

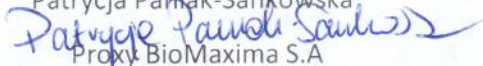
Lublin, 26.09.2024

STATEMENT

We, **BioMaxima s.a** having a registered office in Poland, at Vetterow 5 street, 20-277 Lublin, Poland assign **SRL Sanmedico**, having a registered office at A. Corobceanu street 7A, apt. 9, Chişinău MD-2012, Moldova, as authorized representative in correspondence with the conditions of directive 93/42/EEC, 98/79/EEC and (or) 90/385/EEC.

We declare that the company mentioned above is authorized to register, notify, renew or modify the registration of medical devices on the territory of the Republic of Moldova.

Patrycja Paniak-Sankowska



Proxy BioMaxima S.A

Piotr Janowski



Member of the Board BioMaxima S.A



CERTIFICATE

No. J - 2623/4/2022

This is to certify that:

BioMaxima S.A.
ul. Vetterów 5, 20-277 Lublin

is in conformance with

PN-EN ISO 9001:2015-10

in the following scope of activities:

- **Design, manufacturing, sales and distribution of reagents, tests, microbiological media and systems for in-vitro diagnostics and industrial applications**
- **Distribution of products and service of in vitro diagnostic equipment and industrial applications**

The audit carried out by the Polish Centre for Testing and Certification has afforded evidence of the above.

This Certificate shall remain valid provided that above standard are respected by the Organization.

This certificate is valid:

from **16.09.2022** to **15.09.2025**

Issued under the Contract No. 3009/JM/4/2022

Date of certification decision: 09.09.2022

Certificate bears a qualified signature.

Warsaw, 09.09.2022



AC 019



POLSKIE CENTRUM AKREDYTACJI

POLISH CENTRE FOR ACCREDITATION



Sygnatariusz EA MLA
EA MLA Signatory

CERTYFIKAT AKREDYTACJI

LABORATORIUM BADAWCZEGO

ACCREDITATION CERTIFICATE OF TESTING LABORATORY

Nr AB 1863

Potwierdza się, że: / This is to confirm that:

BioMaxima S.A.
Laboratorium Kontroli Jakości Mikrobiologia
ul. Vetterów 5
20-277 Lublin

spełnia wymagania normy PN-EN ISO/IEC 17025:2018-02
meets requirements of the PN-EN ISO/IEC 17025:2018-02 standard

Akredytowana działalność jest określona w Zakresie Akredytacji Nr AB 1863
Accredited activity is defined in the Scope of Accreditation No AB 1863

Akredytacja pozostaje w mocy pod warunkiem przestrzegania
wymagań jednostki akredytującej określonych w kontrakcie Nr AB 1863
This accreditation remains in force provided the Laboratory observes
the requirements of Accreditation Body defined in the Contract No AB 1863



DYREKTOR
POLSKIEGO CENTRUM AKREDYTACJI

LUCYNA OLBORSKA

Warszawa, 16 czerwca 2023 roku



EU Declaration of Conformity

for In Vitro Diagnostic Medical Devices
according to the Regulation (EU) 2017/746

Manufacturer: BioMaxima S.A., Vetterów 5, 20-277 Lublin, Poland

Product identification: according to the Product List

Conformity route/ Certificate: Annexes I, II and III

Notified Body & Certificate: N/A

Intended purpose: microbiological media and supplements for the cultivation of microorganisms

Classification : Class A, Rule 5

The Basic UDI code - assigned to a group of products

Statement: We herewith under our sole responsibility declare that the mentioned products meet the provisions of the Regulation (EU) 2017/746 and Standards.

The manufacturer is exclusively responsible for the declaration of conformity.

Additional information: N/A

Signed on behalf of BioMaxima S.A.:

Place and date of issue:

Lublin, 2025-01- 20

Name: Henryk Lewczuk

Function: Vice President

A blue ink signature of Henryk Lewczuk.

Name: Patrycja Paniak- Sankowska

Function: Proxy

A blue ink signature of Patrycja Paniak- Sankowska.

EU Declaration of Conformity Product List

Basic UDI	Group of products
59026439APSYR	Dehydrated media
PS 214	Acetamide Medium
PS 98	B.G.A. LAB-AGAR™ acc. to ISO 6579
PS 88	Bile Esculin Azide LAB-AGAR™ acc.to ISO 7899-2
PS 155	Bile Esculin LAB-AGAR™
PS 01	Bismuth Sulfite LAB-AGAR™
PS 159	Blood Free Campylobacter CCDA LAB-AGAR™ Base
PS 02	Blood LAB-AGAR™ Base
PS 205	Blood No 2 LAB-AGAR™ Base
PS 04	Brain Heart Infusion Broth
PS 03	Brain Heart Infusion LAB-AGAR™
PS 137	Brucella Broth
PS 05	Brucella LAB-AGAR™
PS 49	Cetrimide LAB-AGAR™
PS 590	Chromogenic Candida LAB-AGAR™
PS 589	Chromogenic E.coli 0157 LAB-AGAR™
PS 165	Chromogenic Listeria acc.to Ottaviani and Agostii LAB-AGAR™ Base
PS 598	Chromogenic Salmonella LAB-AGAR™
PS 371	Chromogenic Strep B LAB-AGAR™
PS 530	Citrate Christensen LAB-AGAR™
PS 34	CLED LAB-AGAR™
PS 176	Clostridium difficile LAB-AGAR™ Base
PS 190	Columbia CNA LAB-AGAR™
PS 06	Columbia LAB-AGAR™ Base
PS 715E	EMB LAB-AGAR™
PS 716E	EMB Levin LAB-AGAR™
PS 110	Enrichment Broth
PS 41	Eosin Methylene Blue LAB-AGAR™ (EMB)
PS 53	Ewing Malonate Modified Broth
PS 365	Fastidious Anaerobe Broth
PS 364	Fastidious Anaerobe LAB-AGAR™
PS 139	G.C. LAB-AGAR™ Base
PS 182	Haemophilus Test LAB-AGAR™ Base
PS 07	Hektoen LAB-AGAR™
PS 188	Kligler Iron LAB-AGAR™
PS 08	Kligler Iron LAB-AGAR™ acc.to ISO 10273
PS 163	Legionella CYE LAB-AGAR™ Base
PS 104	Listeria acc.to Oxford LAB-AGAR™ Base
PS 102	Listeria acc.to Palcam LAB-AGAR™ Base
PS 241	Lowenstein-Jensen Medium Base
PS 150	Lysine Decarboxylase Broth
PS 10	Mac Conkey LAB-AGAR™
PS 183	Mac Conkey Nr 1 LAB-AGAR™
PS 111	Mac Conkey w/o crystal violet and w/o sodium chloride LAB-AGAR™

PS 186	Mannitol Salt acc.to Chapman LAB-AGAR™
PS 13	Mannitol Salt LAB-AGAR™
PS 525	Motility LAB-AGAR™
PS 59	MRS LAB-AGAR™
PS 92	MRVP Medium
PS 79	Mueller Hinton 2 LAB-AGAR™
PS 15	Mueller Hinton Broth
PS 90	Nutrient Broth
PS 85	Nutrient LAB-AGAR™
PS 127	Peptone Water
PS 62	Phenylalanine LAB-AGAR™
PS 583	Ringer Solution 1/4 Strength
PS 233	RPMI MOPS LAB-AGAR™ BASE
PS 227	Sabouraud 2% Dex. w. Chloramphenicol LAB-AGAR™
PS 547	Sabouraud Dextrose 2% LAB -AGAR™
PS 146	Sabouraud Dextrose Broth
PS 16	Sabouraud Dextrose LAB-AGAR™
PS 32	Sabouraud Dextrose w. Chloramphenicol LAB-AGAR™
PS 94	Sabouraud Dextrose w. Chloramphenicol and Cycloheximide LAB-AGAR™
PS 248	Sabouraud Dextrose w. Chloramphenicol and Gentamycine LAB-AGAR™
PS 17	Salmonella Shigella LAB-AGAR™
PS 19	Schaedler Broth
PS 18	Schaedler LAB-AGAR™
PS 20	Simmons Citrate LAB-AGAR™
PS 68	Sodium Selenite Broth
PS 21	Sorbitol Mac Conkey LAB-AGAR™
PS 43	Thioglycollate Fluid Medium
PS 72	Todd Hewitt Broth
PS 44	Triple Sugar Iron LAB-AGAR™
PS 23	Trypticasein Soy Broth (TSB)
PS 22	Trypticasein Soy LAB-AGAR™ (TSA)
PS 132	Tryptophan Culture Broth
PS 593	Urea Broth
PS 506	Urea Broth Base
PS 134	Urea Indol Broth
PS 24	Urea LAB-AGAR™ Base
PS 529	Urea Modified Broth
PS 45	XLD LAB-AGAR™
PS 145	Yersinia Selective LAB-AGAR™ Base

59026439ASLYL	Supplements and Reagents
SL 0135	0,5M EDTA
SL 0004	Brucella Supplement
SL 0005	Campylobacter CCDA Selective Supplement
SL 0006	Campylobacter Selective Supplement Skirrow

SL 0001	Chromogenic Listeria Set Supplement acc. to ISO 11290
SL 0048	Clostridium difficile Selective Supplement
SL 0160	Defibrinated Sheep Blood
SL 0150	Defibrinated Horse Blood
SL 0035	Egg's Yolk Sterile Emulsion
SL 0054	Haemophilus Test Supplement
SL 0116	Horse Serum
SL 0153	Kovac's reagent
SL 0046	Legionella BCYE Supplement w/o Cysteine
SL 0047	Legionella BCYE Supplement w/o Cysteine
SL 0017	Legionella CYE Growth Supplement
SL 0053	Legionella CYE Supplement with Cysteine
SL 0018	Legionella GVPC Supplement
SL 0081	Listeria Modified acc. to Oxford Supplement
SL 0021	Listeria Selective acc. to Oxford Supplement
SL 0022	Listeria Selective acc. to Palcam Supplement
SL 0136	Phenylboronic Acid
SL 0112	Ringer Tablets
SL 0061	Salmonella Chromogenic Supplement
SL 0061 A	Salmonella Chromogenic Supplement
SL 0039	Trichomonas Selective Supplement
SL 0044	Yersinia CIN Supplement

