 ml of Sterile Egg Yolk Emulsion (EYE80025) and the contents of **one vial of Perfringens Selective Supplement, TSC (PSS80004)** or **Perfringens Selective Supplement, SFP (PFS80004)** reconstituted with 4 ml of sterile distilled water. Mix well before pouring.

Direction for Egg Yolk Free TSC/SFP Agar: Suspend 22,5 g in 500 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the contents of **one vial of Perfringens Selective Supplement, TSC (PSS80004)** or **Perfringens Selective Supplement, SFP (PFS80004)** reconstituted with 4 ml of sterile distilled water. Mix well before pouring.

Prepared media

Bottled media:	100 ml: PAB30100, 500 ml: PAB30500
Plated TSC Agar with egg yolk:	55 mm: PAB50055-01, 90 mm: PAB50090-01
Plated TSC Agar, egg yolk free:	55 mm: PAB50055-02, 90 mm: PAB50090-02
Plated SFP Agar with egg yolk:	55 mm: PAB50055-03, 90 mm: PAB50090-03
Plated SFP Agar, egg yolk free:	55 mm: PAB50055-04, 90 mm: PAB50090-04
Colour of bottled media:	Yellowish
Colour of plated media with egg yolk:	Yellowish, turbid
Colour of plated media, egg yolk free:	Yellowish, transparent
pH (25 °C)	7,5 – 7,7

Direction: Supplement the melted bottled media according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Casein peptone	15
Soya peptone	5
Yeast extract	5
Sodium metabisulphite	1
Ferric ammonium citrate	1
Agar	18

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

II. DEHYDRATED CULTURE MEDIA

Quality Control:

Test strains	Incubation temp: 44 °C	Growth	Incubation time: 48 h
<i>Clostridium perfringens</i>	ATCC 13124	Good, black colonies (under anaerobic conditions)	

References: Harmon et al. (1971) J. Appl. Microbiol. 22: 688.
ISO 11290-1; ISO 7937; ISO 15213

PHARMABIO® CULTURE MEDIA

See: PharmaBio Culture Media (page 139)

PHARMACOPOEIA CULTURE MEDIA

See: Culture media for the method of Pharmacopoeias (page 141)

PHENOL RED AGAR BASE

A solid medium base for carbohydrate decomposition studies.

Dehydrated media

Code Number:	500 g: PHA20500, 5 kg: PHA25000
Colour:	Pinkish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,4 (approx.) at 25 °C

Direction: Suspend **30 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the filter sterilised solution of the sugar (10 g/l) to be examined to the medium. Dispense aseptically into sterile test tubes and allow to cool in slanted position to form slant with deep butt.

Prepared media

Bottled media:	100 ml: PHA30100, 500 ml: PHA30500
Tubed media:	100 x 12 mm: PHA40003
Colour:	Red
pH (at 25 °C):	7,3 – 7,5

Direction: Dispense the melted bottled media aseptically into sterile test tubes and supplement according to the direction of the dehydrated media. Supplement the tubed media according to the direction of the dehydrated media.

FORMULA in g/l

Peptones	10,00
Sodium chloride	5,00
Phenol red	0,02
Agar	15,00

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the tubed media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth with 10 g/l lactose	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Positive: Colour change to yellow	
<i>Salmonella typhimurium</i>	ATCC 14028	Negative: No colour change	

References: Ewing (1986) Edwards and Ewing's identification of Enterobacteriaceae, 4th ed.

PHENOL RED BROTH BASE

A liquid medium base for carbohydrate decomposition studies.

Dehydrated media

Code Number:	500 g: PHB20500, 5 kg: PHB25000
Colour:	Pinkish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,4 (approx.) at 25 °C

Direction: Suspend **15 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into test tubes and sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the filter sterilised solution of the sugar (10 g/l) to be examined to the medium.

Prepared media

Bottled media:	100 ml: PHB30100, 500 ml: PHB30500
Tubed media:	100 x 12 mm: PHB40003 (3 ml)
Colour:	Red
pH (at 25 °C):	7,3 – 7,5

Direction: Dispense the bottled media aseptically into test tubes and supplement according to the direction of the dehydrated media. Supplement the tubed media according to the direction of the dehydrated media.

FORMULA in g/l

Peptones	10,00
Sodium chloride	5,00
Phenol red	0,02

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth with 10 g/l lactose	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Positive: Colour change to yellow	
<i>Salmonella typhimurium</i>	ATCC 14028	Negative: No colour change	

References: Ewing (1986) Edwards and Ewing's Identification of Enterobacteriaceae, 4th ed.

PHENYLALANINE AGAR

A differential medium for the differentiation of bacteria on the basis of phenylalanine deamination.

Dehydrated media

Code Number:	500 g: PNA20500, 5 kg: PNA25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,2 (approx.) at 25 °C

Direction: Suspend **26 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Dispense into test tubes and sterilise by autoclaving at 121 °C for 15 minutes. Allow to cool in slanted position.

Prepared media

Bottled media:	100 ml: PNA30100 500 ml: PNA30500
Tubed media:	100 x 12 mm: PNA40002 (2 ml – slant)
Colour:	Yellowish
pH (25 °C)	7,1 – 7,3

II. DEHYDRATED CULTURE MEDIA

Direction: Dispense the melted bottled media aseptically into sterile test tubes. Allow to cool in slanted position. Media in tubes are ready to use.

FORMULA in g/l

L-Phenylalanine	1
Yeast extract	3
Sodium chloride	5
Buffers	2
Agar	15

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the tubed media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Proteus mirabilis</i>	ATCC 29906	Positive, colour of PAD reagent change to green	
<i>Escherichia coli</i>	ATCC 25922	Negative, without colour change of PAD reagent	

References: Henrikson (1950) J. Bacteriol. 60: 225.

PHENYLALANINE RHAMNOSE (FARH) AGAR

A differential medium for the differentiation of bacteria on the basis of phenylalanine deamination and rhamnose fermentation.

Dehydrated media

Code Number:	500 g: PRH20500, 5 kg: PRH25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	6,7 (approx.) at 25 °C

Direction: Suspend **12 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Dispense into test tubes and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: PRH30100 500 ml: PRH30500
Tubed media:	100 x 12 mm: PRH40003 (3 ml)
Colour:	Green
pH (25 °C):	6,6 – 6,8

Direction: Dispense the melted bottled media aseptically into sterile test tubes. Media in tubes are ready to use.

FORMULA in g/l

Peptones	1,00
Rhamnose	1,00
Sodium chloride	2,00
L-Phenylalanine	1,00
Bromothymol blue	0,04
Buffers	2,00
Agar	5,00

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Reactions		Incubation time: 24 h
		Rhamnose	PAD	
<i>Escherichia coli</i>	ATCC 25922	+	–	
<i>Proteus mirabilis</i>	ATCC 29906	–	+	

References: Henrikson (1950) J. Bacteriol. 60: 225.

PHENYLETHYL ALCOHOL (PEA) AGAR BASE

A selective medium for the isolation of Gram-positive aerobe and anaerobe bacteria.

Dehydrated media

Code Number:	500 g: PED20500, 5 kg: PED25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,3 (approx.) at 25 °C

Direction: Suspend **45 g** in 950 ml of distilled water and heat with frequent agitation until the medium boils well. Add **2,5 ml of Phenylethanol Supplement (PEE80030)**. Mix well and sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically **50 ml of sterile defibrinated sheep blood**. Mix well before pouring.

Prepared media

Bottled media:	100 ml: PED30100, 500 ml: PED30500
Plated media:	55 mm: PED50055, 90 mm: PED50090
Colour of bottled media:	Yellowish
Colour of plated media:	Ruby red
pH (at 25 °C):	7,2 – 7,4

Direction: Supplement the melted bottled media according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	24,500
Sodium chloride	5,000
Anaerobe vitamins	0,415
Agar	15,000

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Streptococcus pyogenes</i>	ATCC 19615	Good (under micro-aerobic conditions)	
<i>Bacteroides fragilis</i>	ATCC 23745	Good (under anaerobic conditions)	
<i>Proteus mirabilis</i>	ATCC 29906	Inhibited	

References: Brewer and Lilley (1953) J. Am. Pharm. Assoc. 42: 6.

PIKE BROTH

A selective medium for the cultivation of enterococci.

Dehydrated media

Code Number:	500 g: PBB20500, 5 kg: PBB25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,4 (approx.) at 25 °C

II. DEHYDRATED CULTURE MEDIA

Direction: Suspend **31 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into final containers and sterilise by autoclaving at 115 °C for 15 minutes.

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: PBB30100, 500 ml: PBB30500
Tubed media:	150 x 15 mm: PBB40010 (10 ml)
Colour:	Purplish
pH (at 25 °C):	7,3 – 7,5

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Peptones	30,700
Glucose	0,200
Sodium azide	0,065
Violet red	0,002

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Enterococcus faecalis</i>	ATCC 51299	Good	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	

References: Pike (1944) Proc. Soc. Exp. Biol. and Med. 57: 187.

PLATE COUNT AGAR

A standard medium for the enumeration of total viable micro-organisms.

Dehydrated media

Code Number:	500 g: PCA20500, 5 kg: PCA25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,0 (approx.) at 25 °C

Direction: Suspend **23,5 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: PCA30100, 500 ml: PCA30500
Plated media:	55 mm: PCA50055, 90 mm: PCA50090
Colour:	Yellowish
pH (25 °C):	6,9 – 7,1

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	5,0
Yeast extract	2,5
Glucose	1,0
Agar	15,0

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good	
<i>Staphylococcus aureus</i>	ATCC 29213	Good	

References: ISO 4833

PLATE COUNT AGAR No.2

A standard medium for the enumeration of total viable micro-organisms.

Dehydrated media

Code Number:	500 g: PAT20500, 5 kg: PAT25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,0 (approx.) at 25 °C

Direction: Suspend **24 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: PAT30100, 500 ml: PAT30500
Plated media:	55 mm: PAT50055, 90 mm: PAT50090
Colour:	Yellowish
pH (25 °C):	6,9 – 7,1

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Tryptone	5
Beef extract	3
Glucose	1
Agar	15

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good	
<i>Staphylococcus aureus</i>	ATCC 29213	Good	

References: APHA (1985) Standard Methods for the Examination of Water and Wastewater, 15th ed.

NEW PRODUCT

PLATE COUNT AGAR, ISO 6222

A standard medium for the enumeration of total viable micro-organisms from water according to ISO 6222.

Dehydrated media

Code Number:	500 g: PCW20500, 5 kg: PCW25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,2 (approx.) at 25 °C

II. DEHYDRATED CULTURE MEDIA

Direction: Suspend **24 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: PCW30100, 500 ml: PCW30500
Plated media:	55 mm: PCW50055, 90 mm: PCW50090
Colour:	Yellowish
pH (25 °C):	7,1 – 7,3

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	6
Yeast extract	3
Agar	15

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good	
<i>Staphylococcus aureus</i>	ATCC 29213	Good	

References: ISO 6222

PLATE COUNT BROTH

A non-selective medium for the enumeration of total viable micro-organisms with MPN procedure.

Dehydrated media

Code Number:	500 g: PCB20500, 5 kg: PCB25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,0 (approx.) at 25 °C

Direction: Suspend **9 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into final containers and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: PCB30100, 500 ml: PCB30500
Tubed media:	150 x 15 mm: PCB40010 (10 ml)
Colour:	Yellowish
pH (at 25 °C):	6,9 – 7,1

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Peptones	8
Glucose	1

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good	
<i>Staphylococcus aureus</i>	ATCC 29213	Good	

PLATE COUNT SKIM MILK AGAR

A non-selective medium for the enumeration of viable micro-organisms in milk and dairy products.

Dehydrated media

Code Number:	500 g: PCS20500, 5 kg: PCS25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,0 (approx.) at 25 °C

Direction: Suspend **23 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: PCS30100, 500 ml: PCS30500
Plated media:	55 mm: PCS50055, 90 mm: PCS50090
Colour:	Yellowish
pH (25 °C):	6,9 – 7,1

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Tryptone	5,0
Yeast extract	2,5
Glucose monohydrate	1,0
Skim milk powder	1,0
Agar	13,5

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good	
<i>Staphylococcus aureus</i>	ATCC 29213	Good	

References: APHA (1985) Standard Methods for the Examination of Dairy Products, 15th ed. ISO 6610

POTATO DEXTROSE AGAR, PH EUR - USP

A selective medium for the detection, isolation and enumeration of yeasts and moulds according to PH EUR (Potato Dextrose Agar – Harmonised).

Dehydrated media

Code Number:	500 g: PDA20500, 5 kg: PDA25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	5,6 (approx.) at 25 °C

Direction: Suspend **39 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 115 °C for 10 minutes. If adjustment of pH is necessary to pH 3,5, cool to 55 °C and add aseptically **Lactic Acid Solution (LAS80100)** to the medium in the necessary quantity (approx. 10 ml). Mix well before pouring.

II. DEHYDRATED CULTURE MEDIA

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.
Once acidified with lactic acid, the medium should not be reheated.

Prepared media

Bottled media:	100 ml: PDA30100, 500 ml: PDA30500
Plated media:	55 mm: PDA50055, 90 mm: PDA50090
Colour:	Yellowish
pH (25 °C):	5,5 – 5,7

Direction: If adjustment of pH is necessary, complete according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Dextrose	20
Potato extract	4
Agar	15

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 25 °C	Growth	Incubation time: 48 h
<i>Candida albicans</i>	ATCC 10231	Good	
<i>Bacillus cereus</i> (at pH=3.5)	ATCC 11778	Inhibited	

References: European Pharmacopoeia

POTATO DEXTROSE BROTH

A selective medium for the cultivation of yeasts and moulds.

Dehydrated media

Code Number:	500 g: PDB20500, 5 kg: PDB25000
Colour:	White
Appearance:	Homogeneous powder
pH before autoclaving:	5,1 (approx.) at 25 °C

Direction: Suspend **24 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into final containers and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: PDB30100, 500 ml: PDB30500
Tubed media:	150 x 15 mm: PDB40010 (10 ml)
Colour:	Water clear
pH (at 25 °C):	5,0 – 5,2

Direction: Dispense the bottled media aseptically into sterile final container. Media in tubes are ready to use.

FORMULA in g/l

Potato extract	4
Dextrose	20

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 25 °C	Growth	Incubation time: 48 h
<i>Candida albicans</i>	ATCC 10231	Good	
<i>Aspergillus brasiliensis</i>	ATCC 16404	Good	

References: APHA (2001) Compendium of Methods for the Microbiological Examination of Foods, 4th ed.

PSEUDOMONAS ISOLATION AGAR BASE

A selective medium for isolation and identification of *Pseudomonas aeruginosa*.

Dehydrated media

Code Number:	500 g: PIA20500, 5 kg: PIA25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,1 (approx.) at 25 °C

Direction: Suspend **45 g** in one litre of distilled water. Add **20 ml of Glycerol Supplement (GLC80100)** and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: PIA30100, 500 ml: PIA30500
Plated media:	55 mm: PIA50055, 90 mm: PIA50090
Colour:	Yellowish
pH (25 °C):	7,0 – 7,2

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	20,600
Potassium sulphate	10,000
Magnesium chloride	1,400
Irganan	0,025
Agar	13,000

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Pseudomonas aeruginosa</i>	ATCC 27853	Good growth, fluorescent green colonies	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	

References: Lenette et al. (1985) Manual of Clinical Microbiology, 4th ed.

PURPLE LACTOSE AGAR BASE, MODIFIED

A differential medium for the isolation, enumeration and presumptive identification of micro-organisms from urine.

Dehydrated media

Code Number:	500 g: BLA20500, 5 kg: BLA25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,2 (approx.) at 25 °C

Direction: Suspend **46 g** in 980 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically **20 ml of sterile defibrinated blood**. Mix well before pouring.

II. DEHYDRATED CULTURE MEDIA

Prepared media

Bottled media:	100 ml: BLA30100, 500 ml: BLA30500
Plated media:	55 mm: BLA50055, 90 mm: BLA50090
Colour:	Purple
pH (25 °C):	7,1 – 7,3

Direction: Supplement the melted bottled media according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	20,000
L-Cystine	0,100
Lactose	10,000
Ferrous citrate	0,200
Sodium thiosulphate	0,200
Esculin	0,500
Bromocresol Purple	0,025
Agar	15,000

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good, yellow colonies	
<i>Salmonella typhimurium</i>	ATCC 14028	Good, blue colonies with black centre	
<i>Enterococcus faecalis</i>	ATCC 29212	Moderate, small yellow colonies with black centre	

R2A AGAR, PH EUR

A non-selective medium for the bacteriological examination of water according to PH EUR (Agar Medium S).

Dehydrated media

Code Number:	500 g: R2A20500, 5 kg: R2A25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,2 (approx.) at 25 °C

Direction: Suspend **18 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: R2A30100, 500 ml: R2A30500
Plated media:	55 mm: R2A50055, 90 mm: R2A50090
Colour:	Yellowish
pH (25 °C):	7,1 – 7,3

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Proteose peptone	0,500
Casein peptone	0,500
Yeast extract	0,500
Glucose	0,500
Starch soluble	0,500
Sodium pyruvate	0,300
Magnesium sulphate, anhydrous	0,024
Potassium phosphate, dibasic	0,300
Agar	14,900

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good	
<i>Staphylococcus aureus</i>	ATCC 29213	Good	

References: European Pharmacopoeia

R2A BROTH

A non-selective medium for the bacteriological examination of water.

Dehydrated media

Code Number:	500 g: R2B20500, 5 kg: R2B25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,2 (approx.) at 25 °C

Direction: Suspend **3,2 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into final containers and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: R2B30100, 500 ml: R2B30500
Tubed media:	150 x 15 mm: R2B40010 (10 ml)
Colour:	Yellowish
pH (at 25 °C):	7,1 – 7,3

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Peptones	1,500
Glucose	0,500
Starch soluble	0,500
Sodium pyruvate	0,300
Magnesium sulphate, anhydrous	0,024
Buffers	0,300

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good	
<i>Staphylococcus aureus</i>	ATCC 29213	Good	

References: Stark and McCoy (1938) Zentralb. Bakt. Parasit. Infekt. Hyg. Abt. 2. 98: 201.

RAPPAPORT-VASSILIADIS (MSRV) MEDIUM BASE

A semi-solid selective medium for the detection of motile *Salmonella* spp.

Dehydrated media

Code Number:	500 g: MSR20500, 5 kg: MSR25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
Final pH:	5,5 (approx.) at 25 °C

II. DEHYDRATED CULTURE MEDIA

Direction: Fill up **20 ml** of **DIASALM-MSRV Magnesium Chloride Solution (DSM80500)** to 500 ml with distilled water. Suspend **10,5 g** of **dehydrated medium** and heat with frequent agitation until the medium boils well. Cool to 50 °C and add aseptically the contents of **one vial** of **Novobiocin (10 mg) Supplement (DSN80004-10)** reconstituted with 4 ml of sterile distilled water. Mix well before pouring.

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: MSR30100, 500 ml: MSR30500
Colour:	Greenish
pH (at 25 °C):	5,4 – 5,6

Direction: Supplement the melted bottled media according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA OF ONE LITRE OF THE COMPLETE MEDIUM in g/l

Peptones	9,180
Sodium chloride	7,340
Magnesium chloride, anhydrous	10,930
Malachite green	0,037
Buffers	1,470
Agar	3,000

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Salmonella typhimurium</i>	ATCC 14028	Good, motile zone	
<i>Pseudomonas aeruginosa</i>	ATCC 27853	Inhibited	

References: De Smedt et al. (1986) J. Food Prot. 48: 510.

RAPPAPORT-VASSILIADIS BROTH BASE, PH EUR - USP

A selective enrichment medium for the isolation of salmonellae according to PH EUR (Rappaport-Vassiliadis Salmonella Enrichment Broth – Harmonised).

Dehydrated media

Code Number:	500 g: RVB20500, 5 kg: RVB25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	5,2 (approx.) at 25 °C

Direction: Fill up **27 ml** of **Rappaport-Vassiliadis Magnesium Chloride Solution (RMG81000)** to one litre with distilled water. Suspend **13,5 g** of **dehydrated medium** and heat gently to dissolve the medium completely. Dispense into final containers and sterilise by autoclaving at 115 °C for 15 minutes.

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: RVB30100, 500 ml: RVB30500
Tubed media:	150 x 15 mm: RVB40010 (10 ml)
Colour:	Green
pH (at 25 °C):	5,1 – 5,3

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA OF ONE LITRE OF THE COMPLETE MEDIUM in g/l

Soya peptone	4,500
Sodium chloride	8,000
Magnesium chloride, anhydrous	13,580
Malachite green	0,036
Potassium phosphate, dibasic	0,400
Potassium phosphate, monobasic	0,600

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Salmonella typhimurium</i>	ATCC 14028	Good	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	

References: Rappaport et al. (1956) J. Clin. Path. 9: 261.
European Pharmacopoeia

REINFORCED CLOSTRIDIAL (RCM) AGAR

A differential medium for the cultivation and enumeration of anaerobes, especially *Clostridium* spp.

Dehydrated media

Code Number:	500 g: RCA20500, 5 kg: RCA25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	6,8 (approx.) at 25 °C

Direction: Suspend **51 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: RCA30100, 500 ml: RCA30500
Colour:	Yellowish
pH (25 °C):	6,7 – 6,9

Direction: Dispense the melted bottled media aseptically into sterile final containers.

FORMULA in g/l

Peptones	23,0
L-Cysteine	0,5
Starch soluble	1,0
Glucose	5,0
Sodium chloride	5,0
Sodium acetate	3,0
Agar	13,5

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 44 °C	Growth	Incubation time: 48 h
<i>Clostridium perfringens</i>	ATCC 13124	Good (under anaerobic conditions)	

References: Hirsh and Grinstead (1954) J. Dairy Res. 21: 101.

II. DEHYDRATED CULTURE MEDIA

REINFORCED CLOSTRIDIAL (RCM-DRCM) MEDIUM BASE, PH EUR – USP

A semi-solid medium for the cultivation and enumeration of anaerobes, especially *Clostridium* spp. according to PH EUR (Medium P – Reinforced Media for Clostridia – Harmonised).

Dehydrated media

Code Number:	500 g: RCM20500, 5 kg: RCM25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	6,8 (approx.) at 25 °C

Direction for RCM Medium: Suspend **38 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Dispense into final containers and sterilise by autoclaving at 121 °C for 15 minutes.

Direction for DRCM Medium: Suspend **19 g** in 500 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121°C for 15 minutes. Cool to 50 °C and add aseptically **10 drops (0,5 ml) of Sodium Metabisulphite Solution, Sterile (SMS80030)** and **10 drops (0,5 ml) of Ferric Ammonium Citrate Solution, Sterile (FAC80030)**. Mix well and dispense aseptically into sterile final containers.

Prepared media

Bottled media:	100 ml: RCM30100, 500 ml: RCM30500
Tubed DRCM media:	150 x 15 mm: RCM40010 (10 ml)
Tubed RCM media:	150 x 15 mm: RCM40010-01 (10 ml)
Colour:	Yellowish, with red colour ring on the top
pH (at 25 °C):	6,7 – 6,9

Direction: If necessary, supplement may be added to the bottled media according to the direction of the dehydrated media. Dispense aseptically into sterile final containers. Media in tubes are ready to use.

Warning!

The media may be used until approximately 30 % of the medium (top layer) has been oxidized, as indicated by a red colour of resazurin near the surface. If oxidation has proceeded further, the media may be reheated once in steam or boiling water, cooled and used.

FORMULA in g/l

Peptones	10,000
Beef extract	10,000
Yeast extract	3,000
L-Cysteine	0,500
Glucose monohydrate	5,000
Starch soluble	1,000
Sodium chloride	5,000
Sodium acetate	3,000
Resazurin	0,001
Agar	0,500

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 44 °C	Growth	Incubation time: 48 h
<i>Clostridium perfringens</i> ATCC 13124 (RCM)		Good (under anaerobic conditions)	
<i>Clostridium perfringens</i> ATCC 13124 (DRCM)		Good, blackening (under anaerobic conditions)	

References: European Pharmacopoeia 5.6
Hirsh and Grinstead (1954) J. Dairy Res. 21: 101.
Gibbs and Freame (1965) J. Appl. Bact. 28: 95.

REINFORCED CLOSTRIDIAL DIFFERENTIAL BROTH

A differential medium for the cultivation and enumeration of anaerobes, especially *Clostridium* spp. by the MPN method.

Dehydrated media

Code Number:	500 g: RCD20500, 5 kg: RCD25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	6,8 (approx.) at 25 °C

Direction: Suspend **38,5 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into final containers and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: RCD30100, 500 ml: RCD30500
Tubed media:	150 x 15 mm: RCD40010 (10 ml)
Colour:	Yellowish, with red colour ring on the top
pH (at 25 °C):	6,7 – 6,9

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

Warning!

The media may be used until approximately 30% of the medium (top layer) has been oxidized, as indicated by a red colour of resazurin near the surface. If oxidation has proceeded further, the media may be reheated once in steam or boiling water, cooled and used.

FORMULA in g/l

Peptones	23,000
L-Cysteine	0,500
Glucose	5,000
Starch soluble	1,000
Sodium chloride	5,000
Sodium acetate	3,000
Ferric ammonium citrate	0,500
Sodium metabisulphite	0,500
Resazurin	0,002

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at 2–8 °C, but no longer than 2 weeks.

Quality Control:

Test strains	Incubation temp: 44 °C	Growth	Incubation time: 48 h
<i>Clostridium perfringens</i> ATCC 13124		Good, colour change to black (under anaerobic conditions)	

References: Gibbs and Freame (1965) J. Appl. Bact. 28: 95.

RINGER SOLUTION, ¼ STRENGTH

A sterile isotonic diluent for bacteriological specimens.

Dehydrated media

Code Number:	500 g: RIS20500, 5 kg: RIS25000
Colour:	White
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,0 (approx.) at 25 °C

Direction: Suspend **2,5 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into final containers and sterilise by autoclaving at 121 °C for 15 minutes.

II. DEHYDRATED CULTURE MEDIA

Prepared media

Bottled media:	100 ml: RIS30100, 500 ml: RIS30500
Colour:	Water clear
pH (at 25 °C):	6,9 – 7,1

Direction: Dispense the bottled media aseptically into sterile final containers.

FORMULA in g/l

Sodium chloride	2,25
Calcium chloride	0,10
Potassium chloride	0,10
Sodium bicarbonate	0,05

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

References: Davis (1956) Lab. Cont. of Dairy Plant.

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 30 °C	Growth	Incubation time: 72 h
<i>Lactobacillus acidophilus</i>	ATCC 4356	Good	(under micro-aerobic conditions)
<i>Staphylococcus aureus</i>	ATCC 29213	Inhibited	

References: Rogosa et al. (1951) J. Appl. Bact. 62: 132.

ROGOSA AGAR

A selective medium for the isolation and enumeration of *Lactobacillus* spp.

Dehydrated media

Code Number:	500 g: ROA20500
	packaging: 500 g agar base + 1 l salt solution
	5 kg: ROA25000
	packaging: 5 kg agar base + 10 l salt solution
Appearance of agar base:	Yellowish homogeneous hygroscopic powder
Appearance of salt solution:	Water clear solution
Final pH:	6,2 (approx.) at 25 °C

Direction: Fill up **100 ml of Rogosa Salt Solution (RSS81000)** to one litre with distilled water. Suspend **50 g of agar base** and heat with frequent agitation until the medium boils well (2–3 min.). If adjustment of pH is necessary to pH 5.4 (approx.), cool to 55 °C and add aseptically glacial acetic acid to the medium in the necessary quantity (1,3 ml approx.). Mix well before pouring.

Warning!

The medium is heat sensitive.

No further sterilisation is necessary or desirable.

Once acidified with glacial acetic acid, the medium should not be reheated.

Prepared media

Bottled media:	100 ml: ROA30100, 500 ml: ROA30500
Plated media:	55 mm: ROA50055, 90 mm: ROA50090
Colour:	Yellowish
pH (at 25 °C):	6,1 – 6,3

Direction: If adjustment of pH is necessary, complete according to direction of the dehydrated media and dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA FOR ONE LITRE OF THE COMPLETE MEDIUM

Peptones	15,200 g
Glucose	20,000 g
Sodium acetate	17,000 g
Ammonium citrate	2,000 g
Magnesium sulphate	0,575 g
Manganese sulphate	0,120 g
Ferrous sulphate	0,034 g
TWEEN 80	1,000 ml
Buffers	6,000 g
Agar	20,000 g

ROSE BENGAL CHLORAMPHENICOL AGAR

A selective medium for the enumeration of yeasts and moulds.

Dehydrated media

Code Number:	500 g: RBA20500, 5 kg: RBA25000
Colour:	Pinkish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,2 (approx.) at 25 °C

Direction: Suspend **31 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: RBA30100, 500 ml: RBA30500
Plated media:	55 mm: RBA50055, 90 mm: RBA50090
Colour:	Rose red
pH (25 °C):	7,1 – 7,3

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	5,00
Glucose	10,00
Magnesium sulphate	0,50
Chloramphenicol	0,10
Rose bengal	0,05
Buffers	1,00
Agar	14,40

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 25 °C	Growth	Incubation time: 48 h
<i>Saccharomyces cerevisiae</i>	ATCC 9763	Good	rose red colonies
<i>Escherichia coli</i>	ATCC 25922	Inhibited	

References: APHA (1978) Standard Method for the Examination of Dairy Products. 14th ed.

II. DEHYDRATED CULTURE MEDIA

ROSE BENGAL DICHLORAN AGAR

A selective medium for the enumeration of yeasts and moulds. Dichloran enhances the selectivity of the medium.

Dehydrated media

Code Number:	500 g: RBD20500, 5 kg: RBD25000
Colour:	Pinkish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	5,6 (approx.) at 25 °C

Direction: Suspend **31 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: RBD30100, 500 ml: RBD30500
Plated media:	55 mm: RBD50055, 90 mm: RBD50090
Colour:	Rose red
pH (25 °C):	5,5 – 5,7

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	5,000
Glucose	10,000
Magnesium sulphate	0,500
Chloramphenicol	0,100
Dichloran	0,002
Rose bengal	0,025
Potassium phosphate, monobasic	1,000
Agar	14,400

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 25 °C	Growth	Incubation time: 48 h
<i>Saccharomyces cerevisiae</i>	ATCC 9763	Good, rose red colonies	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	

References: APHA (1978) Standard Method for the Examination of Dairy Products. 14th ed. ISO 21527-1

RPMI MOPS AGAR BASE

A standard medium for the antimycotical susceptibility testing with Etest.

Dehydrated media

Code Number:	500 g: RGM20500, 5 kg: RGM25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,4 (approx.) at 25 °C

Direction: Suspend **17,5 g** in 400 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C. Meanwhile heat gently **100 ml of RPMI MOPS Solution, Sterile (RGS80100)** to 50 °C. Add the supplement aseptically to the agar base. Mix well before pouring.

Prepared media

Bottled media:	100 ml: RGM30100, 500 ml: RGM30500
Plated media:	55 mm: RGM50055, 90 mm: RGM50090
Colour:	Yellowish
pH (25 °C):	7,3 – 7,5

Direction: Supplement the melted bottled media according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Glucose	20
Agar	15

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 25 °C	Growth	Incubation time: 48 h
<i>Candida albicans</i>	ATCC 10231	Good	

References: www.abbiodisk.com

RUSSEL AGAR

A differential medium for the differentiation of bacteria on the basis of carbohydrate fermentation and hydrogen sulphite production.

Dehydrated media

Code Number:	500 g: RUS20500, 5 kg: RUS25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,3 (approx.) at 25 °C

Direction: Suspend **38 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Dispense into test tubes and sterilise by autoclaving at 121 °C for 15 minutes. Allow to cool in slanted position to form slants with deep butt.

Prepared media

Bottled media:	100 ml: RUS30100, 500 ml: RUS30500
Tubed media:	150 x 15 mm: RUS40006 (6 ml, slant with deep butt) 100 x 12 mm: RUS40003 (3 ml, slant with deep butt)
Colour:	Pinkish
pH (at 25 °C):	7,2 – 7,4

Direction: Dispense the melted bottled media aseptically into test tubes. Allow to cool in slanted position to form slant with deep butt. Media in tubes are ready to use.

FORMULA in g/l

Peptones	8,4
Lactose	10,0
Sucrose	1,0
Glucose	0,5
Sodium chloride	4,0
Ferrous sulphate	0,5
Sodium thiosulphate	0,5
Andrade indicator	0,1
Buffers	1,0
Agar	12,0

Note: The typical formula can be adjusted to obtain optimal performance.

II. DEHYDRATED CULTURE MEDIA

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the tubed media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Reactions				Incubation time: 24 h	
		Slant	Butt	Gas	H ₂ S		
<i>Escherichia coli</i>	ATCC 25922	claret	claret	+	–		
<i>Salmonella typhimurium</i>	ATCC 14028	red	un-changed	+	+		
<i>Proteus mirabilis</i>	ATCC 29906	pink	un-changed	+	+		
<i>Pseudomonas aeruginosa</i>	ATCC 27853	un-changed	un-changed	–	–		

References: Russel and Krumwiede (1935)

SABOURAUD CHLORAMPHENICOL GENTAMICIN TETRAZOLIUM AGAR

A selective medium for the isolation and differentiation of *Candida* spp.

Dehydrated media

Code Number:	500 g: STG20500, 5 kg: STG25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	5,6 (approx.) at 25 °C

Direction: Suspend **45 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Mix well and pour into Petri-dishes or tubes (cooling in slanted position).

Prepared media

Bottled media:	100 ml: STG30100, 500 ml: STG30500
Plated media:	55 mm: STG50055, 90 mm: STG50090
Tubed media:	100 x 15 mm: STG40005 (5 ml, slant)
Colour:	Yellowish
pH (25 °C):	6,3 – 6,5

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes or tubes (cooling in slanted position). Media in Petri-dishes and tubes are ready to use.

FORMULA in g/l

Sabouraud Dextrose (2%) Agar	44,60
Chloramphenicol	0,25
Gentamicin	0,10
Triphenyl tetrazolium chloride	0,05

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated and tubed media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 25 °C	Growth	Incubation time: 48 h
<i>Candida albicans</i>	ATCC 10231	Good	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	

References: Pagano et al. (1958) Antibiotics Ann. 6: 137.

SABOURAUD CHLORAMPHENICOL ACTIDION AGAR

A selective medium for the isolation of dermatophytes from specimens containing mixed flora.

Dehydrated media

Code Number:	500 g: SCA20500, 5 kg: SCA25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	6,4 (approx.) at 25 °C

Direction: Suspend **45 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Mix well and pour into Petri-dishes or tubes (cooling in slanted position).

Prepared media

Bottled media:	100 ml: SCA30100, 500 ml: SCA30500
Plated media:	55 mm: SCA50055, 90 mm: SCA50090
Tubed media:	100 x 15 mm: SCA40005 (5 ml, slant)
Colour:	Yellowish
pH (25 °C):	6,3 – 6,5

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes or tubes (cooling in slanted position). Media in Petri-dishes and tubes are ready to use.

FORMULA in g/l

Sabouraud Dextrose (2%) Agar	44,0
Chloramphenicol	0,5
Cycloheximide	0,5

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated and tubed media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 25 °C	Growth	Incubation time: 48 h
<i>Candida albicans</i>	ATCC 10231	Good	
<i>Aspergillus brasiliensis</i>	ATCC 16404	Inhibited	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	

References: Sabouraud (1892) Ann. Dermatol. Syphil. 3: 1061.

SABOURAUD CHLORAMPHENICOL AGAR, PH EUR

A selective medium for the isolation of all species of fungi according to PH EUR (Agar Medium C – Sabouraud Glucose Agar with Chloramphenicol).

Dehydrated media

Code Number:	500 g: SCE20500, 5 kg: SCE25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	5,6 (approx.) at 25 °C

Direction: Suspend **65 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Mix well and pour into Petri-dishes or tubes (cooling in slanted position).

Prepared media

Bottled media:	100 ml: SCE30100, 500 ml: SCE30500
Plated media:	55 mm: SCE50055, 90 mm: SCE50090
Tubed media:	100 x 15 mm: SCE40005 (5 ml, slant)
Colour:	Yellowish
pH (25 °C):	5,5 – 5,7

II. DEHYDRATED CULTURE MEDIA

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes or tubes (cooling in slanted position). Media in Petri-dishes and tubes are ready to use.

FORMULA in g/l

Casein peptone	5,00
Meat peptone	5,00
Glucose monohydrate	40,00
Chloramphenicol	0,05
Agar	15,00

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated and tubed media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 25 °C	Growth	Incubation time: 48 h
<i>Candida albicans</i>	ATCC 10231	Good	
<i>Aspergillus brasiliensis</i>	ATCC 16404	Inhibited	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	

References: Sabouraud (1892) Ann. Dermatol. Syphil. 3: 1061.
European Pharmacopoeia

SABOURAUD CHLORAMPHENICOL AGAR

A selective medium for the cultivation of all species of fungi, particularly dermatophytes from contaminated specimens.

Dehydrated media

Code Number:	500 g: SCH20500, 5 kg: SCH25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	6,4 (approx.) at 25 °C

Direction: Suspend **45 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Mix well and pour into Petri-dishes or tubes (cooling in slanted position).

Prepared media

Bottled media:	100 ml: SCH30100, 500 ml: SCH30500
Plated media:	55 mm: SCH50055, 90 mm: SCH50090
Tubed media:	100 x 15 mm: SCH40005 (5 ml, slant)
Colour:	Yellowish
pH (25 °C):	6,3 – 6,5

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes or tubes (cooling in slanted position). Media in Petri-dishes and tubes are ready to use.

FORMULA in g/l

Sabouraud Dextrose (2%) Agar	44,5
Chloramphenicol	0,5

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated and tubed media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 25 °C	Growth	Incubation time: 48 h
<i>Candida albicans</i>	ATCC 10231	Good	
<i>Aspergillus brasiliensis</i>	ATCC 16404	Good	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	

References: Emmons et al. (1977) Medical Mycology

SABOURAUD CHLORAMPHENICOL BROTH

A selective medium for the cultivation of all species of fungi, particularly dermatophytes from contaminated specimens.

Dehydrated media

Code Number:	500 g: SCC20500, 5 kg: SCC25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	6,4 (approx.) at 25 °C

Direction: Suspend **30 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into final containers and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: SCC30100, 500 ml: SCC30500
Tubed media:	150 x 15 mm: SCC40010 (10 ml)
Colour:	Brownish
pH (at 25 °C):	6,3 – 6,5

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Peptones	10,0
Glucose	19,5
Chloramphenicol	0,5

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 25 °C	Growth	Incubation time: 48 h
<i>Candida albicans</i>	ATCC 10231	Good	
<i>Aspergillus brasiliensis</i>	ATCC 16404	Good	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	

References: European Pharmacopoeia

SABOURAUD CHLORAMPHENICOL GENTAMICIN AGAR

A selective medium for the cultivation of all species of fungi, particularly dermatophytes from contaminated specimens.

Dehydrated media

Code Number:	500 g: SCG20500, 5 kg: SCG25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	6,8 (approx.) at 25 °C

II. DEHYDRATED CULTURE MEDIA

Direction: Suspend **45 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Mix well and pour into Petri-dishes or tubes (cooling in slanted position).

Prepared media

Bottled media:	100 ml: SCG30100, 500 ml: SCG30500
Plated media:	55 mm: SCG50055, 90 mm: SCG50090
Tubed media:	100 x 15 mm: SCG40005 (5 ml, slant)
Colour:	Yellowish
pH (25 °C):	6,7 – 6,9

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes or tubes (cooling in slanted position). Media in Petri-dishes and tubes are ready to use.

FORMULA in g/l

Sabouraud Dextrose (2%) Agar	44,90
Chloramphenicol	0,05
Gentamicin	0,01

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated and tubed media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 25 °C	Growth	Incubation time: 48 h
<i>Candida albicans</i>	ATCC 10231	Good	
<i>Aspergillus brasiliensis</i>	ATCC 16404	Good	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	

References: Sabouraud (1892) Ann. Dermatol. Syphil. 3: 1061.

SABOURAUD DEXTROSE (1%) MALTOSE (1%) AGAR

A selective medium for the cultivation yeasts and moulds.

Dehydrated media

Code Number:	500 g: SDM20500, 5 kg: SDM25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	5,4 (approx.) at 25 °C

Direction: Suspend **45 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: SDM30100, 500 ml: SDM30500
Plated media:	55 mm: SDM50055, 90 mm: SDM50090
Tubed media:	100 x 15 mm: SDM40005 (5 ml, slant)
Colour:	Yellowish
pH (25 °C):	5,3 – 5,5

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes or tubes. Media in Petri-dishes and tubes are ready to use.

FORMULA in g/l

Peptones	10
Glucose	10
Maltose	10
Agar	15

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated and tubed media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 25 °C	Growth	Incubation time: 48 h
<i>Candida albicans</i>	ATCC 10231	Good	
<i>Aspergillus brasiliensis</i>	ATCC 16404	Good	

References: Sabouraud (1892) Ann. Dermatol. Syphil. 3: 1061.

SABOURAUD DEXTROSE (2%) AGAR

A non-selective medium for the cultivation and isolation of pathogenic and non-pathogenic fungi, particularly dermatophytes.

Dehydrated media

Code Number:	500 g: SDD20500, 5 kg: SDD25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	6,4 (approx.) at 25 °C

Direction: Suspend **45 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: SDD30100, 500 ml: SDD30500
Plated media:	55 mm: SDD50055, 90 mm: SDD50090
Tubed media:	100 x 15 mm: SDD40005 (5 ml, slant)
Colour:	Yellowish
pH (25 °C):	6,3 – 6,5

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes or tubes. Media in Petri-dishes and tubes are ready to use.

FORMULA in g/l

Peptones	10
Glucose	20
Agar	15

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated and tubed media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 25 °C	Growth	Incubation time: 48 h
<i>Candida albicans</i>	ATCC 10231	Good	
<i>Aspergillus brasiliensis</i>	ATCC 16404	Good	

References: Emmons et al. (1977) Medical Mycology

SABOURAUD DEXTROSE (4%) AGAR, PH EUR - USP

A selective medium for the cultivation and isolation of pathogenic and non-pathogenic fungi, particularly dermatophytes according to PH EUR (Sabouraud Dextrose Agar – Harmonised).

Dehydrated media

Code Number:	500 g: SDA20500, 5 kg: SDA25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	5,6 (approx.) at 25 °C

II. DEHYDRATED CULTURE MEDIA

Direction: Suspend **65 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: SDA30100, 500 ml: SDA30500
Plated media:	55 mm: SDA50055, 90 mm: SDA50090
Tubed media:	100 x 15 mm: SDA40005 (5 ml, slant)
Colour:	Yellowish
pH (25 °C):	5,5 – 5,7

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes or tubes. Media in Petri-dishes and tubes are ready to use.

FORMULA in g/l

Casein peptone	5
Meat peptone	5
Glucose monohydrate	40
Agar	15

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated and tubed media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 25 °C	Growth	Incubation time: 48 h
<i>Candida albicans</i>	ATCC 10231	Good	
<i>Aspergillus brasiliensis</i>	ATCC 16404	Good	

References: Sabouraud (1892) Ann. Dermatol. Syphil. 3: 1061.
European Pharmacopoeia

SABOURAUD DEXTROSE BROTH, PH EUR - USP

A sterility test medium for the detection yeast and moulds according to PH EUR (Sabouraud Dextrose Broth – Harmonised).

Dehydrated media

Code Number:	500 g: SDB20500, 5 kg: SDB25000
Colour:	Yellowish
Appearance:	Homogeneous powder
pH before autoclaving:	5,7 (approx.) at 25 °C

Direction: Suspend **30 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into final containers and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: SDB30100, 500 ml: SDB30500
Tubed media:	150 x 15 mm: SDB40010 (10 ml)
Colour:	Brownish
pH (at 25 °C):	5,0 – 5,2

Direction: Dispense the bottled media aseptically into sterile final container. Media in tubes are ready to use.

FORMULA in g/l

Casein peptone	5
Meat peptone	5
Glucose	20

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 25 °C	Growth	Incubation time: 48 h
<i>Candida albicans</i>	ATCC 10231	Good	
<i>Aspergillus brasiliensis</i>	ATCC 16404	Good	

References: European Pharmacopoeia

SABOURAUD MALTOSE (4%) AGAR

A selective medium for the cultivation of yeasts and moulds.

Dehydrated media

Code Number:	500 g: SMA20500, 5 kg: SMA25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	5,6 (approx.) at 25 °C

Direction: Suspend **65 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: SMA30100, 500 ml: SMA30500
Plated media:	55 mm: SMA50055, 90 mm: SMA50090
Tubed media:	100 x 15 mm: SMA40005 (5 ml, slant)
Colour:	Yellowish
pH (25 °C):	5,5 – 5,7

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes or tubes. Media in Petri-dishes and tubes are ready to use.

FORMULA in g/l

Peptones	10
Maltose	40
Agar	15

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated and tubed media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 25 °C	Growth	Incubation time: 48 h
<i>Candida albicans</i>	ATCC 10231	Good	
<i>Aspergillus brasiliensis</i>	ATCC 16404	Good	

References: Sabouraud (1892) Ann. Dermatol. Syphil. 3: 1061.

SALMONELLA SHIGELLA (SS) AGAR, MODIFIED

A selective and differential medium for the isolation of Gram-negative enteric micro-organisms. The medium supplemented with phenylalanine is suitable to distinguish *Salmonella* spp. from *Proteus* spp.

Dehydrated media

Code Number:	500 g: SSA20500, 5 kg: SSA25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
Final pH:	7,0 (approx.) at 25 °C

II. DEHYDRATED CULTURE MEDIA

Direction: Suspend **66 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Mix well before pouring.

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: SSA30100, 500 ml: SSA30500
Plated media:	55 mm: SSA50055, 90 mm: SSA50090
Colour:	Brownish
pH (at 25 °C):	6,9 – 7,1

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	12,000
Bile salts	8,500
L-Phenylalanine	1,000
Lactose	10,000
Sodium citrate	10,000
Sodium thiosulphate	8,500
Ferric citrate	1,000
Neutral red	0,0250
Brilliant green	0,0003
Agar	15,000

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Partially inhibited, rose-red colonies	
<i>Salmonella typhimurium</i>	ATCC 14028	Good, colourless colonies with shiny black centre without brown halo	
<i>Proteus mirabilis</i>	ATCC 29906	Good, without swarming, brown colonies with matt black centre with brown halo	
<i>Enterococcus faecalis</i>	ATCC 29212	Inhibited	

References: Leifson (1935) J. Path. Bact. 40: 581.

SALT BROTH

A differential medium for the differentiation of bacteria on the basis of their salt tolerance.

Dehydrated media

Code Number:	500 g: SBR20500, 5 kg: SBR25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,2 (approx.) at 25 °C

Direction: Suspend **85 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into test tubes and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: SBR30100, 500 ml: SBR30500
Tubed media:	100 x 12 mm: SBR40003 (3 ml)
Colour:	Yellowish
pH (at 25 °C):	7,1 – 7,3

Direction: Dispense the bottled media aseptically into sterile test tubes. Media in tubes are ready to use.

FORMULA in g/l

Peptones	20
Sodium chloride	65

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Staphylococcus aureus</i>	ATCC 29213	Positive, turbid growth	
<i>Escherichia coli</i>	ATCC 25922	Negative, no growth	

SCHAEDLER AGAR

A non-selective medium for the isolation and cultivation of anaerobe bacteria.

Dehydrated media

Code Number:	500 g: SAA20500, 5 kg: SAA25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,6 (approx.) at 25 °C

Direction: Suspend **42 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. If addition of blood is necessary, cool to 50 °C and add aseptically **50 ml of sterile defibrinated blood**. Mix well before pouring.

Prepared media

Bottled media:	100 ml: SAA30100, 500 ml: SAA30500
Plated media:	55 mm: SAA50055, 90 mm: SAA50090
Colour of blood free media:	Yellowish
Colour of media containing blood:	Ruby red
pH (at 25 °C):	7,4 – 7,8

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. If necessary, blood may be added to the melted media according to the direction of the dehydrated media. Media in Petri-dishes are ready to use.

FORMULA in g/l

Nutrient substrate (peptones, extracts)	18,000
Glucose	5,800
L-Cysteine	0,400
Sodium chloride	1,700
Vitamins	0,011
Buffers (TRIS and phosphates)	3,100
Agar	13,000

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 48 h
<i>Bacteroides fragilis</i>	ATCC 23745	Good (under anaerobic conditions)	
<i>Clostridium pefringens</i>	ATCC 13124	Good (under anaerobic conditions)	

References: Schaedler et al. (1965) J. Exp. Med. 122: 59.

II. DEHYDRATED CULTURE MEDIA

SCHAEDLER BROTH

A non-selective enrichment medium for the general cultivation of anaerobe bacteria.

Dehydrated media

Code Number:	500 g: SAB20500, 5 kg: SAB25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,6 (approx.) at 25 °C

Direction: Suspend 29 g in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into final containers and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: SAB30100, 500 ml: SAB30500
Tubed media:	150 x 15 mm: SAB40010 (10 ml)
Colour:	Yellowish
pH (at 25 °C):	7,4 – 7,8

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Nutrient substrate (peptones, extracts)	18,000
L-Cysteine	0,400
Glucose	5,800
Sodium chloride	1,700
Vitamins	0,011
Buffers (TRIS and phosphates)	3,100

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 48 h
<i>Bacteroides fragilis</i>	ATCC 23745	Good (under anaerobic conditions)	
<i>Clostridium pefringens</i>	ATCC 13124	Good (under anaerobic conditions)	

References: Schaedler et al. (1965) J. Exp. Med. 122: 59.

SELENITE BROTH BASE

A selective enrichment medium for isolation of *Salmonella* spp.

Dehydrated media

Code Number:	500 g: SEB20500, 5 kg: SEB25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
Final pH:	7,0 (approx.) at 25 °C

Direction: Dissolve 4 g of Selenite Supplement (SES80110) in one litre of distilled water. Suspend 19 g of dehydrated medium and heat gently to dissolve the medium completely. Dispense into final containers. In case the medium is not getting used on the day of preparation, sterilise at 100 °C for 10 minutes. Cool quickly. The presence of a small amount of pinkish or brownish precipitate is not detrimental.

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: SEB30100, 500 ml: SEB30500
Tubed media:	150 x 15 mm: SEB40010 (10 ml)
Colour:	Pinkish
pH (at 25 °C):	6,9 – 7,1

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Peptones	5
Lactose	4
Buffers	10

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Salmonella typhimurium</i>	ATCC 14028	Good	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	

References: Leifson (1936) Am. J. Hyg. 24: 423.

SELENITE CYSTINE BROTH BASE, USP

A selective enrichment medium for the isolation of *Salmonella* spp. according to USP. L-Cysteine improves the recovery of salmonellae.

Dehydrated media

Code Number:	500 g: SCB20500, 5 kg: SCB25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
Final pH:	7,0 (approx.) at 25 °C

Direction: Dissolve 4 g of Selenite Supplement (SES80110) in one litre of distilled water. Suspend 19 g of dehydrated medium and heat gently to dissolve the medium completely. Dispense into final containers. In case the medium is not getting used on the day of preparation, sterilise at 100 °C for 10 minutes. Cool quickly. The presence of a small amount of pinkish or brownish precipitate is not detrimental.

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: SCB30100, 500 ml: SCB30500
Tubed media:	100 x 15 mm: SCB40005 (5 ml) 150 x 15 mm: SCB40010 (10 ml)
Colour:	Pinkish
pH (at 25 °C):	6,9 – 7,1

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Peptones	5,00
Lactose	4,00
L-Cystine	0,01
Buffers	10,00

Note: The typical formula can be adjusted to obtain optimal performance.

II. DEHYDRATED CULTURE MEDIA

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Salmonella typhimurium</i>	ATCC 14028	Good	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	

References: North and Bartam (1953) Appl. Microbiol. 1: 130.
United States Pharmacopoeia

SELENITE CYSTINE MANNITOL BROTH BASE

A selective enrichment medium for the isolation of *Salmonella* spp. Addition of L-Cystine and replacement of lactose with mannitol improves the recovery of salmonellae.

Dehydrated media

Code Number:	500 g: SCM20500, 5 kg: SCM25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
Final pH:	7,0 (approx.) at 25 °C

Direction: Dissolve **4 g of Selenite Supplement (SE80110)** in one litre of distilled water. Suspend **19 g** of dehydrated medium and heat gently to dissolve the medium completely. Dispense into final containers. In case the medium is not getting used on the day of preparation, sterilise at 100 °C for 10 minutes. Cool quickly. The presence of a small amount of pinkish or brownish precipitate is not detrimental.

Warning!

The medium is heat sensitive.

No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: SCM30100, 500 ml: SCM30500
Tubed media:	100 x 15 mm: SCM40005 (5 ml) 150 x 15 mm: SCM40010 (10 ml)
Colour:	Pinkish
pH (at 25 °C):	6,9 – 7,1

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Peptones	5,00
Mannitol	4,00
L-Cystine	0,01
Buffers	10,00

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Salmonella typhimurium</i>	ATCC 14028	Good	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	

References: Hobbs and Allison (1945) Mon. Bull. Min. Hlth Pub. Hlth Lab. Serv. 4: 12.

SHIGELLA BROTH BASE

A selective medium for the selective enrichment of *Shigella* spp.

Dehydrated media

Code Number:	500 g: SHB20500, 5 kg: SHB25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,0 (approx.) at 25 °C

Direction: Suspend **15 g** in 500 ml of distilled water and heat gently to dissolve the medium completely. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the contents of **one vial of Shigella Selective Supplement (SBS80004)** reconstituted with 4 ml of sterile distilled water. Mix well and dispense aseptically into sterile test tubes.

Prepared media

Bottled media:	100 ml: SHB30100, 500 ml: SHB30500
Tubed media:	150 x 15 mm: SHB40010 (10 ml)
Colour:	Yellowish
pH (at 25 °C):	6,9 – 7,1

Direction: Supplement the bottled media according to the direction of the dehydrated media and dispense aseptically into sterile test tubes. Media in tubes are ready to use.

FORMULA in g/l

Peptones	20
Glucose	1
Sodium chloride	5
Buffers	4

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Shigella sonnei</i>	ATCC 25931	Good	
<i>Enterococcus faecalis</i>	ATCC 29212	Inhibited	

References: FDA (1988) Bacteriological Analytical Manual, 8th ed.

SIM MEDIUM

A semi-solid differential medium for the differentiation of bacteria on the basis of their motility, hydrogen sulphite and indole production.

Dehydrated media

Code Number:	500 g: SIM20500, 5 kg: SIM25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	6,7 (approx.) at 25 °C

Direction: Suspend 30 g in one litre of distilled water and heat with frequent agitation until the medium boils well. Dispense into test tubes and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: SIM30100, 500 ml: SIM30500
Tubed media:	100 x 12 mm: SIM40003 (3 ml)
Colour:	Yellowish
pH (at 25 °C):	6,6 – 6,8

II. DEHYDRATED CULTURE MEDIA

Direction: Dispense the melted bottled media aseptically into sterile test tubes. Media in tubes are ready to use.

FORMULA in g/l

Peptones	26,0
Ferrous ammonium sulphate	0,2
Sodium thiosulphate	0,2
Agar	3,6

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Reactions			Incubation time: 24 h
		H ₂ S	Motility	Indole	
<i>Shigella sonnei</i>	ATCC 25931	–	–	–	
<i>Proteus mirabilis</i>	ATCC 29906	+	+	+	
<i>Escherichia coli</i>	ATCC 25922	–	+	+	

References: Blazevic (1968) Appl. Microbiol. 16: 668.

SIMMONS CITRATE AGAR

A differential medium for the differentiation of Gram-negative bacteria on the basis of their citrate utilisation.

Dehydrated media

Code Number:	500 g: CIT20500, 5 kg: CIT25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	6,9 (approx.) at 25 °C

Direction: Suspend 24 g in one litre of distilled water and heat with frequent agitation until the medium boils well. Dispense into test tubes and sterilise by autoclaving at 121 °C for 15 minutes. Allow to cool in slanted position.

Prepared media:

Bottled media:	100 ml: CIT30100 500 ml: CIT30500
Tubed media:	100 x 12 mm: CIT40002 (2 ml – slant)
Colour:	Green
pH (25 °C)	6,8 – 7,0

Direction: Dispense the melted bottled media aseptically into sterile test tubes. Allow to cool in slanted position. Media in tubes are ready to use.