59026439ADPXF	Dip -slide
DP 12	CLED LAB-AGAR™ / Mac CONKEY LAB-AGAR™

59026439APPYK	Ready to use media on plates
PP 1111	Azide Blood LAB-AGAR™ + 5% SB
PP 1360	BGA LAB-AGAR™ acc. to ISO 6579
PP 0011	BHI LAB-AGAR™ + 6mg /l Vancomycin
PP 0125	BHI LAB-AGAR™ + Potassium Tellurite
PP 1075	Bile Esculin Azide LAB-AGAR™
PP 0019	Bile Esculin LAB-AGAR™
PP 1040	Bismuth Sulfite LAB-AGAR™
PP 1110	Blood LAB-AGAR™ + 5% SB
PP 0015	Blood No 2 LAB-AGAR™ + 5% SB
PP 0007	Brain Heart Infusion LAB-AGAR™
PP 0120	Brucella LAB-AGAR™ + 5% HB
PP 0082	Brucella LAB-AGAR™ + 5% SB + vit. K + Hemine
PP 0066	Burkholderia cepacia LAB-AGAR™
PP 0017	CCDA LAB-AGAR™
PP 1310	Cetrimide LAB-AGAR™
PP 0053	Chocolate 2 LAB-AGAR™ + PV (AB)
PP 0075	Chocolate 3 LAB-AGAR™ + PV (ABV)
PP 1080	Chocolate LAB-AGAR™ + PV
PP 1261	Chocolate LAB-AGAR™ + PV + Bacitracin

PP 1082	Chocolate LAB-AGAR™ + PV + VCAT
PP 1083	Chocolate LAB-AGAR™ + PV + VCN
PP 0028	Chromagar™ Salmonella PLUS LAB-AGAR™
PP 2100	Chromogenic Acinetobacter LAB-AGAR™
PP 0139	Chromogenic Acinetobacter MDR LAB-AGAR™
PP 0137	Chromogenic C. difficile LAB-AGAR™
PP 0201	Chromogenic C. perfringens LAB-AGAR™
PP 0202	Chromogenic C3GR LAB-AGAR™
PP 0163	Chromogenic Campylobacter LAB-AGAR™
PP 0001B	Chromogenic Candida LAB-AGAR™
PP 0255	Chromogenic Candida Plus LAB-AGAR™
PP 0239	Chromogenic COL-APSE LAB-AGAR™
PP 0041	Chromogenic E. coli O157 LAB-AGAR™
PP 0143	Chromogenic E. coli STEC LAB-AGAR™
PP 0155	Chromogenic ESBL Mod. LAB-AGAR™
PP 0157	Chromogenic KPC Mod. LAB-AGAR™
PP 0286	Chromogenic LIN-R LAB-AGAR™
PP 5009	Chromogenic Listeria LAB-AGAR™ acc. ISO 11290
PP 0166	Chromogenic Listeria LAB-AGAR™ acc. ISO 11290 (140 mm)
PP 0043	Chromogenic MRSA Modified LAB-AGAR™
PP 0206	Chromogenic Orientation LAB-AGAR™
PP 0045	Chromogenic S. aureus Modified LAB-AGAR™
PP 0115	Chromogenic Salmonella LAB-AGAR™
PP 0104	Chromogenic Strepto B LAB-AGAR™
PP 0198	Chromogenic Super Carba LAB-AGAR™
PP 0204	Chromogenic UTI LAB-AGAR™
PP 0246	Chromogenic VRE LAB-AGAR™
PP 0074	Chromogenic VRE LAB-AGAR™
PP 0144	Chromogenic Yersinia LAB-AGAR™
PP 1030	CLED LAB-AGAR™
PP 0004	Clostridium difficile LAB-AGAR™
PP 0242	Columbia CAP LAB-AGAR™ + 5% SB
PP 1191	Columbia CNA LAB-AGAR™ + 5% SB
PP 0020	Columbia LAB-AGAR™ + 5% HB
PP 1190	Columbia LAB-AGAR™ + 5% SB
PP 0211	Columbia LAB-AGAR™ + 5% SB + CV
PP 0051	Dermatophytes LAB-AGAR™
PP 1011	Eosin Methylene Blue LAB-AGAR™
PP 0270	Fastidious Anaerobe LAB-AGAR™ +5% HB
PP 0271	Fastidious Anaerobe LAB-AGAR™ +5% HB (120 mm)
PP 0272	Fastidious Anaerobe LAB-AGAR™ +5% HB (140 mm)
PPK 0270	Fastidious Anaerobe LAB-AGAR™ +5% HB (120 mm square)
PP 0005	Gardnerella vaginalis LAB-AGAR™
PP 1260	Haemophilus Test Medium (HTM)
PP 1060	Hektoen LAB-AGAR™
PP 0022	Karmali LAB-AGAR™

PP 0178	Legionella BCYE + AB LAB-AGAR™
PP 0026	Legionella BCYE LAB-AGAR™
PP 0025	Legionella GVPC LAB-AGAR™
PP 0179	Legionella MWY LAB-AGAR™
PP 0027	Legionella without Cysteine LAB-AGAR™
PP 1017	Mac Conkey LAB-AGAR™
PP 1050	Mannitol Salt LAB-AGAR™
PP 0023	MRS LAB - AGAR™
PP 1170	Mueller Hinton 2 LAB-AGAR™
PP 0016	Mueller Hinton 2 LAB-AGAR™
PP 0016K	Mueller Hinton 2 LAB-AGAR™ (120 mm square)
PP 0033	Mueller Hinton 2 LAB-AGAR™
PP 0077	Mueller Hinton 2 LAB-AGAR™ + 2% NaCl
PP 1172	Mueller Hinton 2 LAB-AGAR™ + 5% SB
PP 0018	Mueller Hinton 2 LAB-AGAR™ + 5% SB
PP 0073	Mueller Hinton 2 LAB-AGAR™ + Cloxacillin
PP 0083	Mueller Hinton 2 LAB-AGAR™ + NAD + 5% HB
PP 0092	Mueller Hinton 2 LAB-AGAR™ + NAD + 5% HB
PP 0006	Mueller Hinton LAB-AGAR™ + 4% NaCl + Oxacillin
PP 0105	Mueller Hinton LAB-AGAR™ + Glucose + Methylene Blue
PP 1503	Nutrient LAB-AGAR™
PP 0128	ORSIM LAB-AGAR™
PP 1292	Oxford Listeria LAB-AGAR™
PP 1502	Palcam Listeria LAB-AGAR™
PP 0095	RPMI MOPS LAB-AGAR™
PP 0124	RPMI MOPS LAB-AGAR™
PP 1230	Sabouraud Dextrose LAB-AGAR™
PP 0021	Sabouraud Dextrose with Chloramphenicol and Cycloheximide LAB-AGAR™
PP 1232	Sabouraud Dextrose with Chloramphenicol and Gentamicin LAB-AGAR™
PP 1231	Sabouraud Dextrose with Chloramphenicol LAB-AGAR™
PP 1250	Salmonella Shigella LAB-AGAR™
PP 0002	Schaedler Anaerobe LAB-AGAR™
PP 0012	Schaedler Anaerobe LAB-AGAR™ + 5% SB
PP 0223	Schaedler Anaerobe LAB-AGAR™ + 5% SB + vit. K1
PP 0003	Schaedler Anaerobe LAB-AGAR™ + 5% SB + vit. K3
PP 0039	Schaedler LAB-AGAR™ + 5% SB + CNA
PP 0014	Schaedler LAB-AGAR™ + 5% SB + K+ VA
PP 0013	Schaedler LAB-AGAR™ + 5% SB + VA + NEO
PP 1021	Sorbitol Mac Conkey LAB-AGAR™
PP 1180	Trypticasein Soy LAB-AGAR™
PP 0118	Trypticasein Soy LAB-AGAR™
PP 1330	XLD LAB-AGAR™
PP 1090	Yersinia CIN LAB-AGAR™
PD 001	Blood LAB-AGAR™ + 5% SB / Mac Conkey LAB-AGAR™
PD 017	Chromogenic Candida LAB-AGAR™ / Sabouraud Dext. LAB-AGAR + Ge + C
PD 042	Chromogenic ESBL LAB-AGAR™ / Chromogenic VRE LAB-AGAR™

PD 081	Chromogenic KPC LAB-AGAR™ / Chromogenic VRE LAB-AGAR™
PD 100	Chromogenic KPC LAB-AGAR™ / Chromogenic SUPER CARBA LAB-AGAR™
PD 091	Chromogenic KPC LAB-AGAR™ / Mac Conkey LAB-AGAR™
PD 041	Chromogenic S. aureus LAB-AGAR™ / Chromogenic MRSA LAB-AGAR™
PD 023	Chromogenic Salmonella / XLD LAB-AGAR™
PD 025	Chromogenic URI LAB-AGAR™ / Columbia CNA LAB-AGAR™ + 5% SB
PD 011	Columbia CNA LAB-AGAR™ + 5% KB / Mac Conkey LAB-AGAR™
PD 032	Columbia LAB-AGAR™ + 5% SB / Columbia LAB-AGAR™ + 5% SB
PD 014	Columbia LAB-AGAR™ + 5% SB / Mac Conkey LAB-AGAR™
PD 094	Mac Conkey LAB-AGAR™ / Chromogenic Orientation LAB-AGAR™
PD 043	Sabouraud Dextr. w. Chloramph. LAB-AGAR™ / Sabouraud Dextr. w. Actidione LAB-AGAR™
PD 077	Sabouraud LAB-AGAR™ / Chromogenic Candida LAB-AGAR™
PD 076	Sabouraud LAB-AGAR™ + Chloramphenicol / Fungisel LAB-AGAR™
PD 021	Schaedler LAB-AGAR™ + 5% SB / Schaedler LAB-AGAR™ + 5% SB + K + VA
PD 022	Schaedler LAB-AGAR™ + 5% SB / Schaedler LAB-AGAR™ + 5% SB + NEO + VA
PD 006	SS LAB-AGAR™ / Bismuth Sulfite LAB-AGAR™
PD 093	Schaedler LAB-AGAR™ + 5% SB + CNA/ Schaedler LAB-AGAR™ + 5% SB + K+ VA
PD 019	SS LAB-AGAR™ / Hektoen LAB-AGAR™
PD 037	SS LAB-AGAR™ / XLD LAB-AGAR™

59026439ABTXH	Ready to use media in bottles
BT 5054.01	0,85% Sodium Chloride
BT 5054.02	0,85% Sodium Chloride
BT 5054.05	0,85% Sodium Chloride
BT 5045.01	0,9% Sodium Chloride
BT 5045.02	0,9% Sodium Chloride
BT 5045.05	0,9% Sodium Chloride
BT 5052.01	10% Lactose Broth
BT 5052.02	10% Lactose Broth
BT 5052.05	10% Lactose Broth
BT 5214.01	Acetamide Medium
BT 5214.02	Acetamide Medium
BT 5214.05	Acetamide Medium
BT 5053.01	Arabinose Broth
BT 5053.05	Arabinose Broth
BT 5049.01	Arginine acc. to Falcow Broth
BT 5049.02	Arginine acc. to Falcow Broth
BT 5096.05	BGA LAB-AGAR™ acc. to ISO 6579
BT 5096.01	BGA LAB-AGAR™ acc. to ISO 6579
BT 5096.02	BGA LAB-AGAR™ acc. to ISO 6579
BT 5088.01	Bile Esculin Azide LAB-AGAR™

BT 5088.02	Bile Esculin Azide LAB-AGAR™
BT 5088.05	Bile Esculin Azide LAB-AGAR™
BT 5271.01	Bile salts (2% Sodium deoxycholate)
BT 5003.01	Bismuth Sulfite LAB-AGAR™
BT 5003.02	Bismuth Sulfite LAB-AGAR™
BT 5034.01	Blood LAB-AGAR™ Base
BT 5034.02	Blood LAB-AGAR™ Base
BT 5034.05	Blood LAB-AGAR™ Base
BT 5008.01	Brain Heart Infusion Broth
BT 5008.02	Brain Heart Infusion Broth
BT 5008.05	Brain Heart Infusion Broth
BT 5122.01	Cetrimide LAB-AGAR™
BT 5122.02	Cetrimide LAB-AGAR™
BT 5122.05	Cetrimide LAB-AGAR™
BT 5017.01	Chocolate LAB-AGAR™
BT 5017.02	Chocolate LAB-AGAR™
BT 5017.05	Chocolate LAB-AGAR™
BT 5222.01	Chromogenic Candida LAB-AGAR™
BT 5222.02	Chromogenic Candida LAB-AGAR™
BT 5344.01	Chromogenic Candida Plus LAB-AGAR™
BT 5344.02	Chromogenic Candida Plus LAB-AGAR™
BT 5344.05	Chromogenic Candida Plus LAB-AGAR™
BT 5071.01	Chromogenic E.coli O157 LAB-AGAR™
BT 5071.02	Chromogenic E.coli O157 LAB-AGAR™
BT 5276.01	Chromogenic Orientation LAB-AGAR™
BT 5276.02	Chromogenic Orientation LAB-AGAR™
BT 5276.05	Chromogenic Orientation LAB-AGAR™
BT 5072.01	Chromogenic Salmonella LAB-AGAR™
BT 5072.02	Chromogenic Salmonella LAB-AGAR™
BT 5072.05	Chromogenic Salmonella LAB-AGAR™
BT 5042.01*	Citrate Christensen LAB -AGAR™
BT 5042.02*	Citrate Christensen LAB -AGAR™
BT 5102.01	CLED LAB-AGAR™
BT 5102.02	CLED LAB-AGAR™
BT 5102.05	CLED LAB-AGAR™
BT 5011.01	Columbia LAB-AGAR™ Base
BT 5011.02	Columbia LAB-AGAR™ Base

BT 5011.05	Columbia LAB-AGAR™ Base
BT 5043.01*	Dulcitol Broth
BT 5043.05*	Dulcitol Broth
BT 5001.01	Eosin Methylene Blue LAB-AGAR™
BT 5001.02	Eosin Methylene Blue LAB-AGAR™
BT 5001.05	Eosin Methylene Blue LAB-AGAR™
BT 5018.01	Ewing Malonate Modified Broth
BT 5018.02	Ewing Malonate Modified Broth
BT 5018.05	Ewing Malonate Modified Broth
BT 5111.01	Hektoen LAB-AGAR™
BT 5111.02	Hektoen LAB-AGAR™
BT 5111.05	Hektoen LAB-AGAR™
BT 5006.01	Kligler LAB-AGAR™
BT 5006.02	Kligler LAB-AGAR™
BT 5006.05	Kligler LAB-AGAR™
BT 5050.01	Lysine acc. to Falkow Broth
BT 5050.02	Lysine acc. to Falkow Broth
BT 5050.05	Lysine acc. to Falkow Broth
BT 5010.01	Mac Conkey LAB-AGAR™
BT 5010.02	Mac Conkey LAB-AGAR™
BT 5010.05	Mac Conkey LAB-AGAR™
BT 5137.01	Mac Conkey No 1 LAB-AGAR™
BT 5137.02	Mac Conkey No 1 LAB-AGAR™
BT 5137.05	Mac Conkey No 1 LAB-AGAR™
BT 5104.01	Mannitol Salt LAB-AGAR™ (Chapman)
BT 5104.02	Mannitol Salt LAB-AGAR™ (Chapman)
BT 5104.05	Mannitol Salt LAB-AGAR™ (Chapman)
BT 5026.01	Motility LAB-AGAR™
BT 5026.02	Motility LAB-AGAR™
BT 5026.05	Motility LAB-AGAR™
BT 5031.01	MRS LAB-AGAR™
BT 5031.02	MRS LAB-AGAR™
BT 5031.05	MRS LAB-AGAR™
BT 5036.01	MRVP Medium
BT 5036.02	MRVP Medium
BT 5036.05	MRVP Medium
BT 5002.01	Mueller Hinton 2 LAB-AGAR™

BT 5002.02	Mueller Hinton 2 LAB-AGAR™
BT 5002.05	Mueller Hinton 2 LAB-AGAR™
BT 5055.01	Mueller Hinton Broth
BT 5055.02	Mueller Hinton Broth
BT 5055.05	Mueller Hinton Broth
BT 7012.01	Nutrient Broth
BT 7012.02	Nutrient Broth
BT 7012.05	Nutrient Broth
BT 5126.01	Nutrient LAB-AGAR™
BT 5126.02	Nutrient LAB-AGAR™
BT 5126.05	Nutrient LAB-AGAR™
BT 5116.01	Nutrient S LAB-AGAR™
BT 5116.02	Nutrient S LAB-AGAR™
BT 5116.05	Nutrient S LAB-AGAR™
BT 5046.01	Peptone Water
BT 5046.02	Peptone Water
BT 5046.05	Peptone Water
BT 5029.01	Phenylalanine LAB-AGAR™
BT 5029.02	Phenylalanine LAB-AGAR™
BT 5029.05	Phenylalanine LAB-AGAR™
BT 5105.01	Phosphate Buffered Saline (PBS)(w/o ions Ca / Mg)
BT 5105.02	Phosphate Buffered Saline (PBS)(w/o ions Ca / Mg)
BT 5105.05	Phosphate Buffered Saline (PBS)(w/o ions Ca / Mg)
BT 5140.01	Ringer Solution
BT 5140.02	Ringer Solution
BT 5140.05	Ringer Solution
BT 6000	Ringer Solution
BT 5295.01	RPMI 1640 + NaHCO ₃ + L-Glutamine + Phenol Red
BT 5295.05	RPMI 1640 + NaHCO ₃ + L-Glutamine + Phenol Red
BT 5109.01	Sabouraud 2% Dextrose LAB-AGAR™ with Chloramphenicol
BT 5109.02	Sabouraud 2% Dextrose LAB-AGAR™ with Chloramphenicol
BT 5109.05	Sabouraud 2% Dextrose LAB-AGAR™ with Chloramphenicol
BT 5118.01	Sabouraud 4% Dextrose LAB-AGAR™ with Chloramphenicol
BT 5118.02	Sabouraud 4% Dextrose LAB-AGAR™ with Chloramphenicol
BT 5118.05	Sabouraud 4% Dextrose LAB-AGAR™ with Chloramphenicol
BT 5019.01	Sabouraud Dextrose Broth
BT 5019.02	Sabouraud Dextrose Broth