FORMULA in g/l

Sodium citrate	2,00
Sodium chloride	5,00
Magnesium sulphate	0,20
Bromothymol blue	0,08
Buffers	1,70
Agar	15,00

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the tubed media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Klebsiella pneumoniae</i>	ATCC 13883	Positive, colour change to blue	
<i>Escherichia coli</i>	ATCC 25922	Negative, without colour change	

References: Simmons (1926) J. Infect. Dis. 39: 209.

SLANETZ-BARTLEY AGAR BASE

A selective medium for the detection of *Enterococcus* spp.

Dehydrated media

Code Number:	500 g: SLA20500, 5 kg: SLA25000
Colour:	Yellowish
Appearance:	Slightly adherent Homogeneous hygroscopic powder
pH before autoclaving:	7,2 (approx.) at 25 °C

Direction: Suspend 22 g in 500 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 115 °C for 15 minutes. Cool to 50 °C and add aseptically 10 drops (0,5 ml) of TTC Solution, Sterile (TTC80030). Mix well before pouring.

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: SLA30100, 500 ml: SLA30500
Plated media:	55 mm: SLA50055, 90 mm: SLA50090
Colour:	Yellowish
pH (25 °C):	7,1 – 7,3

Direction: Supplement the melted bottled media according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	25,0
Glucose	2,0
Sodium azide	0,4
Buffers	4,0
Agar	12,5

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 48 h
<i>Enterococcus faecalis</i>	ATCC 29212	Good, ferruginous colonies	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	

References: Slanetz and Bartley (1957) J. Bact. 74: 591.

SPS AGAR

A selective and differential medium for the detection of thermophilic anaerobes, producing hydrogen sulphite.

Dehydrated media

Code Number:	500 g: SPS20500, 5 kg: SPS25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,1 (approx.) at 25 °C

II. DEHYDRATED CULTURE MEDIA

Direction: Suspend **40 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Dispense into test tubes and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: SPS30100, 500 ml: SPS30500
Tubed media:	150 x 15 mm: SPS40010 (10 ml)
Colour:	Yellowish
pH (25 °C):	7,0 – 7,2

Direction: Dispense the melted bottled media aseptically into sterile tubes. Media in tubes are ready to use.

FORMULA in g/l

Peptones	25,00
Ferric ammonium citrate	0,50
Sodium sulphite	0,50
Sodium sulfadiazine	0,12
Polymyxin B sulphate	0,01
Agar	13,90

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the tubed media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 44 °C	Growth	Incubation time: 48 h
<i>Clostridium perfringens</i>	ATCC 13124	Good, colour change to black (under anaerobic conditions)	

References: Angelotti et al. (1962) J. Appl. Microbiol. 10: 193.

STAPHYLOCOCCUS AGAR No. 110

A selective and differential medium for the isolation and presumptive identification of pathogenic *Staphylococcus* spp.

Dehydrated media

Code Number:	500 g: STM20500, 5 kg: STM25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,1 (approx.) at 25 °C

Direction: Suspend **150 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Disperse the precipitate by gentle agitation before pouring.

Prepared media

Bottled media:	100 ml: STM30100, 500 ml: STM30500
Plated media:	55 mm: STM50055, 90 mm: STM50090
Colour:	Yellowish
pH (at 25 °C):	7,0 – 7,2

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	13
Mannitol	10
Lactose	2
Sodium chloride	75
Gelatin	30
Buffers	5
Agar	15

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 48 h
<i>Staphylococcus aureus</i>	ATCC 29213	Good, mannitol decomposition and gelatin liquefaction positive, cream coloured colonies	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	

References: APHA (1976) Compendium of Methods for the Microbiological Examination of Foods

SUGAR FREE AGAR

A standard medium for the enumeration of contaminants in dairy products.

Dehydrated media

Code Number:	500 g: SFA20500, 5 kg: SFA25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	6,8 (approx.) at 25 °C

Direction: Suspend **35 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: SFA30100, 500 ml: SFA30500
Plated media:	55 mm: SFA50055, 90 mm: SFA50090
Colour:	Yellowish
pH (25 °C):	6,7 – 6,9

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	15
Sodium chloride	5
Agar	15

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the tubed media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good	
<i>Staphylococcus aureus</i>	ATCC 29213	Good	

References: I. D. F. (1964). International Standard FIL-IDF 30.

TAYLOR BROTH

See: Culture Media for Amino Acid Decomposition Studies (page 137)

II. DEHYDRATED CULTURE MEDIA

TCBS AGAR

A selective medium for the isolation of pathogenic vibrios.

Dehydrated media

Code Number:	500 g: TCB20500, 5 kg: TCB25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
Final pH:	8,6 (approx.) at 25 °C

Direction: Suspend **91 g** in one litre of distilled water and soak for 10 minutes. Heat with frequent agitation until the medium boils well. Mix well before pouring.

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: TCB30100, 500 ml: TCB30500
Plated media:	55 mm: TCB50055, 90 mm: TCB50090
Colour:	Blue
pH (at 25 °C):	8,5 – 8,7

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	18,00
Bacteriological bile	8,00
Sucrose	20,00
Sodium chloride	10,00
Sodium citrate	10,00
Sodium thiosulphate	10,00
Ferric citrate	1,00
Bromothymol blue	0,04
Thymol blue	0,04
Agar	14,00

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the tubed media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Vibrio parahaemolyticus</i>	ATCC 17802	Good, yellow colonies	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	
<i>Proteus mirabilis</i>	ATCC 29906	Inhibited without swarming	

References: Kobayashi et al. (1963) Jap. J. Bact. 18. 10-11: 387.

TERGITOL 7 AGAR BASE

A differential and selective medium for the detection and enumeration of coliforms.

Dehydrated media

Code Number:	500 g: TEA20500, 5 kg: TEA25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,2 (approx.) at 25 °C

Direction: Suspend **27 g** in 500 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically **10 drops (0,5 ml) of TTC Solution, Sterile (TTC80030)**. Mix well before pouring.

Prepared media

Bottled media:	100 ml: TEA30100, 500 ml: TEA30500
Plated media:	55 mm: TEA50055, 90 mm: TEA50090
Colour:	Green
pH (25 °C):	7,1 – 7,3

Direction: Supplement the melted bottled media according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	10,00
Yeast extract	6,00
Meat extract	5,00
Lactose	20,00
Tergitol 7	0,10
Bromothymol blue	0,05
Agar	12,85

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 48 h
<i>Escherichia coli</i>	ATCC 25922	Good, yellow colonies	
<i>Proteus mirabilis</i>	ATCC 29906	Good, ferruginous colonies without swarming	
<i>Enterococcus faecalis</i>	ATCC 29212	Inhibited	

References: Chapman (1947) J. Bact. 53: 504.

TEST AGAR, pH 6.0

A non-selective medium for the detection of antimicrobial inhibitors.

Dehydrated media

Code Number:	500 g: T6020500, 5 kg: T6025000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	5,9 – 6,1 at 25 °C

Direction: Suspend **25 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically **1 ml Bacillus subtilis spore suspension**. Mix well and pour plates immediately.

Prepared media

Bottled media:	100 ml: T6030100, 500 ml: T6030500
Plated media:	55 mm: T6050055, 90 mm: T6050090
Colour:	Yellowish
pH (25 °C):	6,0

Direction: Complete the melted bottled media according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	6,9
Sodium chloride	5,1
Agar	13,0

Note: The typical formula can be adjusted to obtain optimal performance.

II. DEHYDRATED CULTURE MEDIA

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 1–3 °C. Do not freeze! Additional packaging into a welded plastic bag is highly recommended.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Bacillus subtilis</i>	ATCC 6633	Good	

References: Levetzow (1971) Bundesgesundheitsblatt 14, 15/16: 211.

TEST AGAR, pH 7.2

A non-selective medium for the detection of antimicrobial inhibitors.

Dehydrated media

Code Number:	500 g: T7220500, 5 kg: T7225000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,1 – 7,3 at 25 °C

Direction: Suspend **26 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically **1 ml *Bacillus subtilis* spore suspension**. Mix well and pour plates immediately.

Prepared media

Bottled media:	100 ml: T7230100, 500 ml: T7230500
Plated media:	55 mm: T7250055, 90 mm: T7250090
Colour:	Yellowish
pH (25 °C):	7.2

Direction: Complete the melted bottled media according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	7,0
Sodium chloride	5,0
Buffer	0,8
Agar	13,2

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 1–3 °C. Do not freeze! Additional packaging into a welded plastic bag is highly recommended.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Bacillus subtilis</i>	ATCC 6633	Good	

References: Levetzow (1971) Bundesgesundheitsblatt 14, 15/16: 211.

TEST AGAR, pH 8.0

A non-selective medium for the detection of antimicrobial inhibitors.

Dehydrated media

Code Number:	500 g: T8020500, 5 kg: T8025000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,9 – 8,1 at 25 °C

Direction: Suspend **27,5 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically **1 ml *Bacillus subtilis* spore suspension**. Mix well and pour plates immediately.

Prepared media

Bottled media:	100 ml: T8030100, 500 ml: T8030500
Plated media:	55 mm: T8050055, 90 mm: T8050090
Colour:	Yellowish
pH (25 °C):	8.0

Direction: Complete the melted bottled media according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	6,9
Sodium chloride	5,1
Buffer	2,4
Agar	13,1

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 1–3 °C. Do not freeze! Additional packaging into a welded plastic bag is highly recommended.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Bacillus subtilis</i>	ATCC 6633	Good	

References: Levetzow (1971) Bundesgesundheitsblatt 14, 15/16: 211.

TETRATHIONATE BROTH BASE, MULLER-KAUFFMANN (MKTTn)

A selective medium for the enrichment of *Salmonella* spp. according to ISO standard.

Dehydrated media

Code Number:	500 g: TMK20500, 5 kg: TMK25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
Final pH:	8,0 (approx.) at 25 °C

Direction: Suspend **45 g** in 475 ml of distilled water and heat with frequent agitation until the medium boils well. Cool to 50 °C and add aseptically the contents of **one vial of Novobiocin (20 mg) Supplement (DSN80004-20)** reconstituted with 4 ml of sterile distilled water and **10 ml of Brilliant Green Solution, Sterile (BGS80100-DC)**. Mix well and add aseptically the contents of **one vial of Tetrathionate Iodine-Iodide Selective Supplement (TTS80010)** reconstituted with 10 ml of sterile distilled water. Mix well and dispense aseptically into sterile test tubes.

Warning!

The medium is heat sensitive.

Do not heat after addition of the supplement.

It is recommended to use the complete medium on the day of preparation.

Prepared media

Bottled media:	100 ml: TMK30100, 500 ml: TMK30500
Colour of bottled media:	Yellowish
pH (at 25 °C):	7,9 – 8,1

Direction: Supplement the bottled media according to the direction of the dehydrated media and dispense aseptically into sterile test tubes.

II. DEHYDRATED CULTURE MEDIA

FORMULA in g/l

Peptones	13,4
Bile salts	4,8
Calcium carbonate	38,7
Sodium thiosulphate	30,5
Sodium chloride	2,6

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the tubed media protected from light at 2–8 °C, but no longer than 24 hours.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Salmonella typhimurium</i>	ATCC 14028	Good	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	

References: ISO 6579

TETRATHIONATE BROTH BASE, MULLER-KAUFFMANN

A selective medium for the enrichment of *Salmonella* spp. besides inhibition of *Proteus* spp.

Dehydrated media

Code Number:	500 g: MTB20500, 5 kg: MTB25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
Final pH:	7,6 (approx.) at 25 °C

Direction: Suspend **41 g** in 480 ml of distilled water and heat with frequent agitation until the medium boils well. Cool to 50 °C and add aseptically **10 ml of Brilliant Green Solution, Sterile (BGS80100-DC)**. Mix well and add aseptically the contents of **one vial of Tetrathionate Iodine-Iodide Selective Supplement (TTS80010)** reconstituted with 10 ml of sterile distilled water. Mix well and dispense aseptically into sterile test tubes.

Warning!

The medium is heat sensitive. Do not heat after addition of the supplement. It is recommended to use the complete medium on the day of preparation.

Prepared media

Bottled media:	100 ml: MTB30100, 500 ml: MTB30500
Colour of bottled media:	Yellowish
pH (at 25 °C):	7,5 – 7,7

Direction: Supplement the bottled media according to the direction of the dehydrated media and dispense aseptically into sterile test tubes.

FORMULA in g/l

Peptones	7,0
Bacteriological bile	4,8
Sodium thiosulphate	40,7
Calcium carbonate	25,0
Sodium chloride	4,5

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the tubed media protected from light at 2–8 °C, but no longer than 24 hours.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Salmonella typhimurium</i>	ATCC 14028	Good	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	
<i>Proteus mirabilis</i>	ATCC 29906	Inhibited	

References: Muller (1923) C. R. Soc. Biol. 89: 434.
Kauffmann (1930) Zbl. Bakt. I. Orig. 119: 148.

TETRATHIONATE BROTH BASE, PH EUR

A selective enrichment medium for the isolation of *Salmonella* spp. according to PH EUR (Broth Medium I – Tetrathionate Bile Brilliant Green Broth).

Dehydrated media

Code Number:	500 g: TTE20500, 5 kg: TTE25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
Final pH:	7,0 (approx.) at 25 °C

Direction: Suspend **31,5 g** in 500 ml of distilled water and heat with frequent agitation until the medium boils well. Cool to 50 °C and add aseptically the contents of **one vial of Tetrathionate Iodine-Iodide Selective Supplement (TTS80010)** reconstituted with 10 ml of sterile distilled water. Mix well and dispense aseptically into sterile test tubes.

Warning!

The medium is heat sensitive. Do not heat after addition of the supplement. It is recommended to use the complete medium on the day of preparation.

Prepared media

Bottled media:	100 ml: TTE30100, 500 ml: TTE30500
Colour:	Greenish
pH (at 25 °C):	6,9 – 7,1

Direction: Supplement the bottled media according to the direction of the dehydrated media and dispense aseptically into sterile test tubes.

FORMULA in g/l

Peptones	8,60
Bacteriological bile	8,00
Calcium carbonate	20,00
Sodium thiosulphate	20,00
Sodium chloride	6,40
Brilliant green	0,07

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the tubed media protected from light at 2–8 °C, but no longer than 24 hours.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Salmonella typhimurium</i>	ATCC 14028	Good	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	

References: European Pharmacopoeia

II. DEHYDRATED CULTURE MEDIA

TETRATHIONATE BROTH BASE, USP

A selective enrichment medium for the isolation of *Salmonella* spp. – including *Salmonella typhi* – according to USP.

Dehydrated media

Code Number:	500 g: TTB20500, 5 kg: TTB25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
Final pH:	8,4 (approx.) at 25 °C

Direction: Suspend **23 g** in 500 ml of distilled water and heat with frequent agitation until the medium boils well. Cool to 50 °C and add aseptically the contents of **one vial of Tetrathionate Iodine-Iodide Selective Supplement (TTS80010)** reconstituted with 10 ml of sterile distilled water. Mix well and dispense aseptically into sterile test tubes.

Warning!

The medium is heat sensitive.

Do not heat after addition of the supplement.

It is recommended to use the complete medium on the day of preparation.

Prepared media

Bottled media:	100 ml: TTB30100, 500 ml: TTB30500
Colour:	Yellowish
pH (at 25 °C):	8,3 – 8,5

Direction: Supplement the bottled media according to the direction of the dehydrated media and dispense aseptically into sterile test tubes.

FORMULA in g/l

Peptones	5
Bile salts	1
Sodium thiosulphate	30
Calcium carbonate	10

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the tubed media protected from light at 2–8 °C, but no longer than 24 hours.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Salmonella typhimurium</i>	ATCC 14028	Good	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	

References: United States Pharmacopoeia

THIOGLYCOLLATE MEDIUM G

A non-selective medium for sterility testing. The medium is primarily intended for the culture of anaerobe bacteria, however, it will also detect aerobic bacteria. This medium is more transparent than the classical thioglycollate media.

Dehydrated media

Code Number:	500 g: THG20500, 5 kg: THG25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,1 (approx.) at 25 °C

Direction: Suspend **30 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Dispense into final containers and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: THG30100, 500 ml: THG30500
Tubed media:	150 x 15 mm: THG40010 (10 ml)
Colour:	Yellowish, with red colour ring on the top
pH (at 25 °C):	7,0 – 7,2

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

Warning!

The media may be used until approximately 30 % of the medium (top layer) has been oxidized, as indicated by a red colour of the resazurin near the surface. If oxidation has proceeded further, the media may be reheated once in steam or boiling water, cooled and used.

FORMULA in g/l

Casein peptone	15,250
Yeast extract	5,000
L-Cysteine	0,500
Glucose monohydrate	5,500
Sodium chloride	2,500
Sodium thioglycollate	0,500
Resazurin	0,001
Gelling agent	0,750

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Pseudomonas aeruginosa</i>	ATCC 27853	Good	
<i>Staphylococcus aureus</i>	ATCC 29213	Good	
<i>Clostridium perfringens</i>	ATCC 13124	Good (under anaerobic conditions)	

THIOGLYCOLLATE MEDIUM WITH HEMIN + VITAMIN K3

A non-selective medium for sterility testing. The medium is primarily intended for the culture of anaerobe bacteria.

Dehydrated media

Code Number:	500 g: THK20500, 5 kg: THK25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,1 (approx.) at 25 °C

Direction: Suspend **30 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Dispense into final containers and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: THK30100, 500 ml: THK30500
Tubed media:	150 x 15 mm: THK40010 (10 ml)
Colour:	Yellowish, with red colour ring on the top
pH (at 25 °C):	7,0 – 7,2

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

Warning!

The media may be used until approximately 30 % of the medium (top layer) has been oxidized, as indicated by a red colour of the resazurin near the surface. If oxidation has proceeded further, the media may be reheated once in steam or boiling water, cooled and used.

II. DEHYDRATED CULTURE MEDIA

FORMULA in g/l

Casein peptone	15,250
Yeast extract	5,000
L-Cysteine	0,500
Glucose monohydrate	5,500
Sodium chloride	2,500
Sodium thioglycollate	0,500
Hemin	0,005
Vitamin K3	0,001
Resazurin	0,001
Agar	0,750

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 48 h
<i>Clostridium perfringens</i>	ATCC 13124	Good (under anaerobic conditions)	

References: Lenette et al. (1985) Manual of Clinical Microbiology, 4th ed.

THIOGLYCOLLATE MEDIUM, BREWER

A non-selective enrichment medium for the cultivation of both aerobic and anaerobic micro-organisms, especially in the sterility testing of the biological products.

Dehydrated media

Code Number:	500 g: TBR20500, 5 kg: TBR25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,2 (approx.) at 25 °C

Direction: Suspend **20 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Dispense into final containers and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: TBR30100, 500 ml: TBR30500
Tubed media:	150 x 15 mm: TBR40010 (10 ml)
Colour:	Yellowish, with green colour ring on the top
pH (at 25 °C):	7,1 – 7,3

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

Warning!

The media may be used until approximately 30 % of the medium (top layer) has been oxidized, as indicated by a green colour of the methylene blue near the surface. If oxidation has proceeded further, the medium may be reheated once in steam or boiling water, cooled and used.

FORMULA in g/l

Peptones	8,000
Glucose	5,000
Sodium chloride	5,000
Sodium thioglycollate	1,100
Methylene blue	0,002
Agar	0,900

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 48 h
<i>Staphylococcus aureus</i>	ATCC 29213	Good	
<i>Clostridium perfringens</i>	ATCC 13124	Good (under anaerobic conditions)	

References: Brewer (1940) J. Am. Med. Assoc. 115: 598.

THIOGLYCOLLATE MEDIUM, PH EUR

A non-selective medium for sterility testing according to PH EUR (Fluid Thioglycollate Medium for Sterility Testing). The medium is primarily intended for the culture of anaerobic bacteria, however, it will also detect aerobic bacteria.

Dehydrated media

Code Number:	500 g: THM20500, 5 kg: THM25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,1 (approx.) at 25 °C

Direction: Suspend **30 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Dispense into final containers and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: THM30100, 500 ml: THM30500
Tubed media:	150 x 15 mm: THM40010 (10 ml)
Colour:	Yellowish, with red colour ring on the top
pH (at 25 °C):	7,0 – 7,2

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

Warning!

The media may be used until approximately 30 % of the medium (top layer) has been oxidized, as indicated by a red colour of the resazurin near the surface. If oxidation has proceeded further, the media may be reheated once in steam or boiling water, cooled and used.

FORMULA in g/l

Casein peptone	15,250
Yeast extract	5,000
L-Cysteine	0,500
Glucose monohydrate	5,500
Sodium chloride	2,500
Sodium thioglycollate	0,500
Resazurin	0,001
Agar	0,750

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Pseudomonas aeruginosa</i>	ATCC 27853	Good	
<i>Staphylococcus aureus</i>	ATCC 29213	Good	
<i>Clostridium perfringens</i>	ATCC 13124	Good (under anaerobic conditions)	

References: European Pharmacopoeia

II. DEHYDRATED CULTURE MEDIA

TODD-HEWITT BROTH

A general-purpose non-selective medium for the cultivation primarily of beta-haemolytic streptococci.

Dehydrated media

Code Number:	500 g: THB20500, 5 kg: THB25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,8 (approx.) at 25 °C

Direction for non selective broth: Suspend **37 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into final containers and sterilise by autoclaving at 121 °C for 15 minutes.

Direction for selective broth: Suspend **18,5 g** in 500 ml of distilled water and heat gently to dissolve the medium completely. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the contents of **one vial of Staph/Strep Selective Supplement (SHS80004)** reconstituted with 4 ml of sterile distilled water. Mix well and dispense aseptically into sterile final containers.

Prepared media

Bottled media:	100 ml: THB30100, 500 ml: THB30500
Tubed media, non selective:	150 x 15 mm: THB40010 (10 ml)
Tubed media, selective:	150 x 15 mm: THB40010-02 (10 ml)
Colour:	Yellowish
pH (at 25 °C):	7,7 – 7,9

Direction: If necessary, supplement may be added to the melted bottled media according to the direction of the dehydrated media. Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Nutrient substrate (heart infusion, peptones)	30
Glucose	2
Sodium chloride	2
Buffers	3

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Streptococcus pyogenes</i>	ATCC 19615	Good	
<i>Escherichia coli</i>	ATCC 25922	Inhibited (in case of selective media)	

References: Todd and Hewitt (1932) J. Path. Bact. 35: 973.

TOMATO JUICE AGAR

A selective medium for the cultivation and enumeration of *Lactobacillus* spp.

Dehydrated media

Code Number:	500 g: TJA20500, 5 kg: TJA25000
Colour:	Pinkish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	6,1 (approx.) at 25 °C

Direction: Suspend **53 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. If adjustment of pH is necessary to pH 5,1, cool to 55 °C and add aseptically **Lactic Acid Solution (LAS80100)** to the medium in the necessary quantity (approx. 10 ml). Mix well before pouring.

Warning!

Once acidified with lactic acid, the medium should not be reheated.

Prepared media

Bottled media:	100 ml: TJA30100, 500 ml: TJA30500
Plated media:	55 mm: TJA50055, 90 mm: TJA50090
Colour:	Red
pH (at 25 °C):	6,0 – 6,2

Direction: If adjustment of pH is necessary, complete according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Tomato extract	20
Peptones	10
Milk peptone	10
Agar	13

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 30 °C	Growth	Incubation time: 72 h
<i>Lactobacillus acidophilus</i>	ATCC 4356	Good (under micro-aerobic conditions)	

References: Kulp and White (1932) Science 76: 17.

TRANSPORT MEDIUM, AMIES WITH CHARCOAL

An improved semi-solid, non-nutritional medium for the transportation of fastidious pathogens with prolonged survival of micro-organisms from collection to culturing. The added charcoal neutralises the toxic metabolic products of gonococci.

Dehydrated media

Code Number:	500 g: TAC20500, 5 kg: TAC25000
Colour:	Black
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,2 (approx.) at 25 °C

Direction: Suspend **20 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Dispense into final containers and sterilise by autoclaving at 121 °C for 15 minutes. While cooling turn the containers up and down a few times to distribute the charcoal uniformly.

Prepared media

Bottled media:	100 ml: TAC30100, 500 ml: TAC30500
Colour:	Black
pH (at 25 °C):	7,1 – 7,3

Direction: Dispense the melted bottled media aseptically into final containers. Cool to 50 °C. While cooling turn the containers up and down a few times to distribute the charcoal uniformly.

II. DEHYDRATED CULTURE MEDIA

FORMULA in g/l

Sodium chloride	3,0
Sodium thioglycolate	1,0
Potassium chloride	0,2
Calcium chloride	0,1
Magnesium chloride	0,1
Charcoal	10,0
Buffers	1,6
Agar	4,0

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 30 °C	Growth	Incubation time: 48 h
<i>Streptococcus pyogenes</i>	ATCC 19615	Good growth of the test organism on the plated media following subculture after 48 h in transport medium.	

References: Amies (1967) Can. J. Pub. Hlth. 58: 296.

TRANSPORT MEDIUM, AMIES WITHOUT CHARCOAL

An improved semi-solid, non-nutritional medium for the transportation of fastidious pathogens with prolonged survival of micro-organisms from collection to culturing.

Dehydrated media

Code Number:	500 g: TAW20500, 5 kg: TAW25000
Colour:	White
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,2 (approx.) at 25 °C

Direction: Suspend **10 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Dispense into final containers and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: TAW30100, 500 ml: TAW30500
Colour:	Water clear
pH (at 25 °C):	7,1 – 7,3

Direction: Dispense the melted bottled media aseptically into final containers.

FORMULA in g/l

Sodium chloride	3,0
Sodium thioglycolate	1,0
Potassium chloride	0,2
Calcium chloride	0,1
Magnesium chloride	0,1
Buffers	1,6
Agar	4,0

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 30 °C	Growth	Incubation time: 48 h
<i>Streptococcus pyogenes</i>	ATCC 19615	Good growth of the test organism on the plated media following subculture after 48 h in transport medium.	

References: Amies (1967) Can. J. Pub. Hlth. 58: 296.

TRANSPORT MEDIUM, CARY-BLAIR

A semi-solid, non-nutritional medium for the transportation of Gram-negative and anaerobe bacteria with prolonged survival of micro-organisms from collection to culturing.

Dehydrated media

Code Number:	500 g: TCW20500, 5 kg: TCW25000
Colour:	White
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	8,3 (approx.) at 25 °C

Direction: Suspend **13 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Dispense into final containers and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: TCW30100, 500 ml: TCW30500
Colour:	Water clear
pH (at 25 °C):	8,2 – 8,4

Direction: Dispense the melted bottled media aseptically into final containers.

FORMULA in g/l

Sodium chloride	5,00
Sodium thioglycolate	1,50
Calcium chloride	0,09
Buffers	1,00
Agar	5,40

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 30 °C	Growth	Incubation time: 48 h
<i>Streptococcus pyogenes</i>	ATCC 19615	Good growth of the test organism on the plated media following subculture after 48 h in transport medium.	

References: Cary and Blair (1964) J. Bact. 88: 96.

TRANSPORT MEDIUM, STUART WITH CHARCOAL

A semi-solid, non-nutritional medium for the transportation of fastidious pathogens with prolonged survival of micro-organisms from collection to culturing. The added charcoal neutralises the toxic metabolic products of gonococci.

Dehydrated media

Code Number:	500 g: TSC20500, 5 kg: TSC25000
Colour:	Black
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,4 (approx.) at 25 °C

II. DEHYDRATED CULTURE MEDIA

Direction: Suspend **26 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Dispense into final containers and sterilise by autoclaving at 121 °C for 15 minutes. While cooling turn the containers up and down a few times to distribute the charcoal uniformly.

Prepared media

Bottled media:	100 ml: TSC30100, 500 ml: TSC30500
Colour:	Black
pH (at 25 °C):	7,3 – 7,5

Direction: Dispense the melted bottled media aseptically into final containers. Cool to 50 °C. While cooling turn the containers up and down a few times to distribute the charcoal uniformly.