BT 5019.05	Sabouraud Dextrose Broth
BT 5107.01	Sabouraud Dextrose LAB-AGAR™
BT 5107.02	Sabouraud Dextrose LAB-AGAR™
BT 5107.05	Sabouraud Dextrose LAB-AGAR™
BT 5108.01	Sabouraud Dextrose LAB-AGAR™ with Chloramphenicol
BT 5108.02	Sabouraud Dextrose LAB-AGAR™ with Chloramphenicol
BT 5108.05	Sabouraud Dextrose LAB-AGAR™ with Chloramphenicol
BT 5025.01	Sabouraud Dextrose with Chloramphenicol and Cycloheximide LAB-AGAR™
BT 5025.02	Sabouraud Dextrose with Chloramphenicol and Cycloheximide LAB-AGAR™
BT 5025.05	Sabouraud Dextrose with Chloramphenicol and Cycloheximide LAB-AGAR™
BT 5142.01	Sabouraud Dextrose with Chloramphenicol and Gentamicin LAB-AGAR™
BT 5142.02	Sabouraud Dextrose with Chloramphenicol and Gentamicin LAB-AGAR™
BT 5142.05	Sabouraud Dextrose with Chloramphenicol and Gentamicin LAB-AGAR™
BT 5120.01	Salmonella Shigella LAB-AGAR™
BT 5120.02	Salmonella Shigella LAB-AGAR™
BT 5120.05	Salmonella Shigella LAB-AGAR™
BT 5014.01	Schaedler Broth
BT 5014.02	Schaedler Broth
BT 5014.05	Schaedler Broth
BT 5012.01	Schaedler Broth + vit. K3
BT 5012.02	Schaedler Broth + vit. K3
BT 5012.05	Schaedler Broth + vit. K3
BT 5015.01	Schaedler LAB-AGAR™ + vit. K3
BT 5015.02	Schaedler LAB-AGAR™ + vit. K3
BT 5015.05	Schaedler LAB-AGAR™ + vit. K3
BT 5013.01	Schaedler LAB-AGAR™ Base
BT 5013.02	Schaedler LAB-AGAR™ Base
BT 5013.05	Schaedler LAB-AGAR™ Base
BT 5101.01	Simmons Citrate LAB-AGAR™
BT 5101.02	Simmons Citrate LAB-AGAR™
BT 5101.05	Simmons Citrate LAB-AGAR™
BT 5068.01	Sodium Selenite Broth
BT 5068.02	Sodium Selenite Broth
BT 5068.05	Sodium Selenite Broth
BT 5057.01	Sorbitol Broth
BT 5057.02	Sorbitol Broth
BT 5057.05	Sorbitol Broth

BT 5021.01	Sorbitol MacConkey LAB-AGAR™
BT 5021.02	Sorbitol MacConkey LAB-AGAR™
BT 5021.05	Sorbitol MacConkey LAB-AGAR™
BT 5128.01	Thioglycollate Fluid Medium
BT 5128.02	Thioglycollate Fluid Medium
BT 5128.05	Thioglycollate Fluid Medium
BT 5128.01.BS	Thioglycollate Fluid Medium - septa protective closure
BT 5005.01	Todd Hewitt Broth
BT 5005.02	Todd Hewitt Broth
BT 5005.05	Todd Hewitt Broth
BT 5024.01	Trichomonas Medium
BT 5024.02	Trichomonas Medium
BT 5024.05	Trichomonas Medium
BT 5123.01	Trypticasein Soy Broth
BT 5123.02	Trypticasein Soy Broth
BT 5123.05	Trypticasein Soy Broth
BT 5192	Trypticasein Soy Broth
BT 5000.01	Trypticasein Soy LAB-AGAR™
BT 5000.02	Trypticasein Soy LAB-AGAR™
BT 5000.05	Trypticasein Soy LAB-AGAR™
BT 5030.01	Tryptophan Culture Broth
BT 5030.02	Tryptophan Culture Broth
BT 5028.01	Urea Christensen Broth
BT 5028.02	Urea Christensen Broth
BT 5061.01	Urea Indol Broth
BT 5061.02	Urea Indol Broth
BT 5040.01	Urea Broth Modified acc. to PN-A-04023
BT 5040.02	Urea Broth Modified acc. to PN-A-04023
BT 5040.05	Urea Broth Modified acc. to PN-A-04023
BT 5340.01	Viral Transport Medium (VTM)
BT 5340.02	Viral Transport Medium (VTM)
BT 5340.05	Viral Transport Medium (VTM)
BT 5121.01	XLD LAB-AGAR™
BT 5121.02	XLD LAB-AGAR™
BT 5121.05	XLD LAB-AGAR™
BT 5035.01	Yersinia CIN LAB-AGAR™
BT 5035.02	Yersinia CIN LAB-AGAR™

59026439APWYZ	Ready to use media in tubes
PW 3151	0,85 % Sodium Chloride
PW 3240	0,85 % Sodium Chloride
PW 3145	0,85 % Sodium Chloride
PW 3053	0,85 % Sodium Chloride
PW 3054	0,9% Sodium Chloride
PW 3198	0,9% Sodium Chloride
PW 3088	0,9% Sodium Chloride
PW 3007	10% Lactose Broth
PW 3099	10% Lactose Broth
PW 4214	Acetamide Medium
PW 3274	Arabinose Broth
PW 3046	Arabinose Broth
PW 3184	Arginine acc. to Falkow Broth
PW 3048	Arginine acc. to Falkow Broth
PW 3300	Bile Esculin Azide LAB-AGAR™
PW 3104	Bile Esculin LAB-AGAR™
PW 3327	Bile Salts (2% Sodium deoxycholate)
PW 3015	Brain Heart Infusion Broth
PW 3094	Brain Heart Infusion Broth
PW 3031	Brain Heart Infusion Broth
PW 4202	Brain Heart Infusion Broth
PW 3155	Brain Heart Infusion Broth
PW 3196	Brain Heart Infusion Broth
PW 3294	Brucella Broth + vit. K1
PW 3296	Brucella Broth + vit. K1
PW 3056	Citrate Christensen LAB-AGAR
PW 3059	Dermatophytes LAB-AGAR™
PW 3298	Dermatophytes LAB-AGAR™
PW 3167	Ewing Malonate Broth Modified
PW 3020	Ewing Malonate Broth Modified
PW 3250	Glucose Enrichment Broth
PW 3082S	Glucose Enrichment Broth
PW 3057	Kligler Iron LAB-AGAR™
PW 3116	Kligler Iron LAB-AGAR™
PW 3021	Ksylose Broth
140/T	Lowenstein-Jensen Medium
152/T	Lowenstein-Jensen Medium + PACT
139/T	Lowenstein-Jensen Medium + P
142/T	Lowenstein-Jensen Medium + SM 4
143/T	Lowenstein-Jensen Medium + SM 8
144/T	Lowenstein-Jensen Medium + INH 0,2
145/T	Lowenstein-Jensen Medium + INH 0,4
148/T	Lowenstein-Jensen Medium + RMP 40

149/T	Lowenstein-Jensen Medium + RMP 80
146/T	Lowenstein-Jensen Medium + ETB 2
147/T	Lowenstein-Jensen Medium + ETB 4
PW 3026	Lysine acc.to Falkow Broth
PW 3116	Lysine acc.to Falkow Broth
PW 3023	Motility LAB-AGAR™
PW 3271	Motility LAB-AGAR™
PW 3036	MRVP Medium
PW 3051	Mueller Hinton Broth with Laked Horse Blood
PW 3330	Mueller Hinton II Broth
PW 3041	Mueller Hinton II Broth
PW 3028	Mueller Hinton Broth
PW 3065	Nutrient LAB-AGAR™
PW 3134	Nutrient S LAB-AGAR™
PW 3135	Nutrient S LAB-AGAR™
PW 3074	Peptone Water
PW 3119	Phenylalanine LAB-AGAR™
PW 3352	Phosphate Buffered Saline (PBS) w/o ions Ca2+; Mg2+
PW 3013	Ramnose Broth
PW 3107	Ringer Solution
PW 3022	Sabouraud Dextrose Broth
PW 3034	Sabouraud Dextrose Broth
PW 3064	Sabouraud Dextrose with Chloramphenicol and Cyklohexymide LAB-AGAR™
PW 3270	Sabouraud Dextrose with Chloramphenicol and Cyklohexymide LAB-AGAR™
PW 3206	Sabouraud Dextrose with Chloramphenicol and Gentamicin LAB-AGAR™
PW 3269	Sabouraud Dextrose with Chloramphenicol LAB-AGAR™
PW 3241	Sabouraud with Chloramphenicol Broth
PW 3225	Sacharose Broth
PW 3017	Schaedler Broth
PW 3268	Schaedler Broth + vit. K3
PW 3014	Schaedler Broth + vit. K3
PW 3018	Schaedler Broth + vit. K3
PW 3204	Schaedler Modified Broth
PW 3058	Simmons Citrate LAB-AGAR™
PW 3019	Simmons Citrate LAB-AGAR™
PW 3117	Simmons Citrate LAB-AGAR™
PW 3095	Sodium Selenite Broth
PW 4209	Sodium Selenite Broth
PW 3040	Sodium Selenite Broth
PW 3008	Sodium Selenite Broth
PW 3030	Sodium Selenite Broth
PW 3045	Sorbitol Broth
137/T	Stonebrink Medium + P
135/T	Stonebrink Medium + PACT
PW 3187	Thioglycollate Fluid Medium
PW 3153	Thioglycollate Fluid Medium

PW 4004	Thioglycollate Fluid Medium
PW 3033	Thioglycollate Fluid Medium
PW 3027	Todd Hewitt Broth
PW 3203	Todd Hewitt Broth with Nalidixic Acid and Colistin
PW 3050	Todd Hewitt Broth with Nalidixic Acid and Gentamicin
PW 3085	Trehalose Broth
PW 3011	Trichomonas Broth
PW 4204	Triple Sugar Iron LAB-AGAR™
PW 3193	Triple Sugar Iron LAB-AGAR™
PW 3060	Triple Sugar Iron LAB-AGAR™
PW 4019	Trypticasein Soy Broth
PW 4000	Trypticasein Soy Broth
PW 3152	Trypticasein Soy Broth
PW 3156	Trypticasein Soy Broth
PW 3062	Trypticasein Soy LAB-AGAR™
PW 3226	Tryptone Water
PW 3012	Tryptophan Culture Broth
PW 3098	Tryptophan Culture Broth
PW 3199	TSB Broth +20% Glycerol
PW 3100	Urea Broth Modified acc. to PN-A- 04023
PW 3304	Urea Broth Modified acc. to PN-A- 04023
PW 3006	Urea Christensen Broth
PW 3149	Urea Indol Broth
PW 3267	Urea Indol Broth
PW 3183	Urea LAB-AGAR™
PW 3120	Urea LAB-AGAR™

Członek Zarządu
BioMaxima S.A.
Henryk Lewczuk

Prokurent
BioMaxima S.A.
Patrycja Pamiak-Sankowska

Agar is natural hydrocolloid extracted from several species of red algae, among the Gelidium, Gelidium and Pterocladia types. Bacteriological LAB-AGAR™ (European) is a gelling agent used in the preparation of culture media and other bacteriological applications. The main advantage of this agar is the absence of inhibitors, which could interfere in microorganisms growth. It has excellent transparency, high hysteresis and very reliable reproducibility. Each batch produced is thoroughly tested for biological performance against a battery of known bacterial cultures in order to ensure proper growth characteristics and absence of inhibitors. Bacteriological LAB-AGAR™ (European) type gives a higher gel strength than American version. It is used in concentrations from 1,2% to 1,6%.