FORMULA in g/l

Sodium chloride	0,100
Sodium thioglycolate	0,500
L-Cysteine	0,400
Charcoal	10,000
Methylene blue	0,001
Sodium glycerophosphate	10,000
Agar	5,000

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 30 °C	Growth	Incubation time: 48 h
<i>Streptococcus pyogenes</i>	ATCC 19615	Good growth of the test organism on the plated media following subculture after 48 h in transport medium.	

References: Stuart et al. (1959) Pub. Hlth. Rep. Wash. 74: 431.

TRANSPORT MEDIUM, STUART WITHOUT CHARCOAL

A semi-solid, non-nutritional medium for the transportation of fastidious pathogens with prolonged survival of micro-organisms from collection to culturing.

Dehydrated media

Code Number:	500 g: TSW20500, 5 kg: TSW25000
Colour:	White
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,4 (approx.) at 25 °C

Direction: Suspend **16 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Dispense into final containers and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: TSW30100, 500 ml: TSW30500
Colour:	Water clear
pH (at 25 °C):	7,3 – 7,5

Direction: Dispense the melted bottled media aseptically into final containers.

FORMULA in g/l

Sodium chloride	0,100
Sodium thioglycolate	0,500
L-Cysteine	0,400
Methylene blue	0,001
Sodium glycerophosphate	10,000
Agar	5,000

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 30 °C	Growth	Incubation time: 48 h
<i>Streptococcus pyogenes</i>	ATCC 19615	Good growth of the test organism on the plated media following subculture after 48 h in transport medium.	

References: Stuart et al. (1959) Pub. Hlth. Rep. Wash. 74: 431.

TRIBUTYRIN AGAR BASE

A non-selective medium for the detection and enumeration of lipolytic micro-organisms.

Dehydrated media

Code Number:	500 g: TRA20500, 5 kg: TRA25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,5 (approx.) at 25 °C

Direction: Suspend **20 g** in one litre of distilled water. Add **10 ml of Tributyrin Supplement (TRS80250)** and mix until homogeneous. Heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C with frequent agitation and pour plates immediately to solidify quickly.

Warning!

The ready medium must be homogeneous turbid gel!

Prepared media

Bottled media:	100 ml: TRA30100, 500 ml: TRA30500
Plated media:	55 mm: TRA50055, 90 mm: TRA50090
Colour:	Yellowish, homogeneous turbid
pH (25 °C):	7,4 – 7,6

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes according to the direction of dehydrated media. Media in Petri-dishes are ready to use.

Warning!

The ready medium must be homogeneous turbid gel!

FORMULA in g/l

Peptones	8
Agar	12

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Staphylococcus aureus</i>	ATCC 29213	Good, with clear halo	
<i>Escherichia coli</i>	ATCC 25922	Good, without halo	

References: Anderson (1939) Ber. 3. Int. Microbiol. Congress. 3: 726.

II. DEHYDRATED CULTURE MEDIA

TRICHOMONAS (CPLM) MEDIUM BASE, MODIFIED

A selective medium for the cultivation of *Trichomonas vaginalis*.

Dehydrated media

Code Number:	500 g: CPL20500, 5 kg: CPL25000
Colour:	Brownish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	6,0 (approx.) at 25 °C

Direction: Suspend **17,5 g** in 425 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the contents of **one vial of Trichomonas Selective Supplement (TSS80004)** reconstituted with 4 ml of sterile distilled water and **70 ml of sterile inactivated (i.e. serum held at 56 °C for 30 minutes) and pH adjusted (6,0) horse serum**. Mix well and dispense aseptically into sterile test tubes.

Prepared media

Bottled media:	100 ml: CPL30100, 500 ml: CPL30500
Tubed media:	150 x 15 mm: CPL40010 (10 ml) 150 x 15 mm: CPL40007 (7 ml)
Colour:	Yellowish, with green colour ring on the top
pH (at 25 °C):	5,9 – 6,1

Direction: Supplement the bottled media according to the direction of the dehydrated media and dispense aseptically into sterile test tubes. Media in tubes are ready to use.

Warning!

The media may be used until approximately 30 % of the medium (top layer) has been oxidized, as indicated by a green colour of the methylene blue near the surface. If oxidation has proceeded further, the media may be reheated once in steam or boiling water, cooled and used.

FORMULA in g/l

Nutrient substrate (peptones, liver extract)	26,000
L-Cysteine	2,000
Maltose	1,000
Ringer solution	4,500
Methylene blue	0,005
Buffers	0,500
Agar	1,000

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the tubed media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Trichomonas vaginalis</i>	ATCC 30001	Good	

References: Johnson and Trussel (1943) Proc. Soc. Exp. Biol. 54: 245.
Szénási et al. (1999) Hungarian Venerological Archive 3: 215.

TRICHOMONAS MEDIUM BASE

A selective medium for the cultivation of *Trichomonas vaginalis*.

Dehydrated media

Code Number:	500 g: TRM20500, 5 kg: TRM25000
Colour:	Brownish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	6,4 (approx.) at 25 °C

Direction: Suspend **18,5 g** in 455 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the contents of **one vial of Trichomonas Selective Supplement (TSS80004)** reconstituted with 4 ml of sterile distilled water and **40 ml of sterile inactivated (i.e. serum held at 56 °C for 30 minutes) and pH adjusted (6,4) horse serum**. Mix well and dispense aseptically into sterile test tubes.

Prepared media

Bottled media:	100 ml: TRM30100, 500 ml: TRM30500
Tubed media:	150 x 15 mm: TRM40010 (10 ml)
Colour:	Brownish
pH (at 25 °C):	6,3 – 6,5

Direction: Supplement the bottled media according to the direction of the dehydrated media and dispense aseptically into sterile test tubes. Media in tubes are ready to use.

FORMULA in g/l

Liver extract	24,5
Glucose	5,0
Sodium chloride	6,5
Agar	1,0

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the tubed media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Trichomonas vaginalis</i>	ATCC 30001	Good	

References: Freinberg and Whittington (1957) J. Clin. Path. 10: 327.

TRIPLE SUGAR IRON (TSI) AGAR, PH EUR

A differential medium for the differentiation of bacteria on the basis of carbohydrate fermentation and hydrogen sulphite production according to PH EUR (Agar Medium M).

Dehydrated media

Code Number:	500 g: TSI20500, 5 kg: TSI25000
Colour:	Pinkish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,4 (approx.) at 25 °C

Direction: Suspend **66 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Dispense into test tubes and sterilise by autoclaving at 121 °C for 15 minutes. Allow to cool in slanted position to form slant with deep butt.

Prepared media

Bottled media:	100 ml: TSI30100 500 ml: TSI30500
Tubed media:	100 x 12 mm: TSI40003 (3 ml, slant with deep butt)
Colour:	Onion red
pH (25 °C):	7,3 – 7,5

Direction: Dispense the melted bottled media aseptically into sterile test tubes. Allow to cool in slanted position to form slant with deep butt. Media in tubes are ready to use.

II. DEHYDRATED CULTURE MEDIA

FORMULA in g/l

Peptones	20,000
Beef extract	3,000
Yeast extract	3,000
Lactose monohydrate	10,000
Sucrose	10,000
Glucose	1,000
Sodium chloride	5,000
Sodium thiosulphate	0,300
Ferric citrate	0,300
Phenol red	0,025
Agar	13,400

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the tubed media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Reactions				Incubation time: 24 h
		Slant	Butt	Gas	H ₂ S	
<i>Escherichia coli</i>	ATCC 25922	yellow	yellow	+	–	
<i>Salmonella typhimurium</i>	ATCC 14028	red	yellow	+	+	
<i>Pseudomonas aeruginosa</i>	ATCC 27853	red	red	–	–	

References: European Pharmacopoeia

TRYPTONE BILE AGAR

A differential medium for the enumeration of *Escherichia coli* with DPM method.

Dehydrated media

Code Number:	500 g: TBA20500, 5 kg: TBA25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,2 (approx.) at 25 °C

Direction: Suspend **37 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: TBA30100, 500 ml: TBA30500
Plated media:	55 mm: TBA50055, 90 mm: TBA50090
Colour:	Yellowish
pH (25 °C):	7,1 – 7,3

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Tryptone	20,5
Bile salts	1,5
Agar	15,0

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good	
<i>Staphylococcus aureus</i>	ATCC 29213	Inhibited	

References: Anderson and Baird-Parker (1975) J. Appl. Bact. 39: 111.

TRYPTONE SOYA AGAR

A highly nutritious general purpose medium for the cultivation of a wide variety of micro-organisms.

Dehydrated media

Code Number:	500 g: TSA20500, 5 kg: TSA25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,3 (approx.) at 25 °C

Direction: Suspend **45 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: TSA30100, 500 ml: TSA30500
Plated media in normal Petri-dishes:	55 mm: TSA50055, 90 mm: TSA50090
Plated media in contact Petri-dishes:	65 mm: TSA50065
Colour:	Yellowish
pH (25 °C):	7,2 – 7,4

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Casein peptone	17,0
Soya peptone	3,0
Glucose	2,5
Sodium chloride	5,0
Buffers	2,5
Agar	15,0

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Pseudomonas aeruginosa</i>	ATCC 27853	Good	
<i>Staphylococcus aureus</i>	ATCC 29213	Good	

TRYPTONE SOYA AGAR, PH EUR - USP

A highly nutritious general purpose medium for the cultivation of a wide variety of micro-organisms according to PH EUR (Agar Medium B – Casein Soya-Bean Digest Agar – Harmonised).

Dehydrated media

Code Number:	500 g: TSE20500, 5 kg: TSE25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,3 (approx.) at 25 °C

Direction: Suspend **40 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

II. DEHYDRATED CULTURE MEDIA

Prepared media

Bottled media:	100 ml: TSE30100, 500 ml: TSE30500
Plated media in normal Petri-dishes:	55 mm: TSE50055, 90 mm: TSE50090
Plated media in contact Petri-dishes:	65 mm: TSE50065
Colour:	Yellowish
pH (25 °C):	7,2 – 7,4

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Casein peptone	15
Soya peptone	5
Sodium chloride	5
Agar	15

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Pseudomonas aeruginosa</i>	ATCC 27853	Good	
<i>Staphylococcus aureus</i>	ATCC 29213	Good	
<i>Bacillus subtilis</i>	ATCC 6633	Good	
<i>Candida albicans</i>	ATCC 10231	Good	
<i>Aspergillus niger</i>	ATCC 16404	Good	

References: European Pharmacopoeia

TRYPTONE SOYA BILE (mTSB) BROTH

A selective medium for the isolation of enterohemorrhagic *Escherichia coli* (EHEC).

Dehydrated media

Code Number:	500 g: TBB20500, 5 kg: TBB25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,3 (approx.) at 25 °C

Direction: Suspend **33 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into final containers and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: TBB30100, 500 ml: TBB30500
Tubed media:	150 x 15 mm: TBB40010 (10 ml)
Colour:	Yellowish
pH (at 25 °C):	7,2 – 7,4

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Tryptone	17,0
Soya peptone	3,0
Bile salts	1,5
Glucose	2,5
Sodium chloride	5,0
Buffers	4,0

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i> 0157	ATCC 35150	Good	
<i>Staphylococcus aureus</i>	ATCC 29213	Inhibited	

References: Doyle and Schoeni (1987) Appl. Envir. Microbiol. 53: 2394.

TRYPTONE SOYA BILE (mTSB+n) BROTH WITH NOVOBIOCIN

A selective medium for the isolation of enterohemorrhagic *Escherichia coli* (EHEC).

Dehydrated media

Code Number:	500 g: TBN20500, 5 kg: TBN25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,3 (approx.) at 25 °C

Direction: Suspend **33 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into final containers and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: TBN30100, 500 ml: TBN30500
Tubed media:	150 x 15 mm: TBN40010 (10 ml)
Colour:	Yellowish
pH (at 25 °C):	7,2 – 7,4

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Tryptone	17,00
Soya peptone	3,00
Bile salts	1,50
Glucose	2,50
Sodium chloride	5,00
Novobiocin	0,02
Buffers	4,00

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i> 0157	ATCC 35150	Good	
<i>Staphylococcus aureus</i>	ATCC 29213	Inhibited	

References: ISO 16654

TRYPTONE SOYA BROTH, PH EUR - USP

A highly nutritious general purpose medium for the cultivation of a wide variety of micro-organisms. The medium is primarily intended for the culture of fungi and aerobic bacteria according to PH EUR (Broth Medium A – Casein Soya-Bean Digest Broth – Harmonised).

Dehydrated media

Code Number:	500 g: TSB20500, 5 kg: TSB25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,3 (approx.) at 25 °C

II. DEHYDRATED CULTURE MEDIA

Direction: Suspend **30 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into final containers and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: TSB30100, 500 ml: TSB30500
Tubed media:	150 x 15 mm: TSB40010 (10 ml)
Colour:	Yellowish
pH (at 25 °C):	7,2 – 7,4

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Casein peptone	17,0
Soya peptone	3,0
Glucose monohydrate	2,5
Sodium chloride	5,0
Potassium phosphate, dibasic	2,5

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Pseudomonas aeruginosa</i>	ATCC 27853	Good	
<i>Staphylococcus aureus</i>	ATCC 29213	Good	
<i>Bacillus subtilis</i>	ATCC 6633	Good	

References: European Pharmacopoeia

TRYPTONE SOYA YEAST EXTRACT AGAR

A highly nutritious general purpose medium for the cultivation of a wide variety of micro-organisms especially *Listeria monocytogenes*.

Dehydrated media

Code Number:	500 g: TYA20500, 5 kg: TYA25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,3 (approx.) at 25 °C

Direction: Suspend **51 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: TYA30100, 500 ml: TYA30500
Plated media:	55 mm: TYA50055, 90 mm: TYA50090
Colour:	Yellowish
pH (25 °C):	7,2 – 7,4

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Tryptone	17,0
Soya peptone	3,0
Yeast extract	6,0
Glucose	2,5
Sodium chloride	5,0
Buffers	2,5
Agar	15,0

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Listeria monocytogenes</i>	ATCC 19115	Good	

References: APHA (1992) Compendium of Methods for the Microbiological Examination of Foods 3rd ed.
ISO 11290

TRYPTONE SOYA YEAST EXTRACT BROTH

A highly nutritious non-selective medium for the cultivation of a wide variety of micro-organisms especially *Listeria monocytogenes*.

Dehydrated media

Code Number:	500 g: YTB20500, 5 kg: YTB25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,3 (approx.) at 25 °C

Direction: Suspend **36 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into final containers and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: YTB30100, 500 ml: YTB30500
Tubed media:	150 x 15 mm: YTB40010 (10 ml)
Colour:	Yellowish
pH (at 25 °C):	7,2 – 7,4

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Tryptone	17,0
Soya peptone	3,0
Yeast extract	6,0
Glucose	2,5
Sodium chloride	5,0
Buffers	2,5

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Listeria monocytogenes</i>	ATCC 19115	Good	

References: APHA (1992) Compendium of Methods for the Microbiological Examination of Foods, 3rd ed.
ISO 11290

II. DEHYDRATED CULTURE MEDIA

TRYPTONE WATER

A differential medium for the differentiation of bacteria on the basis of their ability to produce indole from tryptophan.

Dehydrated media

Code Number:	500 g: TRW20500, 5 kg: TRW25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,5 (approx.) at 25 °C

Direction: Suspend **15 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into test tubes and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: TRW30100, 500 ml: TRW30500
Tubed media:	100 x 12 mm: TRW40003 (3 ml)
Colour:	Yellowish
pH (at 25 °C):	7,4 – 7,6

Direction: Dispense the bottled media aseptically into sterile tubes. Media in tubes are ready to use.

FORMULA in g/l

Tryptone	10
Sodium chloride	5

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Indole positive	
<i>Enterobacter aerogenes</i>	ATCC 13048	Indole negative	

References: Farmer (1985) J. Clin. Microbiol. 21: 46.

TRYPTOPHAN BROTH

A differential medium for the differentiation of bacteria on the basis of their ability to produce indole from tryptophan.

Dehydrated media

Code Number:	500 g: TRB20500, 5 kg: TRB25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,5 (approx.) at 25 °C

Direction: Suspend **16 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into test tubes and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: TRB30100, 500 ml: TRB30500
Tubed media:	100 x 12 mm: TRB40003 (3 ml)
Colour:	Yellowish
pH (at 25 °C):	7,4 – 7,6

Direction: Dispense the bottled media aseptically into sterile test tubes. Media in tubes are ready to use.

FORMULA in g/l

Peptones	10
L-Tryptophan	1
Sodium chloride	5

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Indole positive	
<i>Enterobacter aerogenes</i>	ATCC 13048	Indole negative	

References: ISO 9308-1

TRYPTOSE PHOSPHATE BROTH

A highly nutritious non-selective medium for the cultivation of fastidious bacteria.

Dehydrated media

Code Number:	500 g: TPB20500, 5 kg: TPB25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,3 (approx.) at 25 °C

Direction: Suspend **30 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into final containers and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: TPB30100, 500 ml: TPB30500
Tubed media:	150 x 15 mm: TPB40010 (10 ml)
Colour:	Yellowish
pH (at 25 °C):	7,2 – 7,4

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Tryptose	20,5
Glucose	2,0
Sodium chloride	5,0
Buffers	2,5

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Streptococcus pneumoniae</i>	ATCC 49619	Good	

References: Ginsberg et al. (1955) Proc. Soc. Exper. Biol. Med. 89: 66.

II. DEHYDRATED CULTURE MEDIA

TSN AGAR

A selective and differential medium for the selective isolation of *Clostridium perfringens*.

Dehydrated media

Code Number:	500 g: TSN20500, 5 kg: TSN25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,0 (approx.) at 25 °C

Direction: Suspend **40 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Dispense into test tubes and sterilise by autoclaving at 115 °C for 10 minutes.

Warning!

The medium is heat sensitive.

No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: TSN30100, 500 ml: TSN30500
Tubed media:	150 x 15 mm: TSN40010 (10 ml)
Colour:	Yellowish
pH (25 °C):	6,9 – 7,1

Direction: Dispense the melted bottled media aseptically into sterile test tubes. Media in tubes are ready to use.

FORMULA in g/l

Peptones	25,00
Sodium sulphite	1,00
Ferric citrate	0,50
Neomycin	0,05
Polymyxin B	0,02
Agar	13,50

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the tubed media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 44 °C	Growth	Incubation time: 48 h
<i>Clostridium perfringens</i>	ATCC 13124	Good, colour change to black (under anaerobic conditions)	

References: Marshall et al. (1965) Appl. Microbiol. 13: 559.

UNIVERSAL BEER AGAR

A non-selective medium for the isolation of beer spoilage micro-organisms.

Dehydrated media

Code Number:	500 g: UBA20500, 5 kg: UBA25000
Colour:	Pinkish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	6,3 (approx.) at 25 °C

Direction: Suspend **57 g** in 750 ml of distilled water and heat with frequent agitation until the medium boils well. Without delay, add 250 ml of beer to be investigated (without degassing). Mix gently and sterilise by autoclaving at 115 °C for 15 minutes.

Warning!

The medium is heat sensitive.

No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: UBA30100, 500 ml: UBA30500
Colour:	Reddish
pH (at 25 °C):	6,2 – 6,4

Direction: Complete the bottled media according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes.

FORMULA in g/l

Peptones	25,40
Tomato extract	7,00
Glucose	10,00
Mg(II), Na(I), Fe(III) and Mn(II) salts	0,15
Buffers	1,50
Agar	13,00

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 30 °C	Growth	Incubation time: 72 h
<i>Lactobacillus fermentum</i>	ATCC 9338	Good	

References: Kozulis and Page (1968) Proc. Am. Brew. Chem: 52.

UREA AGAR

A differential medium for the differentiation of micro-organisms, especially Enterobacteriaceae, on the basis of their urease activity.

Dehydrated media

Code Number:	500 g: URD20500-M
	packaging: 380 g agar base + 120 g urea
	5 kg: URD25000
	packaging: 3,8 kg agar base + 1,2 kg urea
Appearance of agar base:	Pinkish homogeneous hygroscopic powder
Appearance of urea:	White pellet
pH before autoclaving:	6,4 – 6,6 (approx.) at 25 °C
pH after autoclaving:	6,6 – 7,0 (approx.) at 25 °C

Direction: Suspend **32 g agar base** and **10 g urea** in one litre of distilled water and heat with frequent agitation until the medium boils well. Dispense into test tubes and sterilise by autoclaving at 115 °C for 15 minutes. Cool quickly! Allow to cool in slanted position.

Warning!

The medium is heat sensitive.

No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: URD30100, 500 ml: URD30500
Tubed media:	100 x 15 mm: URD40005 (5 ml – slant)
Colour:	Orange
pH (at 25 °C):	6,6 – 7,0

Direction: Dispense the melted bottled media aseptically into sterile test tubes. Allow to cool in slanted position. Media in tubes are ready to use.

FORMULA OF ONE LITRE OF THE COMPLETE MEDIUM in g/l

Peptones	1,000
Glucose	1,000
Sodium chloride	5,000
Urea	20,000
Phenol red	0,012
Buffers	2,000
Agar	13,000

II. DEHYDRATED CULTURE MEDIA

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the tubed media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Proteus mirabilis</i>	ATCC 29906	Positive: colour change to Purple-red	
<i>Escherichia coli</i>	ATCC 25922	Negative: without colour change	

References: Christensen (1946) J. Bact. 52: 461.

UREA BROTH

A differential medium for the differentiation of micro-organisms, especially Enterobacteriaceae, on the basis of their urease activity.

Dehydrated media

Code Number: **500 g: URE20500-M**
packaging: 325 g broth base + 175 g urea
5 kg: URE25000
packaging: 3,25 kg broth base + 1,75 kg urea

Appearance of broth base:	Pinkish homogeneous hygroscopic powder
Appearance of urea:	White pellet
pH before autoclaving:	6,4 – 6,6 (approx.) at 25 °C
pH after autoclaving:	6,6 – 7,0 (approx.) at 25 °C

Direction: Suspend **19 g broth base** and **10 g urea** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into test tubes and sterilise by autoclaving at 115 °C for 15 minutes. Cool quickly!

Warning!

The medium is heat sensitive.
 No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: URE30100, 500 ml: URE30500
Tubed media:	100 x 15 mm: URE40005 (5 ml)
Colour:	Orange
pH (at 25 °C):	6,6 – 7,0

Direction: Dispense the bottled media aseptically into sterile test tubes. Media in tubes are ready to use.

FORMULA OF ONE LITRE OF THE COMPLETE MEDIUM in g/l

Peptones	1,000
Glucose	1,000
Sodium chloride	5,000
Urea	20,000
Phenol red	0,012
Buffers	2,000

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Proteus mirabilis</i>	ATCC 29906	Positive: colour change to Purple-red	
<i>Escherichia coli</i>	ATCC 25922	Negative: without colour change	

References: Christensen (1946) J. Bact. 52: 461.

UREA INDOLE BROTH

A differential medium for the differentiation of micro-organisms, especially Enterobacteriaceae, on the basis of their urease activity and indole production.

Dehydrated media

Code Number: **500 g: URI20500-M**
packaging: 325 g broth base + 175 g urea
5 kg: URI25000
packaging: 3,25 kg broth base + 1,75 kg urea

Appearance of both base:	Pinkish homogeneous hygroscopic powder
Appearance of urea:	White pellet
pH before autoclaving:	6,4 – 6,6 (approx.) at 25 °C
pH after autoclaving:	6,6 – 7,0 (approx.) at 25 °C

Direction: Suspend **19 g broth base** and **10 g urea** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into test tubes and sterilise by autoclaving at 115 °C for 15 minutes. Cool quickly!

Warning!

The medium is heat sensitive.
 No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: URI30100, 500 ml: URI30500
Tubed media:	100 x 12 mm: URI40002 (2 ml)
Colour:	Orange
pH (at 25 °C):	6,6 – 7,0

Direction: Dispense the bottled media aseptically into sterile test tubes. Media in tubes are ready to use.

FORMULA OF ONE LITRE OF THE COMPLETE MEDIUM in g/l

Peptones	10,000
Sodium chloride	5,000
Urea	10,000
Phenol red	0,012
Buffers	3,000

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Reactions	
		Urease	Indole
<i>Proteus mirabilis</i>	ATCC 29906	Quick +	–
<i>Klebsiella pneumoniae</i>	ATCC 16404	Slow +	–
<i>Escherichia coli</i>	ATCC 25922	–	+

References: Roland et al. (1947) Ann. Inst. Pasteur 73: 914.

VIOLET RED BILE GLUCOSE AGAR, PH EUR

A glucose containing selective and differential medium for the detection and enumeration of Enterobacteriaceae according to PH EUR (Agar Medium F – Crystal Violet Neutral Red Bile Agar with Glucose).

Dehydrated media

Code Number:	500 g: VBE20500, 5 kg: VBE25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
Final pH:	7,4 (approx.) at 25 °C

II. DEHYDRATED CULTURE MEDIA

Direction: Suspend **51,5 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Mix well before pouring.

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: VBE30100, 500 ml: VBE30500
Plated media:	55 mm: VBE50055, 90 mm: VBE50090
Colour:	Reddish Purple
pH (25 °C):	7,3 – 7,5

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Gelatin peptone	7,000
Yeast extract	3,000
Bile salts	1,500
Glucose monohydrate	10,000
Lactose monohydrate	10,000
Sodium chloride	5,000
Neutral red	0,030
Crystal violet	0,002
Agar	15,000

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good, purplish red colonies with precipitate halo	
<i>Proteus mirabilis</i>	ATCC 29906	Good, purplish red colonies without swarming	
<i>Enterococcus faecalis</i>	ATCC 29212	Inhibited	

References: European Pharmacopoeia

VIOLET RED BILE GLUCOSE AGAR, PH EUR - USP

A glucose containing selective and differential medium for the detection and enumeration of Enterobacteriaceae according to PH EUR (Violet Red Bile Glucose Agar – Harmonised).

Dehydrated media

Code Number:	500 g: VBH20500, 5 kg: VBH25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
Final pH:	7,4 (approx.) at 25 °C

Direction: Suspend **41,5 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Mix well before pouring.

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: VBH30100, 500 ml: VBH30500
Plated media:	55 mm: VBH50055, 90 mm: VBH50090
Colour:	Reddish Purple
pH (25 °C):	7,3 – 7,5

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Gelatin peptone	7,000
Yeast extract	3,000
Bile salts	1,500
Glucose monohydrate	10,000
Sodium chloride	5,000
Neutral red	0,030
Crystal violet	0,002
Agar	15,000

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good, purplish red colonies with precipitate halo	
<i>Proteus mirabilis</i>	ATCC 29906	Good, purplish red colonies without swarming	
<i>Enterococcus faecalis</i>	ATCC 29212	Inhibited	

References: European Pharmacopoeia

Mossel (1985) Int. J. Food Microbiol. 2: 27.
ISO 7402

VIOLET RED BILE LACTOSE AGAR

A lactose containing selective and differential medium for the detection and enumeration of coliforms.

Dehydrated media

Code Number:	500 g: VBL20500, 5 kg: VBL25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
Final pH:	7,4 (approx.) at 25 °C

Direction: Suspend **41,5 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Mix well before pouring.

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: VBL30100, 500 ml: VBL30500
Plated media:	55 mm: VBL50055, 90 mm: VBL50090
Colour:	Reddish Purple
pH (25 °C):	7,3 – 7,5

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	10,000
Bile salts	1,500
Lactose	10,000
Sodium chloride	5,000
Neutral red	0,030
Crystal violet	0,002
Agar	15,000

Note: The typical formula can be adjusted to obtain optimal performance.

II. DEHYDRATED CULTURE MEDIA

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good, purplish red colonies with precipitate halo	
<i>Proteus mirabilis</i>	ATCC 29906	Good, colourless colonies without swarming	
<i>Enterococcus faecalis</i>	ATCC 29212	Inhibited	

References: APHA (1978) Standard Method for the Examination of Dairy Product. 14th ed. ISO 4832

VIOLET RED BILE LACTOSE AGAR, BUFFERED

A lactose containing selective and differential medium for the detection and enumeration of coliforms in soured milk products.

Dehydrated media

Code Number:	500 g: VBB20500, 5 kg: VBB25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
Final pH:	7,4 (approx.) at 25 °C

Direction: Suspend **44 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Mix well before pouring.