Chemical characteristics

Appearance	White cream powder
Moisture	Less than 10 %
Ashes	≤ 4,5 %
Gel strength (1,5% Nikan)	800-1100 g/cm ²
pH (1,5%) before autoclaving	7,0 ± 0,4
pH (1,5%) after autoclaving	6,5 ± 0,4
Melting point (1,5%)	85 ± 5°C
Gelling point (1,5%)	35 ± 3°C
Transparency (1,5%)	≤ 5 NTU
Colorimetry (absorbance) 430 nm	≤ 0,200
Particle size	95% Over sieve 60

Microbiological test

Standard plate count	Less than 3000 cfu / g
Yeast and molds	Less than 100 cfu / g
Coliforms	Less than 3 cfu / g
Escherichia coli	Negative
Salmonella	Negative

Storage / Shelf life

- ★ Once opened keep powdered medium closed to avoid hydration. Store at 2 - 30°C
- ★ The expiration date is indicated on the label

Packaging: 500 g



Box: 5+ 5 vials / 2 vials / 500 ml

Intended use

The selective/enrichment supplement here described is used for the preparation of Chromogenic Listeria acc. to ISO 11290 LAB-AGAR™ plating medium for the isolation of Listeria spp. from food, environmental or clinical specimens and for the detection of Listeria monocytogenes. For the details of the procedure see the technical sheet of Chromogenic Listeria LAB- AGAR™Base acc. to ISO 11290 (ref. PS 165)

Selective supplement**Vial for 500 ml of medium base**

Nalidixic acid	10 mg	Amphotericin B	5 mg
Ceftazidime	10 mg	Polimixin B	38350 IU

Directions

Dissolve the contents of one vial of Selective Supplement with 5 ml of a mixture of sterile distilled water-ethanol (1:1) and add to 500 ml of Chromogenic Listeria acc. to ISO 11290 Base (PS165) autoclaved and cooled to 50°C, together with the contents of one vial of Enrichment Supplement pre-warmed to 48-50°C. Mix well and distribute in sterile Petri dishes. Aspect of the medium: homogeneously turbid.

Enrichment supplement – ready to use**Vial for 500 ml of medium base**

L- fosphatidylinositol	1,0 g	Distilled water	20 ml
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Precautions:

- ★ For Laboratory use only
- ★ The supplement should be used only by adequately trained personnel with knowledge of microbiological techniques in the laboratory.
- ★ Consult the material safety data sheet before the use.
- ★ Do not use beyond stated expiry date

Storage / Shelf life

- ★ Store at 2-8°C - When stored as directed the supplement remains stable until the expiry date shown on the label
- ★ The expiration date is indicated on the label



Box: 10 vials / 1 vial / 500 ml

Intended use

The selective supplement for the detection of enumeration of *Campylobacter* spp. from clinical and food samples.

Vial for 500 ml of medium base

Cefoperazone 16 mg Amphotericin B 5 mg

Directions

Dissolve the contents of one vial with 4 ml of sterile distilled water and add to 500 ml of Blood Free *Campylobacter* CCDA LAB-AGAR™ Base (ref. PS 159) autoclaved and cooled to 50°C. Mix well and distribute in sterile Petri dishes. Aspect of the medium: homogeneously turbid.

Precautions:

- ★ For Laboratory use only
- ★ The supplement should be used only by adequately trained personnel with knowledge of microbiological techniques in the laboratory.
- ★ Consult the material safety data sheet before the use.
- ★ Do not use beyond stated expiry date

Storage / Shelf life

- ★ Store at 2-8°C - When stored as directed the supplement remains stable until the expiry date shown on the label
- ★ The expiration date is indicated on the label



Box: 10 vials / 1 vial / 500 ml

Intended use

Supplement for the detection of *Listeria* spp. from food and other samples.

Vials for 500 ml of medium base

Ammonium iron (III) citrate 250,0 mg
Nalidixic acid sodium salt 10,0 mg
Acryflavine HCl 12,5 mg

Directions

Aseptically reconstitute 1 vial with 4 ml of 1:1 solution ethanol / sterile distilled water.
Mix gently until complete dissolution. Aseptically add vial to 500 ml Fraser Listeria Enrichment Broth Base (ref. PS 99), autoclaved and cooled to 50 °C. Mix well and distribute into sterile containers.

Precautions:

- ★ For Laboratory use only
- ★ The supplement should be used only by adequately trained personnel with knowledge of microbiological techniques in the laboratory.
- ★ Consult the material safety data sheet before the use.
- ★ Do not use beyond stated expiry date

Storage / Shelf life

- ★ Store at 2-8°C - When stored as directed the supplement remains stable until the expiry date shown on the label
- ★ The expiration date is indicated on the label



Box: 10 vials / 1 vial / 500 ml

Intended use

Supplement for the detection of *Listeria* spp. from food and other samples.

Vials for 500 ml of medium base

Cycloheximide	200,00 mg	Colistin sulphate.....	10,00 mg
Cefotetan	1,00 mg	Acryflavine HCl	2,50 mg
Fosfomicin	5,00 mg		

Directions

Aseptically reconstitute 1 vial with 4 ml of 1:1 solution ethanol / sterile distilled water (1:1). Mix gently until complete dissolution. Aseptically add vial to 500 ml *Listeria* acc. to Oxford LAB-AGAR™ Base (ref. PS 104), autoclaved and cooled to 50 °C. Mix well and distribute into sterile Petri dishes.

Precautions:

- ★ For Laboratory use only
- ★ The supplement should be used only by adequately trained personnel with knowledge of microbiological techniques in the laboratory.
- ★ Consult the material safety data sheet before the use.
- ★ Do not use beyond stated expiry date

Storage / Shelf life

- ★ Store at 2-8°C - When stored as directed the supplement remains stable until the expiry date shown on the label
- ★ The expiration date is indicated on the label



Box: 10 vials

Selective supplement for the isolation of Salmonella spp. and E. coli O157.

Vial for 250 ml of MKKTn Broth Base and 500 ml m-TSB Broth Base

Novobiocin10 mg

Directions

Aseptically reconstitute 1 vial with 5 ml of sterile distilled water. Mix gently until complete dissolution and add aseptically to 250 ml of MKKTn Broth Base (ref. PS 540) or 500 ml of m-TSB Broth Base (ref. PS 197), cooled to 50°C. Mix well and distribute into appropriate containers.

Precautions:

- ★ For Laboratory use only
- ★ The supplement should be used only by adequately trained personnel with knowledge of microbiological techniques in the laboratory.
- ★ Consult the material safety data sheet before the use.
- ★ Do not use beyond stated expiry date

Storage / Shelf life

- ★ Store at 2-8°C - When stored as directed the supplement remains stable until the expiry date shown on the label
- ★ The expiration date is indicated on the label



Box: 5+ 5 vials / 2 vials / 500 ml

Intended use

The selective/enrichment supplement here described is used for the preparation of Chromogenic Salmonella LAB-AGAR™ (ref. PS 598).

Enrichment supplement – ready to use- vial A**Vial for 500 ml of medium base**

Liquid reagent 2 ml

Reagent add to 500 ml of the medium (Salmonella Chromogenic LAB-AGAR™-ref. PS 589) before autoclaving)

Selective supplement (vial B)**Vial for 500 ml of medium base**

Cefsulodine..... 2,5 mg

Directions

Dissolve the contents of one vial B with 2 ml of sterile distilled water and add to 500 ml of Salmonella Chromogenic LAB-AGAR™ (ref. PS598) autoclaved and cooled to 50°C. Mix well and distribute in sterile Petri dishes.

Precautions:

- ★ For Laboratory use only
- ★ The supplement should be used only by adequately trained personnel with knowledge of microbiological techniques in the laboratory.
- ★ Consult the material safety data sheet before the use.
- ★ Do not use beyond stated expiry date

Storage / Shelf life

- ★ Store at 2-8°C - When stored as directed the supplement remains stable until the expiry date shown on the label
- ★ The expiration date is indicated on the label



Box: 10 vials / 1 vial / 225 ml

Intended use

Supplement for the detection of *Listeria* spp. from food and other samples.

Vials for 225 ml of medium base

Ferric ammonium citrate..... 112,50 mg
Nalidixic acid 2,25 mg
Acryflavine HCl 2,8125 mg

Directions

Aseptically reconstitute 1 vial with 2 ml of 1:1 solution ethanol / sterile distilled water.
Mix gently until complete dissolution. Aseptically add vial to 225 ml Fraser Listeria Enrichment Broth Base (ref. PS 99), autoclaved and cooled to 50 °C. Mix well and distribute into sterile containers.

Precautions:

- ★ For Laboratory use only
- ★ The supplement should be used only by adequately trained personnel with knowledge of microbiological techniques in the laboratory.
- ★ Consult the material safety data sheet before the use.
- ★ Do not use beyond stated expiry date

Storage / Shelf life

- ★ Store at 2-8°C - When stored as directed the supplement remains stable until the expiry date shown on the label
- ★ The expiration date is indicated on the label



Box: 10 vials. 1 vial /100 ml

Description

A sterile solution of 40% urea, for addition to Urea LAB-AGAR™ Base acc. to ISO 6579 (ref. PS 211) for the detection of urease production by *Proteus* spp.

Precautions:

- ★ For Laboratory use only
- ★ The supplement should be used only by adequately trained personnel with knowledge of microbiological techniques in the laboratory
- ★ Consult the material safety data sheet before the use
- ★ Do not use beyond stated expiry date

Storage / Shelf life

- ★ Store at 2-8°C - When stored as directed the supplement remains stable until the expiry date shown on the label
- ★ The expiration date is indicated on the label



Highly selective, for isolation of *Salmonella* spp. particularly *Salmonella* Typhi from clinical specimens and food.

Formula in g/L

Enzymatic digest of animal tissues	10,00	Ferric sulphate (FeSO ₄)	0,30
Beef extract	5,00	Bismuth sulfite (indicator)	8,00
Glucose	5,00	Brilliant green	0,025
Disodium hydrogen phosphate (Na ₂ HPO ₄) anh.	4,00	Agar	20,00

Final pH at 25°C: 7,7 ± 0,2

Principle:

Bismuth Sulfite LAB-AGAR™ is a modification of the Wilson Blair Medium, and generally accepted as routine for the detection of most *Salmonella* and in particular *Salmonella* Typhi.

Bismuth sulfite indicator and brilliant green are inhibitors of Gram- positive bacteria and members of the coliform group. In the presence of H₂S *Salmonella* spp. reduced iron salts to iron sulfate, which produce a black colony, and turns the bismuth indicator to metallic bismuth surrounding the area of the colonies with a bright sheen.

Preparation: suspend 52,3 grams of the medium in one liter of distilled water. Mix well and dissolve by heating with frequent agitation. Boil for one minute. DO NOT AUTOCLAVE. Cool to 45°C (very important), mix well and pour into Petri dishes. The prepared medium should be stored at 8-15°C. The colour of the prepared medium opaque white with a green tint.

The dehydrated medium should be homogenous, free-flowing and light green in color. If there are any physical changes, discard the medium.

Procedure:

- ★ Inoculated by streaking
- ★ Incubated at 37±1°C for 48 hours

Colony colour:

- ★ *Salmonella* spp – bright metallic black
- ★ *Escherichia coli* – brown – green

Storage / Shelf life

- ★ Once opened keep powdered medium closed to avoid hydration at 2 - 30°C
- ★ The expiration date is indicated on the label.

Microbiological test

The following results were obtained in the performance of the medium from type cultures after incubation at a temperature of 37±1°C and observed after 40-48 hours

Microorganisms	Growth	Colony color
<i>Salmonella</i> Enteritidis ATCC 13073	Good	Black with bright metallic
<i>Salmonella</i> Typhi ATCC 19430	Good	Black with bright metallic
<i>Escherichia coli</i> ATCC 25922	Partial inhibition	Brown-green
<i>Shigella flexneri</i> ATCC 12022	Partial inhibition	Brown
<i>Enterococcus faecalis</i> ATCC 29212	Null	---

Packaging: 500 g



For the growth of pathogenic cocci and other microorganisms.

Formula in g/L

Calf brain infusion	12,50	Brain heart infusion	5,00
Enzymatic digest of animal tissues	10,00	Disodium hydrogen phosphate (Na ₂ HPO ₄) anh...	2,50
Sodium chloride	5,00	Glucose	2,00

Final pH at 25°C: 7,4 ± 0,2

Principle:

Brain Heart Infusion Broth (BHIB) is a liquid medium rich in nutrients, suitable for the cultivation of several fastidious strains of bacteria, such as Streptococci, Meningococci and Pneumococci, fungi and yeasts. BHIB is recommended in Standard Methods for water testing and in antimicrobial susceptibility tests.

The nutritionally rich base of beef heart and calf brain infusion and peptone supports growth of a variety of microorganisms. Glucose is the carbon and energy source. Sodium chloride maintains the osmotic balance.

This medium is very versatile and supports the growth of many organisms

Preparation: suspend 37 grams of the medium in one liter of distilled water. Mix well and dissolve by heating with frequent agitation. Boil for one minute until, complete dissolution. Dispense into appropriate containers and sterilize in autoclave at 121°C for 15 minutes.

The prepared medium should be stored at 2-8°C.

Procedure:

- ★ Inoculate the medium with the sample
- ★ Incubate at 37±1°C for 24-48-72 hours

Storage / Shelf life

- ★ Once opened keep powdered medium closed to avoid hydration at 2 - 30°C
- ★ The expiration date is indicated on the label.

Microbiological test

The following results were obtained in the performance of the medium from type cultures after incubation at a temperature of 37±1°C and observed after 18-24 hours

Microorganisms	Growth
Streptococcus pneumoniae ATCC 6303	Good
Streptococcus pyogenes ATCC 19615	Good
Brucella abortus ATCC 4315	Good
Staphylococcus aureus ATCC 25923	Good

Packaging: 500 g



For differentiation of Enterobacterales according to ISO 6579 – 1 standard.

Formula in g/L			
Peptone.....	20,00	Glucose	1,00
Sodium thiosulphate	0,30	Sodium chloride.....	5,00
Lactose	10,00	Iron (III) citrate	0,30
Phenol red	0,024	Agar	12,00
Sucrose	10,00	Beef extract	3,00
Yeast extract.....	3,00		

Final pH at 25°C: 7,4 ± 0,2

Principle:

Triple Sugar Iron LAB-AGAR™ (T.S.I.) may be used to differential enteric Gram – negative Enterobacterales on the basis of carbohydrate fermentation and H₂S production. It used as an aid in the identification of photogenic and saprophytic Enterobacterales isolated from routine bacteriological analysis food samples. This medium is used as a key to initiate the identification of Enterobacterales in some FDA schemas.

The peptone and beef extract provide the nutrients for growth. T.S.I. contains three carbohydrates (glucose, lactose and sucrose), sources of carbon and energy. When these are fermented the acid production is indicated by the phenol red indicator, being the color changes yellow for acid production and red for alkalization. Sodium thiosulphate is reduced to hydrogen sulfide, which reacts with iron salt to give the black iron sulfide. The ferric citrate is a H₂S indicator. Sodium chloride maintains the osmotic balance of the medium.

The mode of action is similar to Kligler Iron LAB-AGAR™ (ref. PW 3016) which contains two sugars. The addition of 1% sucrose in T.S.I. agar allows to differentiate between Proteus and Salmonella. The fermentation of the sucrose by Proteus turns the color of the phenol red indicator in the slant from red to yellow. Glucose – positive, lactose – negative members of the genus Salmonella all cause a reddening of the slant and acidity the depths of the agar tubes.

Preparation: suspend 64,6 grams of the medium in one liter of distilled water. Mix well and dissolve by heating with frequent agitation until complete dissolution. Dispense into tubes for 10 ml of the medium and sterilize in autoclave at 121°C for 15 minutes. Allow to cool in a slanted position in order to obtain butts of 1,5-2,5 cm. depth.

The prepared medium should be stored at 2-8°C.

Procedure:

- ★ With an inoculating needle, prick the center of well isolated colonies obtained from a solid media
- ★ Stab the center of the medium into the deep of the 3-5 mm the bottom
- ★ Withdraw the needle and streak the subculture the surface of the slant
- ★ Loosen closure on the tube before incubating
- ★ Incubate at 36±2°C for 24±3 hours
- ★ Read tubes for acid production of slant / butt, gas and H₂S reaction

Storage / Shelf life

- ★ Once opened keep powdered medium closed to avoid hydration at 2 - 30°C
- ★ The expiration date is indicated on the label.

Microbiological test

The following results were obtained in the performance of the medium from type cultures after incubation at a temperature of 36±2°C and observed after 24±3 hours

Microorganisms	Growth	Slant	Depth	Gas	H ₂ S
Escherichia coli ATCC 25922	Good	Yellow	Yellow	+	-
Proteus vulgaris ATCC 13315	Good	Yellow	Yellow	+	+
Salmonella Enteritidis ATCC 13078	Good	Red	Yellow	+	+
Shigella flexneri ATCC 12022	Good	Red	Yellow	-	-
Pseudomonas aeruginosa ATCC 9027	Good	Red	Red	-	-

Packaging: 500 g

Selective and differential medium for the detection of Salmonella spp. from foods acc. to ISO 6579-1 standard.

Formula in g/L

Xylose	3,75	L-Lysine hydrochloride.....	5,00
Lactose	7,50	Sucrose	7,50
Phenol red	0,08	Yeast extract	3,00
Sodium desoxycholate	1,00	Ammonium iron (III) citrate	0,80
Agar	13,50	Sodium chloride.....	5,00
Sodium thiosulphate	6,80		

Final pH at temp. 25°C: 7,4 ± 0,2

Principle:

The ISO 6579 recommends the XLD LAB-AGAR™ formula for the identification and presumptive identification of Salmonella after pre-enrichment in a non-selective fluid medium and enrichment in a selective fluid medium. The medium was developed principally for isolating and differentiating Gram – negative enteric bacilli, particularly Shigella and Providentia. It has been shown to be more effective than other enteric differential media.

The reactions are degradation of the three fermentable carbohydrates: xylose, lactose and sucrose, with the production of acid, manifested in the color change from red to yellow. Sodium thiosulphate serves as a reactive substance with ferric ammonium citrate as an indicator the formation of H₂S under alkaline conditions. Phenol red is the pH indicator. Yeast extract provides the carbon, protein and nutrient source required for the growth of bacteria. The bacteria that decarboxylase the L-Lysine HCl to cadaverine are identified by the presence of purple – red color around the colonies due to the elevation of the pH.

Preparation: suspend 54 grams of the medium in one liter of distilled water. Mix well and dissolve by heating with frequent agitation until complete dissolution of agar. DO NOT AUTOCLAVE. Cool to 45-50°C and pour into Petri dishes.

The prepared medium should be stored at 8-15°C

Procedure:

- ★ The specimen is seeded by streaking directly on the surface of the medium, or is first enriched in Rappaport Vassiliadis Soy Broth (ref. PW 4245) and MKTTn Broth (ref. PW 6092)
- ★ Incubate at 37°C ± 1°C for 24 h ± 3 h

Colony color:

Salmonella spp.	clear red (black center)
Proteus spp.	yellow, transparent (black center)
E. coli	yellow

Storage / Shelf life

- ★ Once opened keep powdered medium closed to avoid hydration at 2 - 30°C
- ★ The expiration date is indicated on the label.