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

Prepared media

Bottled media:	100 ml: VBB30100, 500 ml: VBB30500
Plated media:	55 mm: VBB50055, 90 mm: VBB50090
Colour:	Reddish Purple
pH (25 °C):	7,3 – 7,5

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	10,000
Bile salts	1,500
Lactose	10,000
Sodium chloride	5,000
Neutral red	0,030
Crystal violet	0,002
Buffers	3,000
Agar	14,500

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good, purplish red colonies with precipitate halo	
<i>Proteus mirabilis</i>	ATCC 29906	Good, colourless colonies without swarming	
<i>Enterococcus faecalis</i>	ATCC 29212	Inhibited	

VOGEL-JOHNSON AGAR BASE, USP

A selective and differential medium for the isolation of *Staphylococcus aureus* according to USP.

Dehydrated media

Code Number:	500 g: VJA20500, 5 kg: VJA25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,2 (approx.) at 25 °C

Direction: Suspend **30 g** in 500 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically **10 drops (0,5 ml) of Potassium Tellurite Solution, Sterile (PTS80030)**. Mix well before pouring.

Prepared media

Bottled media:	100 ml: VJA30100, 500 ml: VJA30500
Plated media:	55 mm: VJA50055, 90 mm: VJA50090
Colour:	Red
pH (at 25 °C):	7,1 – 7,3

Direction: Supplement the melted bottled media according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	15,000
Glycine	10,000
Mannitol	10,000
Lithium chloride	5,000
Phenol red	0,025
Buffers	5,000
Agar	15,000

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 48 h
<i>Staphylococcus aureus</i>	ATCC 29213	Good, black colonies with yellow halo	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	

References: Vogel and Johnson (1961) J. Pub. Hlth. Lab. 18: 131.
United States Pharmacopoeia

WILKINS-CHALGREEN AGAR

A non-selective medium for the general cultivation of anaerobe micro-organisms especially recommended for antimicrobial susceptibility testing.

Dehydrated media

Code Number:	500 g: WCA20500, 5 kg: WCA25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,1 (approx.) at 25 °C

Direction: Suspend **46 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. If addition of blood is necessary, cool to 50 °C and add aseptically **50 ml of sterile defibrinated blood**. Mix well before pouring.

II. DEHYDRATED CULTURE MEDIA

Prepared media

Bottled media:	100 ml: WCA30100, 500 ml: WCA30500
Plated media:	55 mm: WCA50055, 90 mm: WCA50090
Colour of blood free agar:	Yellowish
Colour of blood agar:	Ruby red
pH (at 25 °C):	7,0 – 7,2

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. If necessary, blood may be added to the melted bottled media according to the direction of the dehydrated media. Media in Petri-dishes are ready to use.

FORMULA in g/l

Nutrient substrate (peptones, extracts)	25,000
Glucose	1,000
L-Arginine	1,000
Sodium chloride	5,000
Sodium pyruvate	1,000
Vitamins	0,011
Agar	13,000

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 48 h
<i>Bacteroides fragilis</i>	ATCC 23745	Good (under anaerobic conditions)	
<i>Clostridium pefringens</i>	ATCC 13124	Good (under anaerobic conditions)	

References: Wilkins and Chalgren (1976) Antimicrob. Agents Chemoter. 10: 926.

WILKINS-CHALGREN BROTH

A non-selective enrichment medium for the general cultivation of anaerobe micro-organisms especially recommended for antimicrobial susceptibility testing.

Dehydrated media

Code Number:	500 g: WCB20500, 5 kg: WCB25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,1 (approx.) at 25 °C

Direction: Suspend **33 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into final containers and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: WCB30100, 500 ml: WCB30500
Tubed media:	150 x 15 mm: WCB40010 (10 ml)
Colour:	Yellowish
pH (at 25 °C):	7,0 – 7,2

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Nutrient substrate (peptones, extracts)	25,000
L-Arginine	1,000
Glucose	1,000
Sodium chloride	5,000
Sodium pyruvate	1,000
Vitamins	0,011

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 48 h
<i>Bacteroides fragilis</i>	ATCC 23745	Good (under anaerobic conditions)	
<i>Clostridium pefringens</i>	ATCC 13124	Good (under anaerobic conditions)	

References: Wilkins and Chalgren (1976) Antimicrob. Agents Chemoter. 10: 926.

WL DIFFERENTIAL AGAR

A selective medium for the control of industrial fermentation, particularly the processing of beer.

Dehydrated media

Code Number:	500 g: WLD20500, 5 kg: WLD25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	5,5 (approx.) at 25 °C

Direction: Suspend **75 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: WLD30100, 500 ml: WLD30500
Plated media:	55 mm: WLD50055, 90 mm: WLD50090
Colour:	Greenish
pH (at 25 °C):	5,4 – 5,6

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	9,2000
Glucose	50,0000
Potassium chloride	0,5500
Calcium chloride	0,1250
Magnesium sulphate	0,1250
Ferric chloride	0,0025
Manganese sulphate	0,0025
Cycloheximide	0,0040
Bromocresol green	0,0220
Agar	15,0000

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 30 °C	Growth	Incubation time: 72 h
<i>Lactobacillus fermentum</i>	ATCC 9338	Good	
<i>Saccharomyces cerevisiae</i>	ATCC 9763	Inhibited	

References: Green and Gray (1950) Wallerstein Lab. Commun. 13: 357.

II. DEHYDRATED CULTURE MEDIA

WL DIFFERENTIAL BROTH

A selective medium for the control of industrial fermentation, particularly the processing of beer.

Dehydrated media

Code Number:	500 g: WDB20500, 5 kg: WDB25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	5,5 (approx.) at 25 °C

Direction: Suspend **60 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into final containers and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: WDB30100, 500 ml: WDB30500
Tubed media:	150 x 15 mm: WDB40010 (10 ml)
Colour:	Greenish
pH (at 25 °C):	5,4 – 5,6

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Peptones	9,2000
Glucose	50,0000
Potassium chloride	0,5500
Calcium chloride	0,1250
Magnesium sulphate	0,1250
Ferric chloride	0,0025
Manganese sulphate	0,0025
Cycloheximide	0,0040
Bromocresol green	0,0220

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 30 °C	Growth	Incubation time: 48 h
<i>Lactobacillus fermentum</i>	ATCC 4356	Good	
<i>Saccharomyces cerevisiae</i>	ATCC 6633	Inhibited	

References: Green and Gray (1950) Wallerstein Lab. Commun. 13: 357.

WL NUTRIENT AGAR

A non-selective medium for the control of industrial fermentation, particularly the processing of beer.

Dehydrated media

Code Number:	500 g: WLN20500, 5 kg: WLN25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	5,5 (approx.) at 25 °C

Direction: Suspend **75 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: WLN30100, 500 ml: WLN30500
Plated media:	55 mm: WLN50055, 90 mm: WLN50090
Colour:	Greenish
pH (at 25 °C):	5,4 – 5,6

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	9,2000
Glucose	50,0000
Potassium chloride	0,5500
Calcium chloride	0,1250
Magnesium sulphate	0,1250
Ferric chloride	0,0025
Manganese sulphate	0,0025
Bromocresol green	0,0220
Agar	15,0000

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 30 °C	Growth	Incubation time: 72 h
<i>Lactobacillus fermentum</i>	ATCC 9338	Good	
<i>Saccharomyces cerevisiae</i>	ATCC 9763	Good	

References: Green and Gray (1950) Wallerstein Lab. Commun. 13: 357.

WL NUTRIENT BROTH

A non-selective medium for the control of industrial fermentation, particularly the processing of beer.

Dehydrated media

Code Number:	500 g: WLB20500, 5 kg: WLB25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	5,5 (approx.) at 25 °C

Direction: Suspend **60 g** in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into final containers and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: WLB30100, 500 ml: WLB30500
Tubed media:	150 x 15 mm: WLB40010 (10 ml)
Colour:	Greenish
pH (at 25 °C):	5,4 – 5,6

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Peptones	9,2000
Glucose	50,0000
Potassium chloride	0,5500
Calcium chloride	0,1250
Magnesium sulphate	0,1250
Ferric chloride	0,0025
Manganese sulphate	0,0025
Bromocresol green	0,0220

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

II. DEHYDRATED CULTURE MEDIA

Quality Control:

Test strains	Incubation temp: 30 °C	Growth	Incubation time: 48 h
<i>Lactobacillus fermentum</i>	ATCC 9338	Good	
<i>Saccharomyces cerevisiae</i>	ATCC 6633	Good	

References: Green and Gray (1950) Wallerstein Lab. Commun. 13: 357.

WORT AGAR BASE

A selective medium for the cultivation and enumeration of yeasts.

Dehydrated media

Code Number:	500 g: WOA20500, 5 kg: WOA25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	4,8 (approx.) at 25 °C

Direction: Suspend **49 g** in one litre of distilled water. Add **2,5 ml of Glycerol Supplement (GLC80100)** and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 115 °C for 15 minutes. Cool quickly!

Warning!

The medium is heat sensitive.

No further sterilisation is necessary or desirable.

The ready medium is slightly turbid, but exempt from any precipitation.

Prepared media

Bottled media:	100 ml: WOA30100, 500 ml: WOA30500
Plated media:	55 mm: WOA50055, 90 mm: WOA50090
Colour:	Yellowish, slightly turbid
pH (25 °C):	4,7 – 4,9

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

Warning!

Melt and cool the medium quickly!

Prolonged heating diminish the gel strength of the agar.

FORMULA in g/l

Peptones	1,00
Malt extract	15,00
Maltose	12,75
Dextrin	2,75
Ammonium chloride	1,00
Buffers	1,50
Agar	15,00

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated medium tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 25 °C	Growth	Incubation time: 48 h
<i>Saccharomyces cerevisiae</i>	ATCC 9763	Good	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	

References: Parfitt (1933) J. Dairy Sci. 16: 141.

WORT BROTH BASE

A selective enrichment medium for the cultivation of yeasts.

Dehydrated media

Code Number:	500 g: WOB20500, 5 kg: WOB25000
Colour:	Yellowish
Appearance:	Homogeneous powder
pH before autoclaving:	4,8 (approx.) at 25 °C

Direction: Suspend **34 g** in one litre of distilled water. Add **2,5 ml of Glycerol Supplement (GLC80100)** and heat gently to dissolve the medium completely. Dispense into final containers and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: WOB30100, 500 ml: WOB30500
Tubed media:	150 x 15 mm: WOB40010 (10 ml)
Colour:	Yellowish
pH (at 25 °C):	4,7 – 4,9

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Peptones	1,00
Malt extract	15,00
Maltose	12,75
Dextrin	2,75
Ammonium chloride	1,00
Buffers	1,50

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 25 °C	Growth	Incubation time: 48 h
<i>Saccharomyces cerevisiae</i>	ATCC 9763	Good	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	

References: Parfitt (1933) J. Dairy Sci. 16: 141.

XLD AGAR, PH EUR - USP

A selective and differential medium for the isolation and differentiation of Gram-negative micro-organisms, especially *Shigella* spp. according to PH EUR (Agar Medium K – Xylose Lysine Deoxycholate Agar – Harmonised).

Dehydrated media

Code Number:	500 g: XLD20500, 5 kg: XLD25000
Colour:	Pinkish
Appearance:	Homogeneous hygroscopic powder
Final pH:	7,4 (approx.) at 25 °C

Direction: Suspend **57 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Cool quickly! Mix well before pouring.

Warning!

The medium is heat sensitive.

No further sterilisation is necessary or desirable.

II. DEHYDRATED CULTURE MEDIA

Prepared media

Bottled media:	100 ml: XLD30100, 500 ml: XLD30500
Plated media:	55 mm: XLD50055, 90 mm: XLD50090
Colour:	Red
pH (at 25 °C):	7,3 – 7,5

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Yeast extract	3,00
L-Lysine	5,00
Lactose monohydrate	7,50
Sucrose	7,50
Xylose	3,50
Sodium thiosulphate	6,80
Sodium chloride	5,00
Sodium deoxycholate	2,50
Ferric ammonium citrate	0,80
Phenol red	0,08
Agar	15,30

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Partially inhibited, yellow colonies with precipitate halo	
<i>Salmonella typhimurium</i>	ATCC 14028	Good, red colonies with black centre	
<i>Shigella sonnei</i>	ATCC 25931	Good, red colonies	
<i>Enterococcus faecalis</i>	ATCC 29212	Inhibited	

References: European Pharmacopoeia; ISO 6579

YEAST EXTRACT AGAR

A non-selective medium for the plate count of micro-organisms in water and dairy products.

Dehydrated media

Code Number:	500 g: YEA20500, 5 kg: YEA25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,2 (approx.) at 25 °C

Direction: Suspend **25 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: YEA30100, 500 ml: YEA30500
Plated media:	55 mm: YEA50055, 90 mm: YEA50090
Colour:	Yellowish
pH (25 °C):	7,1 – 7,3

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	7
Yeast extract	3
Agar	15

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Escherichia coli</i>	ATCC 25922	Good	
<i>Staphylococcus aureus</i>	ATCC 29213	Good	

References: Windle and Taylor (1958) The Examination of Waters and Water Supplies, 7th ed.

YEAST MALT AGAR

A non-selective medium for the cultivation of fungi.

Dehydrated media

Code Number:	500 g: YMA20500, 5 kg: YMA25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	6,2 (approx.) at 25 °C

Direction: Suspend **37 g** in one litre of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Warning!

The ready medium is slightly turbid, but exempt from any precipitation.

Prepared media

Bottled media:	100 ml: YMA30100, 500 ml: YMA30500
Plated media:	55 mm: YMA50055, 90 mm: YMA50090
Colour:	Yellowish, slightly turbid
pH (25 °C):	6,1 – 6,3

Direction: Dispense the melted bottled media aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	6
Malt extract	3
Yeast extract	3
Glucose	10
Agar	15

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 25 °C	Growth	Incubation time: 48 h
<i>Candida albicans</i>	ATCC 10231	Good	

References: Atlas and Park (1993) Handbook of Micr. Media

YEAST MALT BROTH

A non-selective medium for the cultivation of fungi.

Dehydrated media

Code Number:	500 g: YMB20500, 5 kg: YMB25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	6,2 (approx.) at 25 °C

II. DEHYDRATED CULTURE MEDIA

Direction: Suspend 23 g in one litre of distilled water and heat gently to dissolve the medium completely. Dispense into final containers and sterilise by autoclaving at 121 °C for 15 minutes.

Prepared media

Bottled media:	100 ml: YMB30100, 500 ml: YMB30500
Tubed media:	150 x 15 mm: YMB40010 (10 ml)
Colour:	Yellowish
pH (at 25 °C):	6,1 – 6,3

Direction: Dispense the bottled media aseptically into sterile final containers. Media in tubes are ready to use.

FORMULA in g/l

Peptones	7
Malt extract	3
Yeast extract	3
Glucose	10

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 25 °C	Growth	Incubation time: 48 h
<i>Candida albicans</i>	ATCC 10231	Good	

References: Atlas and Park (1993) Handbook of Micr. Media

YERSINIA AGAR BASE

A selective and differential medium for the isolation of *Yersinia enterocolitica*.

Dehydrated media

Code Number:	500 g: YAB20500, 5 kg: YAB25000
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,4 (approx.) at 25 °C

Direction: Suspend 30 g in 500 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the contents of **one vial of Yersinia (CIN) Selective Supplement (CIN80004)** reconstituted with 4 ml of sterile distilled water. Mix well before pouring.

Prepared media

Bottled media:	100 ml: YAB30100, 500 ml: YAB30500
Plated media:	55 mm: YAB50055, 90 mm: YAB50090
Colour:	Purplish red
pH (25 °C):	7,3 – 7,5

Direction: Supplement the melted bottled media according to the direction of the dehydrated media and dispense aseptically into sterile Petri-dishes. Media in Petri-dishes are ready to use.

FORMULA in g/l

Peptones	24,000
Mannitol	20,000
Sodium pyruvate	2,000
Sodium chloride	1,000
Sodium deoxycholate	0,500
Magnesium sulphate	0,010
Neutral red	0,020
Crystal violet	0,001
Agar	12,500

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2–8 °C.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Yersinia enterocolitica</i>	ATCC 27729	Good, red "bull's eye" colonies	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	

References: Schiemann (1979) Can. J. Microbiol. 25: 1928.

YERSINIA BROTH BASE

A selective medium for the selective enrichment of *Yersinia enterocolitica*.

Dehydrated media

Code Number:	500 g: YBB20500, 5 kg: YBB25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	7,4 (approx.) at 25 °C

Direction: Suspend 16,5 g in 500 ml of distilled water and heat gently to dissolve the medium completely. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the contents of **one vial of Yersinia (CIN) Selective Supplement (CIN80004)** reconstituted with 4 ml of sterile distilled water. Mix well and dispense aseptically into sterile test tubes.

Prepared media

Bottled media:	100 ml: YBB30100, 500 ml: YBB30500
Tubed media:	150 x 15 mm: YBB40010 (10 ml)
Colour:	Yellowish
pH (at 25 °C):	7,3 – 7,5

Direction: Supplement the bottled media according to the direction of the dehydrated media and dispense aseptically into sterile test tubes. Media in tubes are ready to use.

FORMULA in g/l

Peptones	28,0
Sodium pyruvate	2,5
Buffers	2,5

Note: The typical formula can be adjusted to obtain optimal performance.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Growth	Incubation time: 24 h
<i>Yersinia enterocolitica</i>	ATCC 27729	Good	
<i>Escherichia coli</i>	ATCC 25922	Inhibited	
<i>Enterococcus faecalis</i>	ATCC 29212	Inhibited	

References: Schiemann (1979) Can. J. Microbiol. 25: 1928.

II. DEHYDRATED CULTURE MEDIA

ANTIBIOTIC ASSAY MEDIA

Media for the microbiological assay of antibiotics according to USP and PH EUR.

Dehydrated media

Code Number:	500 g: (A01 – A39)20500, 5 kg: (A01 – A39)25000
Colour:	Yellowish
Appearance:	Homogeneous hygroscopic powder

Direction: Suspend the amount indicated below of dehydrated media in one litre of distilled water. If necessary, add the supplement and heat with frequent agitation until the medium boils well (in case of agars) or heat gently to dissolve the medium completely (in case of broths). Sterilise by autoclaving at 121 °C for 15 minutes.

MEDIUM 1

Peptone	6,0
Casein peptone	4,0
Yeast extract	3,0
Beef extract	1,5
Glucose	1,0
Agar	15,5

31 g/l pH = 6,5 – 6,7

MEDIUM 9

Casein peptone	17,0
Soy peptone	3,0
Glucose	2,5
Sodium chloride	5,0
Dipotassium hydrogen phosphate	2,5
Agar	20,0

50 g/l pH = 7,1 – 7,3

MEDIUM 32

Peptone	6,0
Casein peptone	4,0
Yeast extract	3,0
Beef extract	1,5
Glucose	1,0
Manganese sulphate	0,3
Agar	15,2

31 g/l pH = 6,5 – 6,7

MEDIUM 2

Peptone	6,0
Yeast extract	3,0
Beef extract	1,5
Agar	15,5

26 g/l pH = 6,5 – 6,7

MEDIUM 10 BASE

Casein peptone	17,0
Soy peptone	3,0
Glucose	2,5
Sodium chloride	5,0
K ₂ HPO ₄	2,5
Agar	12,0

42 g/l + 10 ml TWEEN 80 (TWS80100) pH = 7,1 – 7,3

MEDIUM 34 BASE

Peptone	10
Beef extract	10
Sodium chloride	3

23 g/l + 10 ml Glycerol (GLC80100) pH = 6,9 – 7,1

MEDIUM 3

Peptone	5,00
Yeast extract	1,50
Beef extract	1,50
Glucose	1,00
Sodium chloride	3,50
K ₂ HPO ₄	3,68
KH ₂ PO ₄	1,32

17,5 g/l pH = 6,9 – 7,1

MEDIUM 11

Peptone	6,0
Casein peptone	4,0
Yeast extract	3,0
Beef extract	1,5
Glucose	1,0
Agar	15,5

31 g/l pH = 8,2 – 8,4

MEDIUM 35 BASE

Peptone	10
Beef extract	10
Sodium chloride	3
Agar	17

40 g/l + 10 ml Glycerol (GLC80100) pH = 6,9 – 7,1

MEDIUM 5

Peptone	6,0
Yeast extract	3,0
Beef extract	1,5
Agar	15,5

26 g/l pH = 7,8 – 8,0

MEDIUM 13

Peptone	10
Glucose	20

30 g/l pH = 5,5 – 5,7

MEDIUM 36

Casein peptone	15
Soy peptone	5
Sodium chloride	5
Agar	15

40 g/l pH = 7,2 – 7,4

MEDIUM 8

Peptone	6,0
Yeast extract	3,0
Beef extract	1,5
Agar	15,5

26 g/l pH = 5,8 – 6,0

MEDIUM 19

Peptone	9,4
Yeast extract	4,7
Beef extract	2,4
Glucose	10,0
Sodium chloride	10,0
Agar	23,5

60 g/l pH = 6,0 – 6,2

MEDIUM 39

Peptone	5,00
Yeast extract	1,50
Beef extract	1,50
Glucose	1,00
Sodium chloride	3,50
K ₂ HPO ₄	3,68
KH ₂ PO ₄	1,32

17,5 g/l pH = 7,8 – 8,0

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the bottled media protected from light at room temperature. Store the plated media protected from light at 2-8 °C, and the tubed media protected from light at room temperature.

References: European Pharmacopoeia, United States Pharmacopoeia

II. DEHYDRATED CULTURE MEDIA

CULTURE MEDIA FOR AMINO ACID DECOMPOSITION STUDIES

Differential media for the differentiation of micro-organisms on the basis of their ability to decompose (decarboxylate or dihydrolysate) the amino acids.

Dehydrated media	
Code Numbers:	See below
Colour:	Beige
Appearance:	Homogeneous hygroscopic powder
pH before autoclaving:	See below

Direction: Suspend the indicated amount of dehydrated media listed below in one litre of distilled water. In case of bases add the appropriate amount of amino acid (in case of Moeller medium 10 g, in case of Falkow and Taylor media 5 g). Mix well and heat gently to dissolve the medium completely. Check the pH and readjust if necessary. Dispense into test tubes and sterilise by autoclaving at 121 °C for 15 minutes. After inoculation overlie the tubes aseptically with 4 – 5 mm sterile mineral oil (except Taylor Broth).

FORMULA in g/l

Moeller Broth Base

Code Number: DBM20500

Peptone	10,500
Glucose	0,500
Pyridoxal	0,005
Bromocresol purple	0,010
Cresol red	0,005
11 g/l pH = 5,9 – 6,3	

Falkow Broth Base

Code Number: DBF20500

Peptone	8,00
Glucose	1,00
Bromocresol purple	0,02
9 g/l pH = 6,6 – 7,0	

Taylor Broth Base

Code Number: DBT20500

Yeast extract	3,000
Glucose	1,000
Bromocresol purple	0,016
4 g/l pH = 5,9 – 6,3	

Moeller Broth, Arginine

Code Number: DBM20500-AR

Peptone	10,500
Glucose	0,500
L-Arginine	10,000
Pyridoxal	0,005
Bromocresol purple	0,010
Cresol red	0,005
21 g/l pH = 5,9 – 6,3	

Falkow Broth, Arginine

Code Number: DBF20500-AR

Peptone	8,00
Glucose	1,00
L-Arginine	5,00
Bromocresol purple	0,02
14 g/l pH = 6,6 – 7,0	

Taylor Broth, Arginine

Code Number: DBT20500-AR

Yeast extract	3,000
Glucose	1,000
L-Arginine	5,000
Bromocresol purple	0,016
9 g/l pH = 5,9 – 6,3	

Moeller Broth, Lysine

Code Number: DBM20500-LY

Peptone	10,500
Glucose	0,500
L-Lysine	10,000
Pyridoxal	0,005
Bromocresol purple	0,010
Cresol Red	0,005
21 g/l pH = 5,9 – 6,3	

Falkow Broth, Lysine

Code Number: DBF20500-LY

Peptone	8,00
Glucose	1,00
L-Lysine	5,000
Bromocresol purple	0,02
14 g/l pH = 6,6 – 7,0	

Taylor Broth, Lysine

Code Number: DBT20500-LY

Yeast extract	3,000
Glucose	1,000
L-Lysine	5,000
Bromocresol purple	0,016
9 g/l pH = 5,9 – 6,3	

Moeller Broth, Ornithine

Code Number: DBM20500-OR

Peptone	10,500
Dextrose	0,500
L-Ornithine	10,000
Pyridoxal	0,005
Bromocresol purple	0,010
Cresol red	0,005
21 g/l pH = 5,9 – 6,3	

Falkow Broth, Ornithine

Code Number: DBF20500-OR

Peptone	8,00
Glucose	1,00
L-Ornithine	5,000
Bromocresol purple	0,02
14 g/l pH = 6,6 – 7,0	

Taylor Broth, Ornithine

Code Number: DBT20500-OR

Yeast extract	3,000
Glucose	1,000
L-Ornithine	5,000
Bromocresol purple	0,016
9 g/l pH = 5,9 – 6,3	

Note: The typical formula can be adjusted to obtain optimal performance.

II. DEHYDRATED CULTURE MEDIA

Prepared media

Bottled Moeller Broth Base:	100 ml: DBM30100, 500 ml: DBM30500
Bottled Moeller Broth, Arginine:	100 ml: DBM30100-AR, 500 ml: DBM30500-AR
Bottled Moeller Broth, Lysine:	100 ml: DBM30100-LY, 500 ml: DBM30500-LY
Bottled Moeller Broth, Ornithine:	100 ml: DBM30100-OR, 500 ml: DBM30500-OR
Tubed Moeller Broth Base: (covered with paraffin oil)	100 x 12 mm: DBM40002 (2 ml)
Tubed Moeller Broth, Arginine: (covered with paraffin oil)	100 x 12 mm: DBM40002-AR (2 ml)
Tubed Moeller Broth, Lysine: (covered with paraffin oil)	100 x 12 mm: DBM40002-LY (2 ml)
Tubed Moeller Broth, Ornithine: (covered with paraffin oil)	100 x 12 mm: DBM40002-OR (2 ml)

Bottled Falkow Broth Base:	100 ml: DBF30100, 500 ml: DBF30500
Bottled Falkow Broth, Arginine:	100 ml: DBF30100-AR, 500 ml: DBF30500-AR
Bottled Falkow Broth, Lysine:	100 ml: DBF30100-LY, 500 ml: DBF30500-LY
Bottled Falkow Broth, Ornithine:	100 ml: DBF30100-OR, 500 ml: DBF30500-OR
Tubed Falkow Broth Base: (covered with paraffin oil)	100 x 12 mm: DBF40002 (2 ml)
Tubed Falkow Broth, Arginine: (covered with paraffin oil)	100 x 12 mm: DBF40002-AR (2 ml)
Tubed Falkow Broth, Lysine: (covered with paraffin oil)	100 x 12 mm: DBF40002-LY (2 ml)
Tubed Falkow Broth, Ornithine: (covered with paraffin oil)	100 x 12 mm: DBF40002-OR (2 ml)

Bottled Taylor Broth Base:	100 ml: DBT30100, 500 ml: DBT30500
Bottled Taylor Broth, Arginine:	100 ml: DBT30100-AR, 500 ml: DBT30500-AR
Bottled Taylor Broth, Lysine:	100 ml: DBT30100-LY, 500 ml: DBT30500-LY
Bottled Taylor Broth, Ornithine:	100 ml: DBT30100-OR, 500 ml: DBT30500-OR
Tubed Taylor Broth Base:	100 x 12 mm: DBT40002 (2 ml)
Tubed Taylor Broth, Arginine:	100 x 12 mm: DBT40002-AR (2 ml)
Tubed Taylor Broth, Lysine:	100 x 12 mm: DBT40002-LY (2 ml)
Tubed Taylor Broth, Ornithine:	100 x 12 mm: DBT40002-OR (2 ml)

Colour:	Purple
pH (at 25 °C):	See above

Direction: Dispense the bottled media aseptically into sterile test tubes. After inoculation overlie the tubes aseptically with 4 – 5 mm sterile mineral oil (except Taylor Broth). Media in tubes are ready to use.

Storage conditions: Store the dehydrated media tightly closed in a dry place at room temperature and use before the expiry date on the label. Store the prepared media protected from light at room temperature.