Microbiological test

The following results were obtained in the performance of the medium from type cultures after incubation at a temperature of $37\pm 1^{\circ}\text{C}$ and observed after 24 ± 3 hours

Microorganisms	Growth	Colony color
Escherichia coli ATCC 25922	Moderate	Yellow (precipitate)
Salmonella Typhimurium ATCC 14028	Good	Clear red (black center)
Shigella flexneri ATCC 12022	Good	Red
Staphylococcus aureus ATCC 25923	Inhibited	
Packaging: 500 g		

Recommended as a diluent for the homogenization of samples in microbiological analysis of food.

Formula in g/L

Enzymatic digest of casein	10,00	Disodium hydrogen phosphate anh.	3,57*
Potassium dihydrogen phosphate	1,50	Sodium chloride.....	5,00

*Equivalent 9,0 g Disodium hydrogen phosphate dodecahydrate

Final pH at 25°C: 7,0 ± 0,2

Principle:

Buffered Peptone Water is recommended as a pre-enrichment in food samples containing suspected contaminants such as Salmonella. A feature common to all selective media that sublethally injured organisms are not generally detected and therefore a recovery step must be included in examination procedures. This is of importance, particularly in the food industry as various processes such as heat, desiccation, preservation processes, pH changes, ect. Cause sublethal injuries to Salmonella.

The broth is a rich in nutrients and provides high resuscitation rates for sublethally injured bacteria and intense growth. Changes in pH may cause damages to bacteria growth. Buffered Ppetone Water maintains a high pH over the enrichment period vis the phosphate buffer system and allows repair of injured cells sensitive to low pH.

Preparation: suspend 20,07 grams of the medium in one liter of distilled water. Heat with frequent agitation to completely dissolve the medium if necessary. Sterilize in autoclave at 121°C for 15 minutes. The prepared medium should be stored at 2-8°C.

Procedure:

- ★ Detection of *Salmonella* spp. according to standard method: Refer to standards ISO 6579-1,
- ★ Detection of *Cronobacter* spp. according to standard method: Refer to standards ISO 22964

Storage / Shelf life

- ★ Once opened keep powdered medium closed to avoid hydration at 2 - 30°C
- ★ The expiration date is indicated on the label.

Microbiological test

The following results were obtained in the performance of the medium from type cultures after incubation at a temperature of 37±1°C and observed 18 hours

Microorganisms	Growth
Salmonella Enteritidis ATCC 13076	Good
Salmonella Typhi ATCC 19430	Good
Salmonella Typhimurium ATCC 14028	Good
Cronobacter muytjensi ATCC 51329	Good

Packaging: 500 g



For the biochemical confirmation of Salmonella .

Formula in g/L			
Glucose.....	1,00	L-Lysine hydrochloride.....	5,00
Yeast extract.....	3,00	Bromocresol purple	0,015

Final pH at 25°C: 6,8 ± 0,2

Principle:

Lysine Decarboxylase Broth is recommended by ISO 6579 for the biochemical confirmation of Salmonella based on lysine decarboxylation. It is also recommended by ISO 10273 for the biochemical confirmation of Yersinia. When the medium is inoculated with a bacterium that is able to ferment glucose, the acid produced lowers the pH of the medium and changes the color of the indicator from purple to yellow. The acidic condition also stimulates decarboxylase activity. The bacteria that decarboxylate the L-Lysine to cadaverine are identified by presence of a purple-red color. The production of these amines elevates the pH of the medium. A yellow color after 24 hours indicates a negative result.

Yeast extract is the source of vitamins, of particularly the B-group essential for growth. Glucose is the fermentable carbohydrate. Bromocresol purple is the pH indicator. Lysine is added to detect the production of the specific enzyme.

Preparation: suspend 9 g of the medium in one liter of distilled water. Mix well and dissolve by heating with frequent agitation until completely dissolution. Dispense into test tubes and sterilize in autoclave at 121°C for 15 minutes.

The prepared medium should be stored at 2-8°C.

Procedure:

- ★ The tubes are inoculated with the microorganism samples
- ★ Incubated at 36±2°C for 24±3 hours

Storage / Shelf life

- ★ Once opened keep powdered medium closed to avoid hydration at 2 - 30°C
- ★ The expiration date is indicated on the label.

Microbiological test

The following results were obtained in the performance of the medium from type cultures after incubation at a temperature of 36±2 °C and observed after 24±3 hours

Microorganisms	Lysine decarboxylase
Salmonella Typhi ATCC 6539	+
Salmonella Paratyphi ATCC 9150	-
Proteus vulgaris ATCC 13315	-
Salmonella Gallinarum NCTC 9240	+
*Yersinia enterocolitica ATCC 27729	-

*Incubate at 30°C during 24 hours according to ISO 10273

Packaging: 500 g



Selective medium for isolation of lactobacilli from foods, clinical and others samples.

Formula in g /L

Enzymatic digest of casein	10,00	Beef extract	10,00
Yeast extract.....	4,00	Glucose	20,00
Tween-80.....	1,00	Dipotassium hydrogen phosphate	2,00
Sodium acetate	5,00	Tri-Ammonium citrate	2,00
Magnesium sulphate.....	0,20	Manganese sulphate	0,05
Agar	12,00		

Final pH at 25°C: 6,2 ± 0,2

Principle:

MRS LAB-AGAR™ is used for the cultivation of lactobacilli. The addition of magnesium, manganese and acetate with the Tween 80, has provided an improved medium for growth of lactobacilli, including that of very fastidious species such as *Lactobacillus brevis* and *L. fermenti*.

On the other hand, the quality enzymatic digest of casein in addition to the beef extract and yeast extract, combine together all the necessary growth factors that make the MRS LAB-AGAR™ one the best medium for the cultivation of lactobacilli.

Nevertheless, this medium selectivity is low and contaminants tend to grow in these medium, which signifies a higher selectivity is needed.

Preparation: suspend 64,2 grams of the medium in one liter of distilled water. Mix well and dissolve by heating with frequent agitation to completely dissolution. Sterilize in autoclave at 121°C for 12 minutes. Cool to 45-50 °C, mix well and pour into Petri dishes.

The prepared medium should be stored at 8-15°C.

Procedure

Food samples

- ★ Plates are inoculated by spreading of 0,1 mL of the sample of its dilutions
- ★ Incubate at 30°C for 5 days in 5% CO₂ atmosphere

Clinical samples

- ★ Inoculate the plates directly from the samples
- ★ Incubate at 37°C for 72 hours in 5% CO₂ atmosphere

Storage / Shelf life

- ★ once opened keep powdered medium closed to avoid hydration at 2 - 25°C
- ★ the expiration date is indicated on the label.

Microbiological test

The following results were obtained in the performance of the medium from type cultures after incubation at a temperature of 37°C during 3 days, or at 30°C during 5 days, in a CO₂ enriched atmosphere.

Microorganisms	Growth
Lactobacillus acidophilus ATCC 4356	Good
Lactobacillus casei ATCC 393	Good
Escherichia coli ATCC 25922	Moderate - Good
Pseudomonas aeruginosa ATCC 27853	Inhibited

Packaging: 500 g

For selective enrichment medium of Salmonella with the exception of S. Typhi and S. Paratyphi from foodstuffs and other materials. According to ISO 6579-1 standard.

Formula in g/L

Enzymatic digest of soya	4,50	Sodium chloride.....	7,20
Potassium dihydrogen phosphate (KH ₂ PO ₄)	1,26	Dipotassium hydrogen phosphate(K ₂ HPO ₄) ...	0,18
Magnesium chloride anh.....	13,40*	Malachite green oxalate	0,036

*equivalent to 28,6 g * 6H₂O

Final pH at 25°C: 5,2 ± 0,2

Principle:

Rappaport Soy Broth is recommended for the selective isolation of Salmonella from food or environmental samples.

The Rappaport medium was modified by Vassiliadis by reducing malachite green concentration and increasing incubation temperature offering a better stability of the pH of prepared medium and the optimization of the concentration of magnesium chloride, resulting in an improved recovery of Salmonella.

The soy peptone provides essential nutrients for growth: nitrogen, vitamins, minerals and amino acids. Potassium phosphates balance the low pH of the medium, combined with the presence of magnesium chloride to raise the osmotic pressure and malachite green inhibits other bacteria.

Preparation: suspend 26,54 grams of the medium in one liter of distilled water. Mix well and dissolve by heating with frequent agitation until complete dissolution. Dispense into tubes and sterilize in autoclave at 115°C for 15 minutes.

The prepared medium should be stored at 2-8°C

Procedure:

- ★ Transfer 0,1 ml pre-enrichment broth - Buffered Peptone Water incubated at 37±1°C for 20 hours to 10 ml of Rappaport Vassiliadis Soy Broth
- ★ Incubate at 41,5±0,5° for 24 hours
- ★ Subculture to selective agar media: XLD LAB-AGAR™ (ref. PP 1330), Salmonella Shigella LAB-AGAR™ (ref. PP 1250) BGA LAB-AGAR™ (ref. PP 1360), Hektoen LAB-AGAR™ (ref. PP1060); Chromogenic Salmonella LAB-AGAR (ref. PP 0115) or other solid media.

Storage / Shelf life

- ★ Once opened keep powdered medium closed to avoid hydration at 2 - 30°C
- ★ The expiration date is indicated on the label.

Microbiological test

The following results were obtained in the performance of the medium from type cultures after incubation at a temperature of 41,5°C and observed after 24±3 hours

Microorganisms	Growth
Escherichia coli ATCC 25922	Inhibited
Salmonella Typhimurium ATCC 14028	Good

Packaging: 500 g



Enrichment medium for the detection of *Listeria* in food and environmental samples acc. to ISO 11290-1 standard.