Quality Control:

Test strains	Incubation temp: 37 °C	Reactions	Incubation time: 24 h
Broth bases			
<i>Salmonella typhimurium</i>	ATCC 14028	Positive, violet colour	
<i>Citrobacter freundii</i>	ATCC 8090	Negative, yellow colour	

Broths with arginine

<i>Pseudomonas aeruginosa</i>	ATCC 27853	Positive, violet colour
<i>Proteus mirabilis</i>	ATCC 29906	Negative, yellow colour

Broths with lysine

<i>Salmonella typhimurium</i>	ATCC 14028	Positive, violet colour
<i>Citrobacter freundii</i>	ATCC 8090	Negative, yellow colour

Broths with ornithine

<i>Proteus mirabilis</i>	ATCC 29906	Positive, violet colour
<i>Klebsiella pneumoniae</i>	ATCC 13883	Negative, yellow colour

II. DEHYDRATED CULTURE MEDIA

PHARMABIO® CULTURE MEDIA

The **PharmaBio®** product range includes excellent quality culture media according to the pharmacopoeias. All these items are provided only after strict tests which are conducted according to the pharmacopoeias' requirements. Certificates of analysis contain these test results. See their descriptions in the alphabetical list of media.

PharmaBio® BAIRD-PARKER AGAR BASE

Code Number: **PBPA20500, PBPA25000**

See: Baird-Parker Agar Base, PH EUR

PharmaBio® KING A AGAR BASE

Code Number: **PKAA20500, PKAA25000**

See: King A Agar Base, USP

PharmaBio® BRILLIANT GREEN (BPLS) AGAR

Code Number: **PBPE20500, PBPE25000**

See: Brilliant Green (BPLS) Agar, PH EUR

PharmaBio® KING B AGAR BASE

Code Number: **PKAB20500, PKAB25000**

See: King B Agar Base, USP

PharmaBio® CASEIN PEPTONE LECITHIN POLYSORBATE BROTH BASE

Code Number: **PCLP20500, PCLP25000**

See: Casein Peptone Lecithin Polysorbate Broth Base, USP

PharmaBio® LACTOSE BROTH

Code Number: **PLAB20500, PLAB25000**

See: Lactose Broth, PH EUR

PharmaBio® CETRIMIDE AGAR BASE

Code Number: **PCAB20500, PCAB25000**

See: Cetrimide Agar Base, PH EUR - USP

PharmaBio® LACTOSE SULPHITE BROTH BASE

Code Number: **PLSU20500, PLSU25000**

See: Lactose Sulphite Broth Base, PH EUR

PharmaBio® COLUMBIA AGAR

Code Number: **PCLE20500, PCLE25000**

See: Columbia Agar, PH EUR - USP

PharmaBio® MACCONKEY AGAR

Code Number: **PMCE20500, PMCE25000**

See: MacConkey Agar, PH EUR - USP

PharmaBio® DEOXYCHOLATE CITRATE AGAR

Code Number: **PDCE20500, PDCE25000**

See: Deoxycholate Citrate Agar, PH EUR

PharmaBio® MACCONKEY BROTH

Code Number: **PMBE20500, PMBE25000**

See: MacConkey Broth, PH EUR - USP

PharmaBio® EE BROTH

Code Number: **PEEB20500, PEEB25000**

See: EE Broth, PH EUR - USP

PharmaBio® MANNITOL SALT AGAR

Code Number: **PMSA20500, PMSA25000**

See: Mannitol Salt Agar, PH EUR - USP

PharmaBio® EOSIN METHYLENE BLUE AGAR

Code Number: **PEMB20500, PEMB25000**

See: Eosin Methylene Blue Agar, USP

PharmaBio® NEUTRALISING FLUID BASE

Code Number: **PNSE20500, PNSE25000**

See: Neutralising Fluid Base, PH EUR

II. DEHYDRATED CULTURE MEDIA

PharmaBio® PEPTON WATER, BUFFERED

Code Number: PPBE20500, PPBE25000

See: Pepton Water, Buffered, PH EUR - USP

PharmaBio® POTATO DEXTROSE AGAR

Code Number: PPDA20500, PPDA25000

See: Potato Dextrose Agar, PH EUR - USP

PharmaBio® R2A AGAR

Code Number: PR2A20500, PR2A25000

See: R2A Agar, PH EUR

PharmaBio® RAPPAPORT-VASSILIADIS BROTH BASE

Code Number: PRVB20500, PRVB25000

See: Rappaport-Vassiliadis Broth Base, PH EUR - USP

PharmaBio® REINFORCED CLOSTRIDIAL MEDIUM

Code Number: PRCM20500, PRCM25000

See: Reinforced Clostridial (RCM-DRCM) Medium Base, PH EUR - USP

PharmaBio® SABOURAUD CHLORAMPHENICOL AGAR

Code Number: PSCE20500, PSCE25000

See: Sabouraud Chloramphenicol Agar, PH EUR

PharmaBio® SABOURAUD DEXTROSE (4%) AGAR

Code Number: PSDA20500, PSDA25000

See: Sabouraud Dextrose (4%) Agar, PH EUR - USP

PharmaBio® SABOURAUD DEXTROSE BROTH

Code Number: PSDB20500, PSDB25000

See: Sabouraud Dextrose Broth, PH EUR - USP

PharmaBio® SELENITE CYSTINE BROTH BASE

Code Number: PSCB20500, PSCB25000

See: Selenite Cystine Broth Base, USP

PharmaBio® TETRATHIONATE BROTH BASE, PH EUR

Code Number: PTTE20500, PTTE25000

See: Tetrathionate Broth Base, PH EUR

PharmaBio® TETRATHIONATE BROTH BASE, USP

Code Number: PTTB20500, PTTB25000

See: Tetrathionate Broth Base, USP

PharmaBio® THIOGLYCOLLATE MEDIUM

Code Number: PTHM20500, PTHM25000

See: Thioglycollate Medium, PH EUR

PharmaBio® TRYPTONE SOYA AGAR

Code Number: PTSE20500, PTSE25000

See: Tryptone Soya Agar, PH EUR - USP

PharmaBio® TRYPTONE SOYA BROTH

Code Number: PTSB20500, PTSB25000

See: Tryptone Soya Broth, PH EUR - USP

PharmaBio® TSI AGAR

Code Number: PTSI20500, PTSI25000

See: Triple Sugar Iron (TSI) Agar, PH EUR

PharmaBio® VIOLET RED BILE GLUCOSE AGAR, PH EUR

Code Number: PVBE20500, PVBE25000

See: Violet Red Bile Glucose Agar, PH EUR

PharmaBio® VIOLET RED BILE GLUCOSE AGAR, PH EUR - USP

Code Number: PVBH20500, PVBH25000

See: Violet Red Bile Glucose Agar, PH EUR - USP

PharmaBio® VOGEL-JOHNSON AGAR BASE

Code Number: PVJA20500, PVJA25000

See: Vogel-Johnson Agar Base, USP

PharmaBio® XLD AGAR

Code Number: PXLD20500, PXLD25000

See: XLD Agar, PH EUR - USP

II. DEHYDRATED CULTURE MEDIA

CULTURE MEDIA FOR THE METHOD OF PHARMACOPOEIAS

A. Culture media for the method of the European Pharmacopoeia

BROTH MEDIUM A (CASEIN SOYA-BEAN DIGEST BROTH) See: Tryptone Soya Broth, PH EUR - USP	AGAR MEDIUM L (BRILLIANT GREEN PHENOL RED LACTOSE SUCROSE AGAR) See: Brilliant Green (BPLS) Agar, PH EUR
AGAR MEDIUM B (CASEIN SOYA-BEAN DIGEST AGAR) See: Tryptone Soya Agar, PH EUR - USP	AGAR MEDIUM M (TSI AGAR) See: Triple Sugar Iron (TSI) Agar, PH EUR
AGAR MEDIUM C (SABOURAUD GLUCOSE AGAR WITH CHLORAMPHENICOL) See: Sabouraud Chloramphenicol Agar, PH EUR	AGAR MEDIUM N (CETRIMIDE AGAR BASE) See: Cetrimide Agar Base, PH EUR - USP
BROTH MEDIUM D (LACTOSE BROTH) See: Lactose Broth, PH EUR	AGAR MEDIUM O (BAIRD-PARKER AGAR BASE) See: Baird-Parker Agar Base, PH EUR
BROTH MEDIUM E (ENTEROBACTERIA ENRICHMENT BROTH, MOSSEL) See: EE Broth, PH EUR - USP	MEDIUM P (REINFORCED MEDIA FOR CLOSTRIDIA) See: Reinforced Clostridial (RCM-DRCM) Medium Base, PH EUR - USP
AGAR MEDIUM F (CRYSTAL VIOLET NEUTRAL RED BILE AGAR WITH GLUCOSE) See: Violet Red Bile Glucose Agar, PH EUR	AGAR MEDIUM Q (COLUMBIA AGAR) See: Columbia Agar, PH EUR - USP
BROTH MEDIUM G (MACCONKEY BROTH) See: MacConkey Broth, PH EUR - USP	BROTH MEDIUM R (LACTOSE SULPHITE BROTH BASE) See: Lactose Sulphite Broth Base, PH EUR
AGAR MEDIUM H (MACCONKEY AGAR) See: MacConkey Agar, PH EUR - USP	AGAR MEDIUM S (R2A AGAR) See: R2A Agar, PH EUR
BROTH MEDIUM I (TETRATHIONATE BILE BRILLIANT GREEN BROTH) See: Tetrathionate Broth Base, PH EUR	BUFFERED SODIUM CHLORIDE PEPTONE SOLUTION PH 7.0 See: Peptone Water, Buffered, PH EUR - USP
AGAR MEDIUM J (DESOXYCHOLATE CITRATE AGAR) See: Deoxycholate Citrate Agar, PH EUR	FLUID THIOGLYCOLLATE MEDIUM FOR STERILITY TESTING See: Thioglycollate Medium, PH EUR
AGAR MEDIUM K (XYLOSE LYSINE DEOXYCHOLATE AGAR) See: XLD Agar, PH EUR - USP	NEUTRALISING FLUID BASE See: Neutralising Fluid Base, PH EUR

II. DEHYDRATED CULTURE MEDIA

B. Culture media for the method of the United States Pharmacopoeia

CASEIN PEPTONE LECITHIN POLYSORBATE BROTH BASE, USP

See: Casein Peptone Lecithin Polysorbate Broth Base, USP

EOSIN METHYLENE BLUE AGAR, USP

See: Eosin Methylene Blue Agar, USP

KING A AGAR, USP

See: King A Agar Base, USP

KING B AGAR, USP

See: King B Agar Base, USP

SELENITE-CYSTINE BROTH BASE, USP

See: Selenite Cystine Broth Base, USP

TETRATONATE BROTH BASE, USP

See: Tetratolate Broth Base, USP

VOGEL-JOHNSON AGAR, USP

See: Vogel-Johnson Agar Base, USP

C. Culture media for the harmonised method

BUFFERED SODIUM CHLORIDE PEPTONE SOLUTION pH 7.0

See: Peptone Water, Buffered, PH EUR - USP

CASEIN SOYA BEAN DIGEST AGAR

See: Tryptone Soya Agar, PH EUR - USP

CASEIN SOYA BEAN DIGEST BROTH

See: Tryptone Soya Broth, PH EUR - USP

CETRIMIDE AGAR

See: Cetrinide Agar Base, PH EUR - USP

COLUMBIA AGAR

See: Columbia Agar, PH EUR - USP

ENTEROBACTERIA ENRICHMENT BROTH, MOSSEL

See: EE Broth, PH EUR - USP

MACCONKEY AGAR

See: MacConkey Agar, PH EUR - USP

MACCONKEY BROTH

See: MacConkey Broth, PH EUR - USP

MANNITOL SALT AGAR

See: Mannitol Salt Agar, PH EUR - USP

POTATO DEXTROSE AGAR

See: Potato Dextrose Agar, PH EUR - USP

RAPPAPORT VASSILIADIS SALMONELLA ENRICHMENT BROTH

See: Rappaport Vassiliadis Broth Base, PH EUR - USP

REINFORCED MEDIUM FOR CLOSTRIDIA

See: Reinforced Clostridial (RCM-DRCM) Medium Base, PH EUR - USP

SABOURAUD DEXTROSE AGAR

See: Sabouraud Dextrose (4%) Agar, PH EUR - USP

SABOURAUD DEXTROSE BROTH

See: Sabouraud Dextrose Broth, PH EUR - USP

VIOLET RED BILE GLUCOSE AGAR

See: Violet Red Bile Glucose Agar, PH EUR - USP

XYLOSE, LYSINE, DEOXYCHOLATE AGAR

See: XLD Agar, PH EUR - USP

III. SUPPLEMENTS

III. SUPPLEMENTS

AEROMONAS SELECTIVE SUPPLEMENT

FOR 500 ml OF AEROMONAS AGAR

Freeze-dried mixture for the isolation of *Aeromonas* spp.

Description

Code Number:	4 ml: AES80004
Colour:	White
Appearance:	Homogeneous lyophilisate

Direction: Suspend **30 g of Aeromonas Agar Base (AEA20500)** in 500 ml of distilled water and heat with frequent agitation until the medium boils well. Cool to 50 °C and add aseptically the contents of **one vial of Aeromonas Selective Supplement (AES80004)** reconstituted with 4 ml of sterile distilled water. Mix well before pouring.

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

FORMULA [mg/vial]

Ampicillin	2,5
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Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

NEW PRODUCT

BACITRACIN (150 mg) SUPPLEMENT

Freeze-dried mixture for the supplementation of Chocolate Agar Base.

Description

Code Number:	4 ml: BAC80004
Colour:	White
Appearance:	Homogeneous lyophilisate

Direction: Suspend **18 g of Chocolate Agar Base** in 455 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically **35 ml of sterile defibrinated blood** and “chocolate” by heating at 80 °C for 10 min. Cool to 50 °C. Dissolve the contents of **one vial of Growth Factor Mixture Hydration Fluid** with 5 ml of sterile distilled water and add aseptically to the **Growth Factor Mixture (GFM80005)**. Mix well and add aseptically to the medium. Dissolve the contents of **one vial of Bacitracin (150 mg) Supplement (BAC80004)** with 4 ml of sterile distilled water and add aseptically to the above. Mix well before pouring.

FORMULA [mg/vial]

Bacitracin	150
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Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

NEW PRODUCT

AMPICILLIN (5 mg) SUPPLEMENT

Freeze-dried mixture for the supplementation of Columbia Blood Agar Base.

Description

Code Number:	4 ml: AMP80004
Colour:	White
Appearance:	Homogeneous lyophilisate

Direction: Suspend **42 g of Columbia Blood Agar Base** in 950 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically **50 ml of sterile defibrinated sheep blood**. Dissolve the contents of **one vial of Ampicillin (5 mg) Supplement (AMP80004)** with 4 ml of sterile distilled water and add aseptically to the above at 50 °C. Mix well before pouring.

FORMULA [mg/vial]

Ampicillin	5
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Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

BORDETELLA SELECTIVE SUPPLEMENT

FOR 500 ml OF BORDETELLA AGAR

Freeze-dried mixture for the isolation of *Bordetella* spp.

Description

Code Number:	4 ml: BSS80004
Colour:	White
Appearance:	Homogeneous lyophilisate

Direction: Suspend **26 g of Charcoal Agar Base** in 450 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically 50 ml of sterile defibrinated blood and the contents of **one vial of Bordetella Selective Supplement (BSS80004)** reconstituted with 4 ml of sterile distilled water. Mix well before pouring.

FORMULA [mg/vial]

Cephalexin	20
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Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

III. SUPPLEMENTS

BRILLIANT GREEN SOLUTION, STERILE

A sterile brilliant green solution for the supplementation of some media.

Description

Code Number:	100 ml: BGS80100-DC
	30 ml: BGS80030-DC
	10 ml: BGS80010-DC
Colour:	Dark green
Appearance:	Transparent solution

Direction: Various. See the product information of media (e.g. Brilliant Green Agar, human, tetrathionate broths etc.).

FORMULA

Brilliant green	0,1 %
Solvent	Sterile distilled water

Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

BRUCELLA SELECTIVE SUPPLEMENT

FOR 500 ml OF BRUCELLA AGAR

Freeze-dried mixture for the isolation of *Brucella* spp.

Description

Code Number:	4 ml: BAS80004
Colour:	White
Appearance:	Homogeneous lyophilisate

Direction: Suspend **22,5 g of Brucella Agar Base (BAB20500)** in 460 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C. Add aseptically 4 ml of 1:1 mixture of methanol and sterile distilled water to **one vial of Brucella Selective Supplement (BAS80004)** to form suspension. Incubate for 15 minutes at 37 °C. Shake well and add immediately to the agar base together with **35 ml of sterile inactivated (i.e. serum held at 56 °C for 30 minutes) horse serum**. Mix well before pouring.

FORMULA [mg/vial]

Bacitracin	250,0
Cycloheximide	50,0
Nystatin	11,0
Vancomycin	10,0
Nalidixic acid	2,5
Polymyxin B	0,4

Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

CAMPYLOBACTER GROWTH SUPPLEMENT

FOR 500 ml OF CAMPYLOBACTER AGAR

Freeze-dried mixture for the enhanced growth of *Campylobacter* spp.

Description

Code Number:	4 ml: CGS80004
Colour:	Yellow
Appearance:	Homogeneous lyophilisate

Direction: Suspend **19 g of Campylobacter Agar Base (CAA20500)** in 470 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically **25 ml of sterile lysed horse blood** and the contents of **one vial of Campylobacter Growth Supplement (CGS80004)** reconstituted with 4 ml of sterile distilled water. Mix well before pouring.

FORMULA [mg/vial]

Sodium pyruvate	125
Sodium metabisulphite	125
Ferrous sulphate	125

Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

CAMPYLOBACTER SELECTIVE SUPPLEMENT, BLASER-WANG

FOR 500 ml OF CAMPYLOBACTER AGAR, BLASER-WANG

Freeze-dried mixture for the isolation of *Campylobacter* spp.

Description

Code Number:	4 ml: CBW80004
Colour:	Yellowish
Appearance:	Homogeneous lyophilisate

Direction: Suspend **19 g of Campylobacter Agar Base (CAA20500)** in 465 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically **25 ml of sterile lysed horse blood** and the contents of **one vial of Campylobacter Growth Supplement (CGS80004)** reconstituted with 4 ml of sterile distilled water. Dissolve the contents of **one vial of Campylobacter Selective Supplement, Blaser-Wang (CBW80004)** with 4 ml of sterile distilled water and add aseptically to the above. Mix well before pouring.

FORMULA [mg/vial]

Cefalotin	7,5
Vancomycin	5,0
Trimethoprim	2,5
Amphotericin B	1,0
Polymyxin B	0,2

Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

III. SUPPLEMENTS

CAMPYLOBACTER SELECTIVE SUPPLEMENT, BOLTON

FOR 500 ml OF BOLTON BROTH

Freeze-dried mixture for the selective enrichment of *Campylobacter* spp.

Description

Code Number:	4 ml: CBS80004
Colour:	White
Appearance:	Homogeneous lyophilisate

Direction: Suspend 14 g of Bolton Broth Base (BOB20500) in 470 ml of distilled water and heat gently to dissolve the medium completely. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically 25 ml of sterile lysed horse blood and the contents of one vial of Campylobacter Selective Supplement, Bolton (CBS80004) reconstituted with 4 ml of sterile distilled water. Mix well and dispense aseptically into sterile test tubes.

FORMULA [mg/vial]

Cycloheximide	25
Cefoperazone	10
Trimethoprim	10
Vancomycin	10

Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

CAMPYLOBACTER SELECTIVE SUPPLEMENT, KARMALI

FOR 500 ml OF CAMPYLOBACTER AGAR, KARMALI

Freeze-dried mixture for the isolation of *Campylobacter* spp.

Description

Code Number:	4 ml: CPK80004
Colour:	Yellowish
Appearance:	Homogeneous lyophilisate

Direction: Suspend 23 g of Campylobacter Agar Base, Karmali (CAK20500) in 500 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the contents of one vial of Campylobacter Selective Supplement, Karmali (CPK80004) reconstituted with 4 ml of sterile distilled water. Mix well before pouring.

FORMULA [mg/vial]

Cycloheximide	50
Sodium pyruvate	50
Cefoperazone	16
Vancomycin	10

Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

CAMPYLOBACTER SELECTIVE SUPPLEMENT, CCDA

FOR 500 ml OF CAMPYLOBACTER BLOOD-FREE (CCDA) AGAR

Freeze-dried mixture for the isolation of *Campylobacter* spp.

Description

Code Number:	4 ml: CCS80004
Colour:	White
Appearance:	Homogeneous lyophilisate

Direction: Suspend 24 g of Campylobacter Blood-Free (CCDA) Agar Base (CCA20500) in 500 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the contents of one vial of Campylobacter Selective Supplement, CCDA (CCS80004) reconstituted with 4 ml of sterile distilled water. Mix well before pouring.

FORMULA [mg/vial]

Cefoperazone	16
Amphotericin B	5

Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

CAMPYLOBACTER SELECTIVE SUPPLEMENT, PRESTON

FOR 500 ml OF CAMPYLOBACTER AGAR, PRESTON

Freeze-dried mixture for the isolation of *Campylobacter* spp.

Description

Code Number:	4 ml: CPS80004
Colour:	White
Appearance:	Homogeneous lyophilisate

Direction: Suspend 19 g of Campylobacter Agar Base (CAA20500) in 465 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically 25 ml of sterile lysed horse blood and the contents of one vial of Campylobacter Growth Supplement (CGS80004) reconstituted with 4 ml of sterile distilled water. Dissolve the contents of one vial of Campylobacter Selective Supplement, Preston (CPS80004) with 4 ml of 1:1 mixture of acetone and sterile distilled water and add aseptically to the above. Mix well before pouring.

FORMULA [mg/vial]

Cycloheximide	50,0
Rifampicin	5,0
Trimethoprim	5,0
Polymyxin B	0,4

Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

III. SUPPLEMENTS

CAMPYLOBACTER SELECTIVE SUPPLEMENT, SKIRROW

FOR 500 ml OF CAMPYLOBACTER AGAR, SKIRROW

Freeze-dried mixture for the isolation of *Campylobacter* spp.

Description

Code Number:	4 ml: CSS80004
Colour:	White
Appearance:	Homogeneous lyophilisate

Direction: Suspend **19 g of Campylobacter Agar Base (CAA20500)** in 465 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically **25 ml of sterile lysed horse blood** and the contents of **one vial of Campylobacter Growth Supplement (CGS80004)** reconstituted with 4 ml of sterile distilled water. Dissolve the contents of **one vial of Campylobacter Selective Supplement, Skirrow (CSS80004)** with 4 ml of sterile distilled water and add aseptically to the above. Mix well before pouring.

FORMULA [mg/vial]

Vancomycin	5,0
Trimethoprim	2,5
Polymyxin B	0,2

Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

CEREUS SUPPLEMENT

FOR 500 ml OF ChromoBio® CEREUS AGAR

NEW PRODUCT

A powdered mixture for the isolation of *Bacillus cereus*.

Description

Code Number:	50 ml: CES80050
Colour:	Yellowish
Appearance:	Homogeneous sterile powder

Direction: Suspend **16,5 g of ChromoBio Cereus Base (CER20500)** in 450 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. In the meantime add 50 ml of sterile distilled water to **one bottle of Cereus Supplement (CES80050)**. Mix well and soak the suspension about one hour – repeating the mixing a few times – until the lecithin dissolves completely. The ready supplement is homogeneous turbid, but exempt from any precipitate. Cool the agar base to 50 °C and add aseptically the supplement. Mix well before pouring. To ensure the complete homogeneity repeat the mixing a few times during the pouring again.

FORMULA

Lecithin	1000 mg/vial
Trimethoprim	5 mg/vial
Polymyxin B	53.000 IU/vial

Storage conditions: Protected from light, at 2-8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

CEFIXIME TELLURITE SELECTIVE SUPPLEMENT

FOR 500 ml OF MACCONKEY AGAR, SORBITOL

Freeze-dried mixture for the isolation of *Escherichia coli* O157.

Description

Code Number:	4 ml: CTS80004
Colour:	White
Appearance:	Homogeneous lyophilisate

Direction: Suspend **26 g of MacConkey Agar Base, Sorbitol (MCS20500)** in 500 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the contents of **one vial of Cefixime Tellurite Supplement (CTS80004)** reconstituted with 4 ml of sterile distilled water. Mix well before pouring.

FORMULA [mg/vial]

Potassium tellurite	1,250
Cefixime	0,025

Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

CLOSTRIDIUM SELECTIVE SUPPLEMENT

FOR 500 ml OF CLOSTRIDIUM DIFFICILE AGAR

Freeze-dried mixture for the isolation of *Clostridium difficile*.

Description

Code Number:	4 ml: CDS80004
Colour:	White
Appearance:	Homogeneous lyophilisate

Direction for blood agar: Suspend **34,5 g of Clostridium Difficile Agar Base (CDA20500)** in 460 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically **35 ml of sterile defibrinated blood** and the contents of **one vial of Clostridium Selective Supplement (CDS80004)** reconstituted with 4 ml of sterile distilled water. Mix well before pouring.

Direction for blood-free agar: Suspend **34,5 g of Clostridium Difficile (CCFA) Agar Base (CCF20500)** in 500 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the contents of **one vial of Clostridium Selective Supplement (CDS80004)** reconstituted with 4 ml of sterile distilled water. Mix well before pouring. Because of the sensitivity of some *Clostridium difficile* strains, the amount of cycloserine and cefoxitin is reduced. If you want to compensate the decreased selectivity, treat the specimen with alcohol before inoculation.

III. SUPPLEMENTS

FORMULA [mg/vial]

D-Cycloserine	125
Cefoxitin	4

Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

DIASALM-MSRV MAGNESIUM CHLORIDE SOLUTION

FOR 12,5 LITRE OF DIASALM MEDIUM BASE
FOR 12,5 LITRE OF RAPPAPORT-VASSILIADIS (MSRV) MEDIUM BASE

A magnesium chloride solution for the preparation of DIASALM and Rappaport-Vassiliadis (MSRV) Medium.

Description

Code Number:	500 ml: DSM80500
Colour:	Water clear
Appearance:	Transparent solution

Direction for DIASALM Medium: Fill up 20 ml of DIASALM-MSRV Magnesium Chloride Solution (DSM80500) to 500 ml with distilled water. Suspend 20 g of DIASALM Medium Base (DIM20500) and heat with frequent agitation until the medium boils well. Cool to 50 °C and add aseptically the contents of one vial of Novobiocin (5 mg) Supplement (DSN80004-05) reconstituted with 4 ml of sterile distilled water. Mix well before pouring.

Direction for Rappaport-Vassiliadis (MSRV) Medium: Fill up 20 ml of DIASALM-MSRV Magnesium Chloride Solution (DSM80500) to 500 ml with distilled water. Suspend 10,5 g of Rappaport-Vassiliadis (MSRV) Medium Base (MSR20500) and heat with frequent agitation until the medium boils well. Cool to 50 °C and add aseptically the contents of one vial of Novobiocin (10 mg) Supplement (DSN80004-10) reconstituted with 4 ml of sterile distilled water. Mix well before pouring.

Warning!

These media are heat sensitive.
No further sterilisation is necessary or desirable.

FORMULA

Magnesium chloride x 6H ₂ O	518 g/l
Solvent	Distilled water

Storage conditions: Protected from light, at room temperature.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

DTM SELECTIVE SUPPLEMENT

FOR 500 ml OF DTM AGAR

Freeze-dried mixture for the isolation of dermatophytes.

Description

Code Number:	4 ml: DTS80004
Colour:	White
Appearance:	Homogeneous lyophilisate

Direction: Suspend 20 g of DTM Agar Base (DTM20500) in 500 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the contents of one vial of DTM Selective Supplement (DTS80004), reconstituted with 4 ml of 1:1 mixture of ethanol and sterile distilled water. Mix well before pouring.

FORMULA [mg/vial]

Cycloheximide	250
Chlortetracycline	50
Gentamicin	50

Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

ENDO BASIC FUCHSIN SOLUTION, DEV

FOR 500 g OF ENDO AGAR BASE, DEV

A basic fuchsin solution for the preparation of Endo Agar, DEV.

Description

Code Number:	45 ml: FBS80045
Colour:	Dark magenta
Appearance:	Dark solution

Direction: Suspend 58 g of Endo Agar Base, DEV (EDE20500) in one litre of distilled water. Add 5 ml of Endo Basic Fuchsin Solution, DEV (FBS80045). Mix well and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Mix well again before pouring.

FORMULA

Basic fuchsin	10 %
Solvent	Mixture of ethanol and distilled water

Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

ENDO BASIC FUCHSIN SOLUTION

FOR 500 g OF ENDO OR ENDO LES AGAR BASE
FOR 250 g OF ENDO M BROTH BASE

A basic fuchsin solution for the preparation of endo media.

Description

Code Number:	60 ml: FBS80060
Colour:	Deep magenta
Appearance:	Dark solution

Direction of Endo and Endo LES agar: Suspend 42 g of Endo Agar Base (END20500) or 50 g of Endo LES Agar Base (ELA20500) in one litre of distilled water. Add 5 ml of Endo Basic Fuchsin Solution (FBS80060). Mix well and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Mix well again before pouring.

III. SUPPLEMENTS

Direction of Endo M Broth: Suspend **48 g of Endo M Broth Base (ENB20500)** in one litre of distilled water. Add **10 ml of Endo Basic Fuchsin Solution (FBS80060)**. Mix well and heat with frequent agitation until the medium boils well. Cool and dispense aseptically into final containers.

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

FORMULA

Basic fuchsin	10 %
Solvent	Mixture of ethanol and distilled water

Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

FERRIC AMMONIUM CITRATE SOLUTION, STERILE

FOR PREPARATION OF 10 OR 30 LITRE OF MEDIA

A ferric ammonium citrate solution for the differentiation of *Clostridium* spp.

Description

Code Number:	10 ml: FAC80010, 30 ml: FAC80030
Colour:	Yellow
Appearance:	Transparent solution

Direction: Prepare 500 ml of sterile medium base from one of the dehydrated medium bases for the detection of *Clostridium* spp. (e.g. RCM-DRCM Medium Base, Lactose Sulphite Broth Base etc.) according to the direction of the given medium. Cool to 50 °C and add aseptically **10 drops (0,5 ml) of Ferric Ammonium Citrate Solution, Sterile (FAC80030)** and **10 drops (0,5 ml) of Sodium Metabisulphite Solution, Sterile (SMS80030)**. Mix well before pouring.

FORMULA

Ferric ammonium citrate	60 %
Solvent	Sterile distilled water

Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

GARDNERELLA SELECTIVE SUPPLEMENT

FOR 500 ml OF GARDNERELLA AGAR



Freeze-dried mixture for the isolation of *Gardnerella vaginalis*.

Description

Code Number:	4 ml: GAS80004
Colour:	White
Appearance:	Homogeneous lyophilisate

Direction: Suspend **42 g of Columbia Blood Agar Base (COL20500)** in 950 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically **50 ml of sterile defibrinated sheep blood**. Mix well. Dissolve the contents of **one vial of Gardnerella Selective Supplement (GAS80004)** with 4 ml of sterile distilled water and add aseptically to the above at 50 °C. Mix well before pouring.

FORMULA [mg/vial]

Nalidixic acid	15
Gentamicin	2
Amphotericin B	1

Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

GC SELECTIVE SUPPLEMENT, VCN

FOR 500 ml OF SELECTIVE THAYER-MARTIN AGAR

Freeze-dried mixture for the isolation of pathogenic *Neisseria* spp.

Description

Code Number:	4 ml: VCN80004
Colour:	White
Appearance:	Homogeneous lyophilisate

Direction: Suspend **19,5 g of GC Agar Base (GCA20500)** in 460 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically **35 ml of sterile defibrinated blood** and “chocolate” by heating at 80 °C for 10 min. Cool to 50 °C. Dissolve the contents of **one vial of Growth Factor Mixture Hydration Fluid** with 5 ml of sterile distilled water and add aseptically to the **Growth Factor Mixture (GFM80005)**. Mix well and add aseptically to the medium. Dissolve the contents of **one vial of GC Selective Supplement, VCN (VCN80004)** with 4 ml of sterile distilled water and add aseptically to the above. Mix well before pouring.

FORMULA [mg/vial]

Colistin	3,75
Vancomycin	1,50
Nystatin	1,50

Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

GC SELECTIVE SUPPLEMENT, VCNT

FOR 500 ml OF SELECTIVE THAYER-MARTIN AGAR

Freeze-dried mixture for the isolation of pathogenic *Neisseria* spp. This supplement prevents the swarming of *Proteus* spp.

Description

Code Number:	4 ml: VCT80004
Colour:	White
Appearance:	Homogeneous lyophilisate

III. SUPPLEMENTS

Direction: Suspend **19,5 g of GC Agar Base (GCA20500)** in 460 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically **35 ml of sterile defibrinated blood** and “chocolate” by heating at 80 °C for 10 min. Cool to 50 °C. Dissolve the contents of **one vial of Growth Factor Mixture Hydration Fluid** with 5 ml of sterile distilled water and add aseptically to the **Growth Factor Mixture (GFM80005)**. Mix well and add aseptically to the medium. Dissolve the contents of **one vial of GC Selective Supplement, VCNT (VCT80004)** with 4 ml of sterile distilled water and add aseptically to the above. Mix well before pouring.

FORMULA [mg/vial]

Colistin	3,75
Trimethoprim	2,50
Vancomycin	1,50
Nystatin	1,50

Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

GLYCEROL SUPPLEMENT

Glycerol (1,2,3-Propanetriol) for preparation of some media.

Description

Code Number:	100 ml: GLC80100, 500 ml: GLC80500
Colour:	Water clear
Appearance:	Transparent

Direction: Various. See the product information of the relevant media bases (e.g. Cetrimide agars, Lowenstein-Jensen, DG 18, etc.).

FORMULA

Glycerol (bacteriological grade)	GLC80100 - 100 ml
Glycerol (bacteriological grade)	GLC80500 - 500 ml

Storage conditions: Protected from light, at room temperature.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

GROWTH FACTOR MIXTURE WITH HYDRATION FLUID

FOR 500 ml OF HAEMOPHILUS OR CHOCOLATE OR THAYER-MARTIN AGAR

Freeze-dried mixture of essential growth factors for the enhanced growth of fastidious micro-organisms.

Description

Code Number:	5 ml: GFM80005 (1 vial GFM + 1 vial hydration fluid)
Colour:	White
Appearance:	Homogeneous lyophilisate

Direction: Suspend **26 g of Charcoal Agar Base (CHA20500) for Haemophilus Agar or 18 g of Chocolate Agar Base (CHO20500) for Chocolate Agar or 19,5 g of GC Agar Base (GCA20500) for Thayer-Martin Agar** in 460 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically **35 ml of sterile defibrinated blood** and “chocolate” by heating at 80 °C for 10 min. Cool to 50 °C. Dissolve the contents of **one vial of Growth Factor Mixture Hydration Fluid** with 5 ml of sterile distilled water and add aseptically to the **Growth Factor Mixture (GFM80005)**. Mix well and add aseptically to the medium. Mix well before pouring.

FORMULA [mg/vial]

Glucose	1000,00
L-Cysteine	259,00
L-Glutamine	100,00
L-Cystine	11,00
Adenine	10,00
NAD	2,50
Coccarboxylase	1,00
Guanine	0,30
Ferric nitrate	0,20
p-Aminobenzoic acid	0,13
Thiamine	0,03

Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

GSP SELECTIVE SUPPLEMENT

FOR 500 ml OF GSP AGAR

Freeze-dried mixture for the detection and differentiation of *Pseudomonas* and *Aeromonas* spp.

Description

Code Number:	4 ml: GSU80004
Colour:	White
Appearance:	Homogeneous lyophilisate

Direction: Suspend **23 g of GSP Agar Base (GSP20500)** in 500 ml of distilled water and heat with frequent agitation until the medium boils well. Cool quickly to 50 °C and add aseptically the contents of one vial of GSP Selective Supplement (GSU80004) reconstituted with 4 ml of sterile distilled water. Mix well before pouring.

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

FORMULA [mg/vial]

Penicillin	70
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Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

III. SUPPLEMENTS

HAEMOPHILUS SUPPLEMENT

FOR 500 ml OF HAEMOPHILUS TEST AGAR

Freeze-dried mixture for the isolation of *Haemophilus influenzae*.

Description

Code Number:	4 ml: HTS80004
Colour:	White
Appearance:	Homogeneous lyophilisate

Direction: Suspend 21,5 g of Haemophilus Test Agar Base (HTM20500) in 500 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the contents of **one vial of Haemophilus Supplement (HTS80004)** reconstituted with 4 ml of sterile distilled water. Mix well before pouring.

FORMULA [mg/vial]

Nicotinamide adenine dinucleotide (NAD)	7,5
Hemin	7,5

Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

K AGAR MALIC ACID SOLUTION

FOR 500 ml OF K AGAR

A malic acid solution for the preparation of K Agar.

Description

Code Number:	5 ml: KMS80005
Colour:	Water clear
Appearance:	Transparent

Direction: Suspend 12 g of K Agar Base (KSA20500) in 500 ml of distilled water. Add 0,5 ml of TWEEN 80 Supplement (TWS80100) and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool quickly to 50 °C and add aseptically **one vial of K Agar Malic Acid Solution (KMS80005)**. Mix well before pouring.

Warning!

Once acidified with malic acid, the medium should not be reheated.

FORMULA

Malic acid	25 %
Solvent	Distilled water

Storage conditions: Protected from light, at room temperature.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

LACTIC ACID SOLUTION

Lactic acid solution for pH adjustment of some media.

Description

Code Number:	100 ml: LAS80100
Colour:	Water clear
Appearance:	Transparent

Direction: Various. See the product information of the relevant media bases (e.g. Czapek-Dox Agar, Malt Extract Media, Tomato Juice Agar, Potato Dextrose Agar etc.).

FORMULA

Lactic acid	10 %
Solvent	Distilled water

Storage conditions: Protected from light, at room temperature.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

LEGIONELLA GROWTH FACTOR MIXTURE WITH CYSTEINE

FOR 100 ml OR 500 ml LEGIONELLA BCYE AGAR WITH CYSTEINE

Powdered mixture of essential growth factors for the isolation of *Legionella* spp.

Description

Code Number:	for 100 ml of BCYE Agar with Cysteine: LGF80005-01 for 500 ml of BCYE Agar with Cysteine: LGF80005-02
Colour:	White
Appearance:	Homogeneous sterile powder

Direction for 100 ml agar: Suspend 2,5 g Legionella (CYE) Agar Base (CYE20500) in 95 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C. Add 5 ml sterile distilled water to **one vial of Legionella BCYE Growth Supplement with Cysteine (LGF80005-01)**. Shake well and add to the medium base. Mix well before pouring.

Direction for 500 ml agar: Suspend 12,5 g Legionella (CYE) Agar Base (CYE20500) in 490 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C. Add 5 ml sterile distilled water to **one vial of Legionella BCYE Growth Supplement with Cysteine (LGF80005-02)**. Shake well and add to the medium base. Repeat the wash-out with 5 ml sterile distilled wa-ter one more time. Mix well before pouring.

FORMULA [g/l]

ACES buffer	10,00
α-Ketoglutarate	1,00
L-Cysteine	0,40
Ferric pyrophosphate	0,25

Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

III. SUPPLEMENTS

LEGIONELLA GROWTH FACTOR MIXTURE WITHOUT CYSTEINE

FOR 100 ml OR 500 ml LEGIONELLA BCYE AGAR WITHOUT CYSTEINE

Powdered mixture of essential growth factors without cysteine for the isolation of *Legionella* spp.

Description

Code Number: **for 100 ml of BCYE Agar without Cysteine: LWC80005-01**
for 500 ml of BCYE Agar without Cysteine: LWC80005-02

Colour: **White**

Appearance: **Homogeneous sterile powder**

Direction for 100 ml agar: Suspend **2,5 g Legionella (CYE) Agar Base (CYE20500)** in 95 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C.

Add 5 ml sterile distilled water to **one vial of Legionella BCYE Growth Supplement without Cysteine (LWC80005-01)**. Shake well and add to the medium base. Mix well before pouring.

Direction for 500 ml agar: Suspend **12,5 g Legionella (CYE) Agar Base (CYE20500)** in 490 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C.

Add 5 ml sterile distilled water to **one vial of Legionella BCYE Growth Supplement without Cysteine (LWC80005-02)**. Shake well and add to the medium base. Repeat the wash-out with 5 ml sterile distilled water one more time. Mix well before pouring.

FORMULA [g/l]

ACES buffer	10,00
α-Ketoglutarate	1,00
Ferric pyrophosphate	0,25

Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

LEGIONELLA SELECTIVE SUPPLEMENT, BMPA

FOR 100 ml OR 500 ml LEGIONELLA BCYE AGAR, BMPA

A powdered mixture for the isolation of *Legionella* spp.

Description

Code Number: **for 100 ml of BCYE Agar, BMPA: BMP80005-01**
for 500 ml of BCYE Agar, BMPA: BMP80005-02

Colour: **White**

Appearance: **Homogeneous sterile powder**

Direction for 100 ml agar: Suspend **2,5 g of Legionella (CYE) Agar Base (CYE20500)** in 90 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C.

Add 5–5 ml sterile distilled water to **one vial of Legionella BCYE Growth Supplement with Cysteine (LGF80005-01)** and **one vial of Legionella Selective Supplement, BMPA (BMP80005-01)**. Shake well and add both of them to the medium base. Mix well before pouring.

Direction for 500 ml agar: Suspend **12,5 g of Legionella (CYE) Agar Base (CYE20500)** in 480 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C.

Add 5–5 ml sterile distilled water to **one vial of Legionella BCYE Growth Supplement with Cysteine (LGF80005-02)** and **one vial of Legionella Selective Supplement, BMPA (BMP80005-02)**. Shake well and add both of them to the medium base. Repeat the wash-out with 5–5 ml sterile distilled water one more time. Mix well before pouring.

FORMULA [mg/l]

Anisomycin	80
Polymyxin B	10
Cefamandole	4

Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

LEGIONELLA SELECTIVE SUPPLEMENT, GVPC

FOR 100 ml OR 500 ml LEGIONELLA BCYE AGAR, GVPC

A powdered mixture for the isolation of *Legionella* spp.

Description

Code Number: **for 100 ml of BCYE Agar, GVPC: GVP80005-01**
for 500 ml of BCYE Agar, GVPC: GVP80005-02

Colour: **White**

Appearance: **Homogeneous sterile powder**

Direction for 100 ml agar: Suspend **2,5 g of Legionella (CYE) Agar Base (CYE20500)** in 90 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C.

Add 5–5 ml sterile distilled water to **one vial of Legionella BCYE Growth Supplement with Cysteine (LGF80005-01)** and **one vial of Legionella Selective Supplement, GVPC (GVP80005-01)**. Shake well and add both of them to the medium base. Mix well before pouring.

Direction for 500 ml agar: Suspend **12,5 g of Legionella (CYE) Agar Base (CYE20500)** in 480 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C.

Add 5–5 ml sterile distilled water to **one vial of Legionella BCYE Growth Supplement with Cysteine (LGF80005-02)** and **one vial of Legionella Selective Supplement, GVPC (GVP80005-02)**. Shake well and add both of them to the medium base. Repeat the wash-out with 5–5 ml sterile distilled water one more time. Mix well before pouring.

FORMULA [mg/l]

Glycine	3000
Cycloheximide	80
Polymyxin B	10
Vancomycin	1

Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

LEGIONELLA SELECTIVE SUPPLEMENT, MWY

FOR 100 ml OR 500 ml LEGIONELLA BCYE AGAR, MWY

A powdered mixture for the isolation of *Legionella* spp.

Description

Code Number: **for 100 ml of BCYE Agar, MWY: MWY80005-01**
for 500 ml of BCYE Agar, MWY: MWY80005-02

Colour: **White**

Appearance: **Homogeneous sterile powder**

III. SUPPLEMENTS

Direction for 100 ml agar: Suspend 2,5 g of *Legionella* (CYE) Agar Base (CYE20500) in 90 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C.

Add 5–5 ml sterile distilled water to **one vial of Legionella BCYE Growth Supplement with Cysteine (LGF80005-01)** and **one vial of Legionella Selective Supplement, MWY (MWY80005-01)**. Shake well and add both of them to the medium base. Mix well before pouring.

Direction for 500 ml agar: Suspend 12,5 g of *Legionella* (CYE) Agar Base (CYE20500) in 480 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C.

Add 5–5 ml sterile distilled water to **one vial of Legionella BCYE Growth Supplement with Cysteine (LGF80005-02)** and **one vial of Legionella Selective Supplement, MWY (MWY80005-02)**. Shake well and add both of them to the medium base. Repeat the wash-out with 5–5 ml sterile distilled water one more time. Mix well before pouring.

FORMULA [mg/l]

Glycine	3000
Anisomycin	80
Polymyxin B	8
Vancomycin	1
Bromothymol blue	10
Bromocresol purple	10

Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

LISTERIA SELECTIVE SUPPLEMENT, FRASER

FOR 500 ml OF FRASER BROTH

Freeze-dried mixture for the isolation of *Listeria monocytogenes*.

Description

Code Number: **4 ml: LSF80004**
 Colour: **Brownish yellow**
 Appearance: **Homogeneous lyophilisate**

Direction: Suspend 27,5 g of *Listeria* Enrichment Broth Base, UVM-Fraser (LEF20500) in 500 ml of distilled water and heat gently to dissolve the medium completely. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the contents of **one vial of Listeria Selective Supplement, Fraser (LSF80004)** reconstituted with 4 ml of 1:1 mixture of ethanol and sterile distilled water. Mix well. Dispense aseptically into sterile final containers.

FORMULA [mg/vial]

Ferric ammonium citrate	250,0
Acriflavine	12,5
Nalidixic acid	10,0

Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

LISTERIA SELECTIVE SUPPLEMENT, HALF FRASER

FOR 500 ml OF HALF FRASER BROTH

Freeze-dried mixture for the isolation of *Listeria monocytogenes*.

Description

Code Number: **4 ml: LSH80004**
 Colour: **Brownish yellow**
 Appearance: **Homogeneous lyophilisate**

Direction: Suspend 27,5 g of *Listeria* Enrichment Broth Base, UVM-Fraser (LEF20500) in 500 ml of distilled water and heat gently to dissolve the medium completely. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the contents of **one vial of Listeria Selective Supplement, Half Fraser (LSH80004)** reconstituted with 4 ml of 1:1 mixture of ethanol and sterile distilled water. Mix well. Dispense aseptically into sterile final containers.

FORMULA [mg/vial]

Ferric ammonium citrate	250,00
Acriflavine	6,25
Nalidixic acid	5,00

Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

LISTERIA SELECTIVE SUPPLEMENT, OXFORD

FOR 500 ml OF LISTERIA SELECTIVE AGAR, OXFORD

Freeze-dried mixture for the isolation of *Listeria monocytogenes*.

Description

Code Number: **4 ml: LS080004**
 Colour: **White**
 Appearance: **Homogeneous lyophilisate**

Direction: Suspend 29,5 g of *Listeria* Selective Agar Base, Oxford (LA020500) in 500 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the contents of **one vial of Listeria Selective Supplement, Oxford (LS080004)** reconstituted with 4 ml of 1:1 mixture of ethanol and sterile distilled water. Mix well before pouring.

FORMULA [mg/vial]

Cycloheximide	200,0
Colistin	10,0
Fosfomycin	5,0
Acriflavine	2,5
Cefotetan	1,0

Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

III. SUPPLEMENTS

LISTERIA SELECTIVE SUPPLEMENT, PALCAM

FOR 500 ml OF LISTERIA SELECTIVE AGAR, PALCAM

Freeze-dried mixture for the isolation of *Listeria monocytogenes*.

Description

Code Number:	4 ml: LSP80004
Colour:	Yellowish
Appearance:	Homogeneous lyophilisate

Direction: Suspend 36 g of Listeria Selective Agar Base, Palcam (LAP20500) in 500 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the contents of one vial of Listeria Selective Supplement, Palcam (LSP80004) reconstituted with 4 ml of sterile distilled water. Mix well before pouring.

FORMULA [mg/vial]

Ceftazidime	10,0
Polymyxin B	5,0
Acriflavine	2,5

Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

LISTERIA SELECTIVE SUPPLEMENT, UVM II

FOR 500 ml OF UVM II BROTH

Freeze-dried mixture for the isolation of *Listeria monocytogenes*.

Description

Code Number:	4 ml: LU280004
Colour:	White
Appearance:	Homogeneous lyophilisate

Direction: Suspend 27,5 g of Listeria Enrichment Broth Base, UVM-Fraser (LEF20500) in 500 ml of distilled water and heat gently to dissolve the medium completely. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the contents of one vial of Listeria Selective Supplement, UVM II (LU280004) reconstituted with 4 ml of 1:1 mixture of ethanol and sterile distilled water. Mix well. Dispense aseptically into sterile final containers.

FORMULA [mg/vial]

Nalidixic acid	12,5
Acriflavine	10,0

Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

LISTERIA SELECTIVE SUPPLEMENT, UVM I

FOR 500 ml OF UVM I BROTH

Freeze-dried mixture for the isolation of *Listeria monocytogenes*.

Description

Code Number:	4 ml: LU180004
Colour:	White
Appearance:	Homogeneous lyophilisate

Direction: Suspend 27,5 g of Listeria Enrichment Broth Base, UVM-Fraser (LEF20500) in 500 ml of distilled water and heat gently to dissolve the medium completely. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the contents of one vial of Listeria Selective Supplement, UVM I (LU180004) reconstituted with 4 ml of 1:1 mixture of ethanol and sterile distilled water. Mix well. Dispense aseptically into sterile final containers.

FORMULA [mg/vial]

Nalidixic acid	10
Acriflavine	6

Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

MALACHITE GREEN SOLUTION, STERILE

FOR THE PREPARATION OF 10 OR 30 LITRE OF MEDIUM

Malachite green solution for the preparation of Malachite Green Broth.

Description

Code Number:	10 ml: MS080010, 30 ml: MS080030
Colour:	Green
Appearance:	Transparent solution

Direction: Suspend 4,2 g Malachite Green Broth Base (MIB20500) in 500 ml of distilled water and heat gently to dissolve the medium completely. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically 10 drops (0,5 ml) of Malachite Green Solution, Sterile (MS080030). Mix well and dispense aseptically into sterile final containers.

FORMULA

Malachite Green	1 %
Solvent	Sterile distilled water

Storage conditions: Protected from light, at room temperature.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

III. SUPPLEMENTS

M-CP CHROMOGENIC SUPPLEMENT

FOR 100 ml OR 500 ml OF M-CP AGAR

Freeze-dried mixture for the enumeration of *Clostridium perfringens*.

Description

Code Number: **for 100 ml of M-CP Agar: MCC80004-01**
for 500 ml of M-CP Agar: MCC80004-02

Colour: **White**
Appearance: **Homogeneous lyophilisate**

Direction for 100 ml agar: Suspend 7,1 g of ChromoBio® M-CP Base (MCP20500) in 100 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the contents of **one vial of M-CP Chromogenic Supplement (MCC80004-01)** and **one vial of M-CP Selective Supplement (MPS80004-01)** both reconstituted with 4 ml of sterile distilled water. Mix well before pouring.

Direction for 500 ml agar: Suspend 35,5 g of ChromoBio® M-CP Base (MCP20500) in 500 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the contents of **one vial of M-CP Chromogenic Supplement (MCC80004-02)** and **one vial of M-CP Selective Supplement (MPS80004-02)** both reconstituted with 4 ml of sterile distilled water. Mix well before pouring.

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

FORMULA [mg/500 ml medium]

Phenolphthalein diphosphate	100
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Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

M-CP SELECTIVE SUPPLEMENT

FOR 100 ml OR 500 ml OF M-CP AGAR

Freeze-dried mixture for the enumeration of *Clostridium perfringens*.

Description

Code Number: **for 100 ml of M-CP Agar: MPS80004-01**
for 500 ml of M-CP Agar: MPS80004-02

Colour: **White**
Appearance: **Homogeneous lyophilisate**

Direction for 100 ml agar: Suspend 7,1 g of ChromoBio® M-CP Base (MCP20500) in 100 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the contents of **one vial of M-CP Chromogenic Supplement (MCC80004-01)** and **one vial of M-CP Selective Supplement (MPS80004-01)** both reconstituted with 4 ml of sterile distilled water. Mix well before pouring.

Direction for 500 ml agar: Suspend 35,5 g of ChromoBio® M-CP Base (MCP20500) in 500 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the contents of **one vial of M-CP Chromogenic Supplement (MCC80004-02)** and **one vial of M-CP Selective Supplement (MPS80004-02)** both reconstituted with 4 ml of sterile distilled water. Mix well before pouring.

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

FORMULA [mg/500 ml medium]

D-Cycloserine	400
Iron(III) chloride	90
Polymyxin B	25

Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

MRS SUPPLEMENT

FOR 10 LITRE OF MRS AGAR OR BROTH

A solution containing TWEEN 80 and sodium acetate for the preparation of MRS media.

Description

Code Number: **100 ml: MRC80100**
Colour: **Yellowish**
Appearance: **Instable emulsion**

Direction of MRS Agar: Suspend 63 g of MRS Agar Base (MRA20500) in one litre of distilled water. Add 10 ml of MRS Supplement (MRC80100). Mix well and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes.

Direction of MRS Broth: Suspend 50 g of MRS Broth Base (MRB20500) in one litre of distilled water. Add 10 ml of MRS Supplement (MRC80100). Mix well and heat gently to dissolve the medium completely. Dispense into final containers and sterilise by autoclaving at 121 °C for 15 minutes.

Warning!

To ensure the homogeneity shake well the supplement before use.

FORMULA

Sodium acetate	30 %
TWEEN 80	10 %
Solvent	Distilled water

Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

MRSA SELECTIVE SUPPLEMENT

FOR 500 ml OF MRSA SCREEN AGAR

Freeze-dried mixture for the detection of MRSA.

Description

Code Number: **4 ml: MSS80004**
Colour: **White**
Appearance: **Homogeneous lyophilisate**

III. SUPPLEMENTS

Direction: Suspend **39 g of MRSA Screen Agar Base (MRS20500)** in 500 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the contents of **one vial of MRSA Selective Supplement (MSS80004)** reconstituted with 4 ml of sterile distilled water. Mix well before pouring.

FORMULA [mg/vial]

Oxacillin	3
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Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

MUG SUPPLEMENT

FOR THE PREPARATION OF 500 ml OF FLUORESCENT MEDIA

MUG (4-methylumbelliferyl-beta-D-glucuronide) for the detection of *Escherichia coli* by a fluorogenic procedure.

Description

Code Number:	4 ml: MGS80004
Colour:	White
Appearance:	Homogeneous lyophilisate

Direction: Prepare 500 ml of sterile medium base from one of the dehydrated medium bases for the detection of *Escherichia coli* (e.g. MacConkey, CLED, VRB, BBB, EC, LSB etc.) according to the direction of the given medium. Cool to 50 °C and add aseptically the contents of **one vial of MUG Supplement (MGS80004)** reconstituted with 4 ml of sterile distilled water. Mix well before pouring.

FORMULA [mg/vial]

MUG	50
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Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

NOVOBIOCIN SELECTIVE SUPPLEMENT

Freeze-dried mixture for the supplementation of some media.

Description

Code Number of Novobiocin (5 mg) Supplement:	4 ml: DSN80004-05
Code Number of Novobiocin (10 mg) Supplement:	4 ml: DSN80004-10
Code Number of Novobiocin (20 mg) Supplement:	4 ml: DSN80004-20
Colour:	White
Appearance:	Homogeneous lyophilisate

Direction: Various. See the product information of relevant media (e.g. DIASALM Medium Base, Rappaport-Vassiliadis (MSRV) Medium Base, Tetrathionate broths etc.).

FORMULA

Novobiocin	DSN80004-05 - 5 mg
Novobiocin	DSN80004-10 - 10 mg
Novobiocin	DSN80004-20 - 20 mg

Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

OGYE SELECTIVE SUPPLEMENT

FOR 500 ml OF OGYE AGAR

Freeze-dried mixture for the isolation of yeasts and moulds.

Description

Code Number:	4 ml: OGS80004
Colour:	White
Appearance:	Homogeneous lyophilisate

Direction: Suspend **19 g Oxytetracycline Glucose Yeast Extract Agar Base (OGY20500)** in 500 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the contents of **one vial of OGYE Selective Supplement (OGS80004)** reconstituted with 4 ml of sterile distilled water. Mix well before pouring.

FORMULA [mg/vial]

Oxytetracycline	50
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Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

PERFRINGENS SELECTIVE SUPPLEMENT, OPSP, A + B

FOR 500 ml OF OPSP AGAR

Freeze-dried mixture for the isolation of *Clostridium perfringens*.

Description

Code Number:	2x4 ml: POS80004
Colour:	White
Appearance:	Homogeneous lyophilisate

Direction: Suspend **23,5 g of Perfringens (OPSP) Agar Base (POB20500)** in 500 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the contents of **one vial each of Perfringens Selective Supplements, OPSP, A + B (POS80004)** both reconstituted with 4 ml of sterile distilled water. Mix well before pouring.

FORMULA [mg/vial]

Perfringens Selective Supplement, OPSP, A	
Polymyxin B	0,80
Oleandomycin	0,25

Perfringens Selective Supplement, OPSP, B

Sulfadiazine	50,00
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Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

III. SUPPLEMENTS

PERFRINGENS SELECTIVE SUPPLEMENT, SFP

FOR 500 ml OF SFP AGAR

Freeze-dried mixture for the isolation of *Clostridium perfringens*.

Description

Code Number:	4 ml: PFS80004
Colour:	White
Appearance:	Homogeneous lyophilisate

Direction for SFP Agar: Suspend 22,5 g of Perfringens (TSC + SFP) Agar Base (PAB20500) in 470 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically 25 ml of Sterile Egg Yolk Emulsion (EYE80025) and the contents of one vial of Perfringens Selective Supplement, SFP (PFS80004) reconstituted with 4 ml of sterile distilled water. Mix well before pouring.

Direction for Egg Yolk Free SFP Agar: Suspend 22,5 g of Perfringens (TSC + SFP) Agar Base (PAB20500) in 500 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the contents of one vial of Perfringens Selective Supplement, SFP (PFS80004) reconstituted with 4 ml of sterile distilled water. Mix well before pouring.

FORMULA [mg/vial]

Kanamycin	6,0
Polymyxin B	2,5

Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

PERFRINGENS SELECTIVE SUPPLEMENT, TSC

FOR 500 ml OF TSC AGAR

Freeze-dried mixture for the isolation of *Clostridium perfringens*.

Description

Code Number:	4 ml: PSS80004
Colour:	White
Appearance:	Homogeneous lyophilisate

Direction for TSC Agar: Suspend 22,5 g of Perfringens (TSC + SFP) Agar Base (PAB20500) in 470 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically 25 ml of Sterile Egg Yolk Emulsion (EYE80025) and the contents of one vial of Perfringens Selective Supplement, TSC (PSS80004) reconstituted with 4 ml of sterile distilled water. Mix well before pouring.

Direction for Egg Yolk Free TSC Agar: Suspend 22,5 g of Perfringens (TSC + SFP) Agar Base (PAB20500) in 500 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the contents of one vial of Perfringens Selective Supplement, TSC (PSS80004) reconstituted with 4 ml of sterile distilled water. Mix well before pouring.

FORMULA [mg/vial]

D-Cycloserine	200
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Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

PHENYLETHANOL SUPPLEMENT

FOR THE PREPARATION OF 12 LITRE OF PEA AGAR

Phenylethanol (2-Phenylethyl alcohol) for the preparation of Phenylethyl Alcohol (PEA) Agar.

Description

Code Number:	30 ml: PEE80030
Colour:	Water clear
Appearance:	Transparent solution

Direction: Suspend 45 g of Phenylethyl Alcohol (PEA) Agar Base (PED20500) in 950 ml of distilled water and heat with frequent agitation until the medium boils well. Add 2,5 ml of Phenylethanol Supplement (PEE80030). Mix well and sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically 50 ml of sterile defibrinated sheep blood. Mix well before pouring.

FORMULA

Phenylethanol	30 ml
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Storage conditions: Protected from light, at room temperature.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

POTASSIUM TELLURITE SOLUTION, STERILE

FOR THE PREPARATION OF 3,3 OR 10 LITRE OF G-C BROTH
FOR THE PREPARATION OF 10 OR 30 LITRE OF V-J AGAR

A potassium tellurite solution for the preparation of the above media.

Description

Code Number:	10 ml: PTS80010, 30 ml: PTS80030
Colour:	Water clear
Appearance:	Transparent solution

Direction for Giolitti-Cantoni Broth: Suspend 27 g of Giolitti-Cantoni Broth Base in 500 ml of distilled water and heat gently to dissolve the medium completely. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically 30 drops (1,5 ml) of Potassium Tellurite Solution, Sterile (PTS80030). Mix well and dispense aseptically into sterile final containers.

Direction for Vogel-Johnson Agar: Suspend 30 g of Vogel-Johnson Agar Base in 500 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically 10 drops (0,5 ml) of Potassium Tellurite Solution, Sterile (PTS80030). Mix well before pouring.

FORMULA

Potassium tellurite	18 %
Solvent	Distilled water

Storage conditions: Protected from light, at 2–8 °C.

III. SUPPLEMENTS

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

PSEUDOMONAS SELECTIVE SUPPLEMENT, CFC

FOR 500 ml OF CETRIMIDE (CN) AGAR No.2

Freeze-dried mixture for the isolation of *Pseudomonas aeruginosa*.

Description

Code Number: **4 ml: CFC80004**
 Colour: **White**
 Appearance: **Homogeneous lyophilisate**

Direction: Suspend **25 g Cetrime (CN) Agar Base No.2 (CCT20500)** in 500 ml of distilled water. Add **5 ml of Glycerol Supplement (GLC80100)** and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the content of **one vial of Pseudomonas Selective Supplement, CFC (CFC80004)** reconstituted with 4 ml of sterile distilled water. Mix well before pouring.

FORMULA [mg/vial]

Cefaloridine	25
Cetrimide	5
Fucidin	5

Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

PSEUDOMONAS SELECTIVE SUPPLEMENT, CN

FOR 500 ml OF CETRIMIDE (CN) AGAR No.2

Freeze-dried mixture for the isolation of *Pseudomonas aeruginosa*.

Description

Code Number: **4 ml: PCN80004**
 Colour: **White**
 Appearance: **Homogeneous lyophilisate**

Direction: Suspend **25 g Cetrime (CN) Agar Base No.2 (CCT20500)** in 500 ml of distilled water. Add **5 ml of Glycerol Supplement (GLC80100)** and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the content of **one vial of Pseudomonas Selective Supplement, CN (PCN80004)** reconstituted with 4 ml of sterile distilled water. Mix well before pouring.

FORMULA

Cetrimide	100,0
Nalidixic acid	7,5

Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

NEW PRODUCT

PSEUDOMONAS SELECTIVE SUPPLEMENT, PP

FOR 500 ml OF CETRIMIDE (CN) AGAR No.2

Freeze-dried mixture for the isolation of *Pseudomonas aeruginosa*.

Description

Code Number: **4 ml: PPP80004**
 Colour: **White**
 Appearance: **Homogeneous lyophilisate**

Direction: Suspend **25 g Cetrime (CN) Agar Base No.2 (CCT20500)** in 500 ml of distilled water. Add **5 ml of Glycerol Supplement (GLC80100)** and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the content of **one vial of Pseudomonas Selective Supplement, PP (PPP80004)** reconstituted with 4 ml of sterile distilled water. Mix well before pouring.

FORMULA

Penicillin G	50.000 IU/vial
Pimaricin	5 mg/vial

Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

RAPPAPORT-VASSILIADIS MAGNESIUM CHLORIDE SOLUTION

FOR 500 g OF RAPPAPORT-VASSILIADIS BROTH BASE, PH EUR - USP

A magnesium chloride solution for the preparation of Rappaport-Vassiliadis Broth.

Description

Code Number: **500 ml: RMG81000**
 Colour: **Water clear**
 Appearance: **Transparent solution**

Direction: Fill up **27 ml of Rappaport-Vassiliadis Magnesium Chloride Solution (RMG81000)** to one litre with distilled water. Suspend **13,5 g of Rappaport-Vassiliadis Broth Base (RVB20500)** and heat gently to dissolve the medium completely. Dispense into final containers and sterilise by autoclaving at 115 °C for 15 minutes.

Warning!

The medium is heat sensitive.
 No further sterilisation is necessary or desirable.

FORMULA

Magnesium chloride x 6H ₂ O	953 g/l
Solvent	Distilled water

Storage conditions: Protected from light, at room temperature.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

III. SUPPLEMENTS

NEW PRODUCT

ROSOLIC ACID SUPPLEMENT

FOR 500 ml OF M-FC AGAR OR BROTH

Freeze-dried mixture for the detection and enumeration of faecal coliforms by membrane filtration.

Description

Code Number: **5 ml: RAS80005**
 Colour: **Dark red**
 Appearance: **Homogeneous lyophilisate**

Direction for agar: Suspend **26 g of M-FC Agar Base (MFC20500)** in 500 ml of distilled water and heat with frequent agitation until the medium becomes transparent (about 90 °C). Add the content of **one vial of Rosolic Acid Supplement (RAS80005)** reconstituted with 5 ml of sterile distilled water. Continue heating with frequent agitation until the medium boils well. Mix well before pouring.

Direction for broth: Suspend **18,5 g of M-FC Broth Base (MFB20500)** in 500 ml of distilled water. Add the content of **one vial of Rosolic Acid Supplement (RAS80005)** reconstituted with 5 ml of sterile distilled water. Mix well and heat with frequent agitation until the medium boils well.

Warning!

These media are heat sensitive.
 No further sterilisation is necessary or desirable.

FORMULA [mg/vial]

Rosolic acid	50
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Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

RPMI MOPS SOLUTION, STERILE

FOR THE PREPARATION OF 500 ml OF RPMI MOPS AGAR

Sterile RPMI MOPS solution for the preparation of RPMI MOPS Agar.

Description

Code Number: **100 ml: RGS80100**
 Colour: **Light orange**
 Appearance: **Transparent solution**

Direction: Suspend **17,5 g of RPMI MOPS Agar Base (RPM20500)** in 400 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C. Meanwhile heat gently **100 ml of RPMI MOPS Solution, Sterile (RGS80100)** to 50 °C. Add the supplement aseptically to the agar base. Mix well before pouring.

FORMULA [g/l]

MOPS	34,5
RPMI 1640	10,5

Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

NEW PRODUCT

SALMONELLA PLUS SELECTIVE SUPPLEMENT

FOR 500 ml OF ChromoBio® SALMONELLA PLUS

Freeze-dried mixture for the isolation of *Salmonella* spp.

Description

Code Number: **4 ml: SSP80004**
 Colour: **White**
 Appearance: **Homogeneous lyophilisate**

Direction: Suspend **22,5 g of ChromoBio® Salmonella Plus Base (SAP20500)** in 500 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the contents of **one vial of Salmonella Plus Selective Supplement (SSP80004)** reconstituted with 4 ml sterile distilled water. Mix well before pouring.

FORMULA [mg/vial]

Cefsulodin	6,0
Novobiocin	2,5
Specific inhibitor	1,0

Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

NEW PRODUCT

SALMONELLA SELECTIVE SUPPLEMENT

FOR 500 ml OF ChromoBio® SALMONELLA

Freeze-dried mixture for the isolation of *Salmonella* spp.

Description

Code Number: **4 ml: SSS80004**
 Colour: **White**
 Appearance: **Homogeneous lyophilisate**

Direction: Suspend **21,5 g of ChromoBio® Salmonella Base (SAL20500)** in 500 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the contents of **one vial of Salmonella Selective Supplement (SSS80004)** reconstituted with 4 ml sterile distilled water. Mix well before pouring.

FORMULA [mg/vial]

Cefsulodin	6,0
Novobiocin	2,5

Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

III. SUPPLEMENTS

SELENITE SUPPLEMENT

FOR 500 g OF SELENITE BROTHS

Sodium selenite for preparation of selenite broths.

Description

Code Number:	110 g: SES80110
Colour:	White
Appearance:	Crystalline powder

Direction: Dissolve **4 g of Selenite Supplement (SES80110)** in one litre of distilled water. Suspend **19 g of Selenite Broth Base (SEB20500)** or **Selenite Cystine Broth Base, USP (SCB20500)** or **Selenite Cystine Mannitol Broth Base (SCM20500)** and heat gently to dissolve the medium completely. Dispense into final containers. In case the medium is not getting to use on the day of preparation, sterilise at 100 °C for 10 minutes. Cool quickly. The presence of a small amount of pinkish or brownish precipitate is not detrimental.

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

FORMULA

Sodium selenite (bacteriological grade)	110 g
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Storage conditions: Protected from light, at room temperature.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

SHIGELLA SELECTIVE SUPPLEMENT

FOR 500 ml OF SHIGELLA SELECTIVE BROTH

Freeze-dried mixture for the selective enrichment of *Shigella* spp.

Description

Code Number:	4 ml: SBS80004
Colour:	White
Appearance:	Homogeneous lyophilisate

Direction: Suspend **15 g Shigella Broth Base (SHB20500)** in 500 ml of distilled water and heat gently to dissolve the medium completely. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the contents of **one vial of Shigella Selective Supplement (SBS80004)** reconstituted with 4 ml of sterile distilled water. Mix well and dispense aseptically into sterile test tubes.

FORMULA [mg/vial]

Cefsulodin	20,0
Novobiocin	0,3

Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

SODIUM METABISULPHITE SOLUTION, STERILE

FOR THE PREPARATION OF 10 OR 30 LITRE OF MEDIA

Sodium metabisulphite solution for the differentiation of *Clostridium* spp.

Description

Code Number:	10 ml: SMS80010, 30 ml: SMS80030
Colour:	Yellow
Appearance:	Transparent solution

Direction: Prepare 500 ml of sterile medium base from one of the dehydrated medium bases for the detection of *Clostridium* spp. (e.g. RCM-DRCM Medium Base, Lactose Sulphite Medium Base etc.) according to the direction of the given medium. Cool to 50 °C and add aseptically **10 drops (0,5 ml) of Sodium Metabisulphite Solution, Sterile (SMS80030)** and **10 drops (0,5 ml) of Ferric Ammonium Citrate Solution, Sterile (FAC80030)**. Mix well before pouring.

FORMULA

Sodium metabisulphite	60 %
Solvent	Distilled water

Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

STAPH/STREP SELECTIVE SUPPLEMENT

FOR 500 ml OF COLUMBIA CNA AGAR FOR 500 ml OF TODD-HEWITT SELECTIVE BROTH

Freeze-dried mixture for the isolation of *Staphylococcus* and *Streptococcus* spp.

Description

Code Number:	4 ml: SHS80004
Colour:	White
Appearance:	Homogeneous lyophilisate

Direction of Columbia CNA Agar: Suspend **42 g Columbia Blood Agar Base (COL20500)** in 950 ml of distilled water and boil to dissolve the medium completely. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically **50 ml of sterile defibrinated sheep blood** and the contents of **one vial of Staph/Strep Selective Supplement (SHS80004)** reconstituted with 4 ml of sterile distilled water. Mix well before pouring.

Direction of Todd-Hewitt Selective Broth: Suspend **18,5 g of Todd-Hewitt Broth (THB20500)** in 500 ml of distilled water and heat gently to dissolve the medium completely. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the contents of **one vial of Staph/Strep Selective Supplement (SHS80004)** reconstituted with 4 ml of sterile distilled water. Mix well and dispense aseptically into sterile final containers.

FORMULA [mg/vial]

Nalidixic acid	7,5
Colistin	5,0

Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

III. SUPPLEMENTS

STERILE EGG YOLK EMULSION

FOR 500 ml TO 2000 ml OF AGARS

Sterile, stabilised emulsion of egg yolk for the identification of *Clostridium*, *Bacillus* or *Staphylococcus* spp. on the basis of their lipase activity.

Description

Code Number:	25 ml: EYE80025, 50 ml: EYE80050, 100 ml: EYE80100
Colour:	Yellow
Appearance:	Homogeneous emulsion

Direction: Prepare 475 ml (appropriate powder quantity for 500 ml medium and 475 ml distilled water) of sterile medium base from one of the dehydrated medium bases for the detection of *Clostridium*, *Bacillus* or *Staphylococcus* spp. (e.g. *Perfringens* Agar Base etc.) according to the direction of the given medium. Cool to 50 °C and add aseptically 25 ml of Sterile Egg Yolk Emulsion (EYE80025). Mix well before pouring.

FORMULA

Egg yolk	50 %
Solvent	Physiological salt solution

Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

STERILE EGG YOLK POLYMYXIN (PREP) EMULSION

FOR PREPARATION OF 0,5 OR 1 LITRE OF BACILLUS CEREUS (PREP) AGAR

Sterile, stabilised emulsion of egg yolk containing polymyxin B for the identification of *Bacillus* spp. on the basis of their lipase activity.

Description

Code Number:	50 ml: EYP80050-02 100 ml: EYP80100-02
Colour:	Yellow
Appearance:	Homogeneous emulsion

Direction: Suspend 46 g of *Bacillus Cereus* (PREP) Agar Base (BPR20500) in 900 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically 100 ml of Sterile Egg Yolk Polymyxin (PREP) Emulsion (EYP80100-02). Mix well before pouring.

FORMULA OF 50 ml SUPPLEMENT

Egg yolk	50 %
Polymyxin B	8 mg
Solvent	Physiological salt solution

Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

STERILE EGG YOLK POLYMYXIN (PEMBA) EMULSION

FOR PREPARATION OF 0,5 OR 1 LITRE OF BACILLUS CEREUS (PEMBA) AGAR

Sterile, stabilised emulsion of egg yolk containing polymyxin B for the identification of *Bacillus* spp. on the basis of their lipase activity.

Description

Code Number:	25 ml: EYP80025-01 50 ml: EYP80050-01
Colour:	Yellow
Appearance:	Homogeneous emulsion

Direction: Suspend 40 g of *Bacillus Cereus* (PEMBA) Agar Base (BCA20500) in 950 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically 50 ml of Sterile Egg Yolk Polymyxin (PEMBA) Emulsion (EYP80050-01). Mix well before pouring.

FORMULA OF 50 ml SUPPLEMENT

Egg yolk	50 %
Polymyxin B	16 mg
Solvent	Physiological salt solution

Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

STERILE EGG YOLK TELLURITE EMULSION

FOR 500 ml TO 2000 ml OF BAIRD-PARKER AGAR OR BROTH

Sterile, stabilised emulsion of egg yolk containing potassium tellurite for the isolation and presumptive identification of coagulase positive staphylococci.

Description

Code Number:	25 ml: EYT80025, 50 ml: EYT80050, 100 ml: EYT80100
Colour:	Yellow
Appearance:	Homogeneous emulsion

Direction for agar: Suspend 60 g of Baird-Parker Agar Base (BPA20500) in 950 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically 50 ml of Sterile Egg Yolk Tellurite Emulsion (EYT80050). Mix well before pouring.

Direction for broth: Suspend 43 g of Baird-Parker Broth Base (BBR20500) in 950 ml of distilled water and heat gently to dissolve the medium completely. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically 50 ml of Sterile Egg Yolk Tellurite Emulsion (EYT80050). Mix well and dis-pense aseptically into sterile final containers.

FORMULA OF 50 ml SUPPLEMENT

Egg yolk	50 %
Potassium tellurite	100 mg
Solvent	Physiological salt solution

Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

III. SUPPLEMENTS

SULPHAMANDELATE SELECTIVE SUPPLEMENT

FOR 500 ml OF BRILLIANT GREEN AGAR, MODIFIED

Freeze-dried mixture for the isolation of *Salmonella* spp.

Description

Code Number:	4 ml: SUS80004
Colour:	White
Appearance:	Homogeneous lyophilisate

Direction: Suspend 26,5 g of Brilliant Green Agar Base, Modified (BGM20500) in 500 ml of distilled water and heat with frequent agitation until the medium boils well. Cool quickly to 50 °C and add aseptically the contents of one vial of Sulphamandelate Selective Supplement (SUS80004) reconstituted with 4 ml of sterile distilled water. Mix well before pouring.

Warning!

The medium is heat sensitive.
No further sterilisation is necessary or desirable.

FORMULA [mg/vial]

Sodium sulfacetamide	500
Sodium mandelate	125

Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

TETRATHIONATE IODINE-IODIDE SELECTIVE SUPPLEMENT

FOR 500 ml OF TETRATHIONATE BROTHS

Dehydrated mixture for the preparation of tetrathionate broths.

Description

Code Number:	10 ml: TTS80010
Colour:	Brown
Appearance:	Homogeneous powder

Direction: Suspend the appropriate quantity of one of the tetrathionate broth bases in 500 ml of distilled water and heat gently to dissolve the medium completely. Cool to 50 °C and add aseptically the contents of one vial of Tetrathionate Iodine-Iodide Selective Supplement (TTS80010) reconstituted with 10 ml of sterile distilled water. If necessary, add the other relevant supplement. Mix well and dispense aseptically into sterile test tubes.

Warning!

The medium is heat sensitive.
Do not heat after the addition of the supplement.
It is recommended to use the complete medium on the day of preparation.

FORMULA [g/vial]

Iodine	3,0
Potassium iodide	2,5

Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

TRIBUTYRIN SUPPLEMENT

FOR 500 g OF TRIBUTYRIN AGAR BASE

Tributyryn (1,2,3-Tributyrylglycerol) for preparation of Tributyrin Agar.

Description

Code Number:	250 ml: TRS80250
Colour:	Water clear
Appearance:	Transparent

Direction: Suspend 20 g of Tributyrin Agar Base (TRA20500) in one litre of distilled water. Add 10 ml of Tributyrin Supplement (TRS80250) and mix until homogeneous. Heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C with frequent agitation and pour plates immediately to solidify quickly.

Warning!

The ready medium must be homogeneous turbid gel!

FORMULA

Tributyryn (bacteriological grade)	250 ml
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Storage conditions: Protected from light, at room temperature.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

TRICHOMONAS SELECTIVE SUPPLEMENT

FOR 500 ml OF TRICHOMONAS MEDIA

Freeze-dried mixture for the cultivation of *Trichomonas vaginalis*.

Description

Code Number:	4 ml: TSS80004
Colour:	White
Appearance:	Homogeneous lyophilisate

Direction for Trichomonas (CPLM) Medium, Modified: Suspend 17,5 g of Trichomonas (CPLM) Medium Base, Modified (CPL20500) in 425 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the contents of one vial of Trichomonas Selective Supplement (TSS80004) reconstituted with 4 ml of sterile distilled water and 70 ml of sterile inactivated (i.e. serum held at 56 °C for 30 minutes) and pH adjusted (6,0) horse serum. Mix well and dispense aseptically into sterile test tubes.

Direction for Trichomonas Medium: Suspend 18,5 g of Trichomonas Medium Base (TRM20500) in 455 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the contents of one vial of Trichomonas Selective Supplement (TSS80004) reconstituted with 4 ml of sterile distilled water and 40 ml of sterile inactivated (i.e. serum held at 56 °C for 30 minutes) and pH adjusted (6,4) horse serum. Mix well and dispense aseptically into sterile test tubes.

FORMULA [mg/vial]

Streptomycin	500
Penicillin	80

Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

III. SUPPLEMENTS

TRITON X-100 SUPPLEMENT

FOR 100 OR 500 LITRE OF A-1 BROTH

TRITON X-100 (Octylphenol ethylene oxide condensate) for preparation of A-1 Broth.

Description

Code Number:	100 ml: TXS80100, 500 ml: TXS80500
Colour:	Colourless or slightly yellowish
Appearance:	Transparent

Direction: Suspend **31 g of A-1 Broth Base (A1B20500)** in one litre of distilled water. Add **1 ml of Triton X-100 Supplement (TXS80100)**. Mix well and heat gently to dissolve the medium completely. Dispense into test tubes fitted with Durham tube and sterilise by autoclaving at 121 °C for 15 minutes.

FORMULA

TRITON X-100 (bacteriological grade)	TXS80100 - 100 ml
TRITON X-100 (bacteriological grade)	TXS80500 - 500 ml

Storage conditions: Protected from light, at room temperature.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

TTC SOLUTION, STERILE

FOR THE PREPARATION OF 10 OR 30 LITRE OF MEDIA

TTC (2,3,5-Triphenyl-2H-tetrazolium chloride) solution for the preparation of some media.

Description

Code Number:	10 ml: TTC80010, 30 ml: TTC80030
Colour:	Water clear
Appearance:	Transparent solution

Direction: Prepare 500 ml of sterile medium base from one of the dehydrated medium bases for the detection of enterococci or coliforms (e.g. CATC Agar Base, KF Streptococcus Agar Base, Slanetz-Bartley Agar Base, Tergitol 7 Agar Base etc.) according to the direction of the given medium. Cool to 50 °C and add aseptically **10 drops (0,5 ml) of TTC Solution, Sterile (TTC80030)**. Mix well before pouring.

FORMULA

TTC	5 %
Solvent	Distilled water

Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

TWEEN 80 SUPPLEMENT

TWEEN 80 (Polyoxyethylene sorbitan monooleate; Polysorbate 80) for the preparation of some media.

Description

Code Number:	100 ml: TWS80100, 500 ml: TWS80500
Colour:	Colourless or slightly yellowish
Appearance:	Transparent, weak precipitation may occur

Direction: Various. See the product information of the relevant media bases.

FORMULA

TWEEN 80 (bacteriological grade)	TWS80100 - 100 ml
TWEEN 80 (bacteriological grade)	TWS80500 - 500 ml

Storage conditions: Protected from light, at room temperature.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

NEW PRODUCT

VANCOMYCIN SUPPLEMENT

Freeze-dried mixture for the supplementation of some media.

Description

Code Number of Vancomycin (3 mg) Supplement:	4 ml: VSS80004-03
Code Number of Vancomycin (13 mg) Supplement:	4 ml: VSS80004-13
Colour:	White
Appearance:	Homogeneous lyophilisate

Direction for Chocolate Agar + Vancomycin: Suspend **18 g of Chocolate Agar Base** in 455 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically **35 ml of sterile defibrinated blood** and “chocolate” by heating at 80 °C for 10 min. Cool to 50 °C. Dissolve the contents of one vial of **Growth Factor Mixture Hydration Fluid** with 5 ml of sterile distilled water and add aseptically to the **Growth Factor Mixture (GFM80005)**. Mix well and add aseptically to the medium. Dissolve the contents of **one vial of Vancomycin (13 mg) Supplement (VSS80004-13)** with 4 ml of sterile distilled water and add aseptically to the above. Mix well before pouring.

Direction for Vancomycin Screen Agar: Suspend **25 g of Brain Heart Infusion Agar** in 500 ml of distilled water and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the contents of **one vial of Vancomycin (3 mg) Supplement (VSS80004-03)** reconstituted with 4 ml of sterile distilled water. Mix well before pouring.

FORMULA

Vancomycin	VSS80004-03 - 3 mg
Vancomycin	VSS80004-13 - 13 mg

Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

III. SUPPLEMENTS

YERSINIA (CIN) SELECTIVE SUPPLEMENT

FOR 500 ml OF YERSINIA AGAR
FOR 500 ml OF YERSINIA BROTH

Freeze-dried mixture for the isolation of *Yersinia enterocolitica*.

Description

Code Number:	4 ml: CIN80004
Colour:	White
Appearance:	Homogeneous lyophilisate

Direction for Yersinia Agar: Suspend **30 g of Yersinia Agar Base (YAB20500)** in 500 ml of distilled wa-ter and heat with frequent agitation until the medium boils well. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the contents of **one vial of Yersinia (CIN) Selective Supplement (CIN80004)** reconstituted with 4 ml of sterile distilled water. Mix well before pouring.

Direction for Yersinia Broth: Suspend **16,5 g of Yersinia Broth Base (YBB20500)** in 500 ml of distilled water and heat gently to dissolve the medium completely. Sterilise by autoclaving at 121 °C for 15 minutes. Cool to 50 °C and add aseptically the contents of **one vial of Yersinia (CIN) Selective Supplement (CIN80004)** reconstituted with 4 ml of sterile distilled water. Mix well and dispense aseptically into sterile test tubes.

FORMULA [mg/vial]

Cefsulodin	7,50
Irgasan	2,00
Novobiocin	1,25

Storage conditions: Protected from light, at 2–8 °C.

Warning!

Use before the expiry date on the label.

In vitro diagnostic – for professional use only!

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