Formula in g/L			
Sodium chloride	20,00	Disodium hydrogen phosphate 2-hydrate....	12,00
Enzymatic digest of animal tissues.....	5,00	Tryptone (enzymatic digest of casein).....	5,00
Yeast extract.....	5,00	Beef extract	5,00
Lithium chloride	3,00	Dipotassium hydrogen phosphate	1,35
Esculin	1,00		

Final pH at 25°C: 7,2 ± 0,2

Principle:

Fraser Listeria Enrichment Broth Base is an appropriate medium for the selective enrichment of *Listeria* in the two-step method according to ISO 11290-1, for the preparation of Fraser or Half Fraser Broth by adding the respective supplements.

It is recommended for the detection of *Listeria* spp. in food products and in sample from the environment. All *Listeria* species hydrolyse the esculin to esculentin, which reacts with iron ions producing blackening of the medium. Another advantage of this medium is that the addition of ferric ammonium citrate improves the growth of *Listeria monocytogenes*. Lithium chloride included in the medium, along with nalidixic acid and acryflavine from the supplement, inhibit the growth of the accompanying flora, which can hydrolyze the esculin. The high amount of sodium chloride inhibits the growth of enterococci. Tryptone, proteose peptone and beef extract provide nitrogen, vitamins, minerals and amino acids essential for growth. Yeast extract is the source of vitamins, particularly of the B-group. Phosphate salts act as a buffer.

Preparation: suspend 28,68 grams of the medium in 500 ml of distilled water. Mix well and dissolve by heating with frequent agitation until complete dissolution. Sterilize in autoclave at 121°C for 15 minutes. Cool to 45-50°C and add one vial of Half Fraser Listeria Selective Supplement (ref. SL 0014) or Fraser Listeria Selective Supplement (ref. SL 0012). Mix well.

The prepared medium should be stored at 2-8°C.

Procedure:

Detection of *Listeria monocytogenes* according to standard method: Refer to standards ISO 11290-1

Storage / Shelf life

- ★ Once opened keep powdered medium closed to avoid hydration at 2 - 30°C
- ★ The expiration date is indicated on the label.

Microbiological test

The following results were obtained in the performance of the medium from type cultures after incubation at a temperature of 30±1°C and observed 24 ± 3 hours – Half Fraser Broth and after incubation at a temperature of 37±1°C and observed 28 ± 3 hours – Fraser Broth

Microorganisms	Growth	Esculin reactions
<i>Listeria monocytogenes</i> ATCC 19111	Good	+
<i>Enterococcus faecalis</i> ATCC 29212	Null	-

Packaging: 500 g

Supplements: Half Fraser Listeria Selective Supplement 10 vials. 1 vial / 500 ml (ref. SL 0014)
Fraser Listeria Selective Supplement 10 vials. 1 vial / 500 ml (ref. SL 0012)



Selective medium for the detection of *Listeria monocytogenes* from food and other samples. According to **ISO 11290-1** standard.

Formula in g/L			
Proteose peptone.....	23,00	Ammonium iron (III) citrate.....	0,50
Starch	1,00	Sodium chloride.....	5,00
Agar	10,00	Esculin.....	1,00
Lithium chloride	15,00		

Final pH at 25°C: 7,0 ± 0,2

Principle:

Listeria acc. to Oxford LAB-AGAR™ is a selective medium for *Listeria* according to Oxford formula and is recommended for the detection of *L. monocytogenes* from clinical samples and foods products. It is used directly or for confirmation after using Fraser Broth (cat. no. PW4024).

All *Listeria* spp. hydrolyze the esculin to esculetin that reacts with the iron ions producing black colonies and a blackening of the medium. Another advantage of this medium Columbia LAB-AGAR™ Base (cat. no. PS06) provides a rich nutrient base for growth and the addition of ferric ammonium citrate improves the growth of *L. monocytogenes*. Lithium chloride is an inhibiting agent, together with the other antibiotics, which inhibit the growth of Gram-negative bacteria and a large part of Gram-positive ones. Cycloheximide inhibits yeasts.

Preparation: suspend 27,75 grams of the medium in 500 ml of distilled water. Mix well and dissolve by heating with frequent agitation until complete dissolution. Sterilize in autoclave at 121°C for 15 minutes. Cool to 45-50°C and add one vial of *Listeria* Selective acc. to Oxford Supplement (ref. SL 0021). Mix well and pour into Petri dishes.

The prepared medium should be stored at 8-15°C.

Procedure

Detection of *Listeria monocytogenes* according to standard method: Refer to standards ISO 11290-1

Result:

- ★ *Listeria monocytogenes* brown-grey colonies with black center and black halo

Storage / Shelf life

- ★ Once opened keep powdered medium closed to avoid hydration at 2 - 30°C
- ★ The expiration date is indicated on the label.

Microbiological test

The following results were obtained in the performance of the medium from type cultures after incubation at a temperature of 37°C and observed 24-48 hours

Microorganisms	Growth	Colony color
<i>Listeria monocytogenes</i> ATCC 13932	Good	Brown-grey colonies with black center and black halo
<i>Staphylococcus aureus</i> ATCC 25923	Inhibited	White colonies
<i>Enterococcus faecalis</i> ATCC 29212	Null	-
<i>Escherichia coli</i> ATCC 25923	Null	-

Packaging: 500 g

Supplement: *Listeria* Selective acc. to Oxford Supplement 10 vials. 1 vial / 500 ml (ref. SL 0021)

Listeria Modified acc. to Oxford Supplement 10 vials. 1 vial / 500 ml (ref. SL 0081)



Selective medium for the isolation of Campylobacter spp. from food and other samples. According to ISO 10272.

Formula in g/L

Meat extract.....	10,00	Enzymatic digest of animal tissues	10,00
Enzymatic digest of casein	3,00	Sodium desoxycholate.....	1,00
Agar	15,00	Ferrous sulphate (II)	0,25
Sodium pyruvate	0,25	Sodium chloride.....	5,00
Charcoal	4,00		

Final pH at 25°C: 7,4 ± 0,2

Principle:

Blood Free Campylobacter CCDA LAB-AGAR™ is a modified formula described by Bolton et. al., replacing blood with charcoal, sodium pyruvate and ferrous sulphate. This medium supports growth of most enteric Campylobacter. It is recommended for the selective isolation of *C. jejuni*, *C. coli*, *C. lari* and thermophilic Campylobacter from food, clinical and non clinical specimens.

This medium contains ferrous sulphate, sodium pyruvate and charcoal to promote the growth of Campylobacter spp., as they quench the toxic forms of oxygen (hydrogen pyroxide) increasing the aero tolerance and enabling the oxygen sensitive strains to be readily isolated. Sodium desoxycholate and cephoerazone partially or completely inhibits Gram- positive and most Gram – negative bacteria. Amphotericin B inhibits yeasts.

Preparation: suspend 24,3 grams of the medium in 500 ml of distilled water. Mix well and dissolve by heating with frequent agitation until complete dissolution. Sterilize in autoclave at 121°C for 15 minutes. Cool to 45-50°C and add one vial of Campylobacter CCDA Selective Supplement (ref. SL 0005). Mix well and pour into Petri dishes.

The prepared meidum should be stored at 8-15°C.

Procedure:

- ★ Inoculate and incubate at 42°C for 24-48 hours

Results

- ★ *C. jejuni* produces grey,moist, flat, spreading colonies
- ★ *C. coli* colonies are creamy-grey, moist, slightly raised and tend to be discrete

Storage / Shelf life

- ★ Once opened keep powdered medium closed to avoid hydration at 2 - 30°C
- ★ The expiration date is indicated on the label.

Microbiological test

The following results were obtained in the performance of the medium from type cultures after incubation in anaerobic conditions at a temperature of $42 \pm 1^{\circ}\text{C}$ and observed after 24-48 hours

Microorganisms	Growth
Escherichia coli ATCC 25922	Inhibited
Campylobacter jejuni ATCC 29428	Good
Campylobacter coli ATCC 33559	Good

Packaging: 500 g

Supelment: Campylobacter CCDA Selective Supplement 10 vials. 1 vial / 500 ml, Ref. SL 0005

Selective medium for the detection and enumeration of *Listeria monocytogenes*. Medium is recommendations of the norm: ISO 11290-1 and ISO 11290-2.

Formula in g/L

Enzymatic digest of animal tissues	18,00	Enzymatic digest of casein.....	6,00
Yeast extract.....	10,00	Sodium pyruvate	2,00
Glucose.....	2,00	Lithium chloride.....	10,00
Magnesium glycerophosphate.....	1,00	Magnesium sulphate anh.	0,50
Sodium chloride	5,00	Disodium hydrogen phosphate anh.	2,50
5-bromo-4-chloro-3-indolyl-β-D-glucopyranoside	0,05	Agar	13,50

Final pH at 25°C: 7,2 ± 0,2

Principle:

Chromogenic medium for the presumptive isolation, enumeration and identification of *Listeria monocytogenes* and *Listeria* spp. in food and clinical samples. It is used for confirmation after using *Listeria* Enrichment Broth Base (PS 99). The differential activity of the medium is due to two factors. On one hand, the presence of the chromogenic component X-glucoside, a substrate for the detection of the enzyme β-glucosidase, common to all *Listeria* species giving the colonies their blue colour. Other organisms that possess this enzyme, for example enterococci, are inhibited by the selective agents within the medium and by the selective supplement. On the other hand, the differential activity is also obtained by the lipase substrate, upon which the specific enzyme for *L. monocytogenes* acts. The lipase is responsible for the opaque white halo which surrounds *L. monocytogenes*. The combination of both substrates allows us to differentiate the colonies of *Listeria monocytogenes* from the rest of *Listeria* spp. since, although all are blue in colour, *L. monocytogenes* present an opaque white halo surrounding them. It has been observed that some strains of *Listeria ivanovii*, mostly pathogenic to animals although some of which have caused infections in humans, also lipase activity.

Preparation: suspend 35,25 grams of the medium in 500 ml of distilled water. Mix well and dissolve by heating with frequent agitation until complete dissolution. Sterilize in autoclave at 121°C for 15 minutes. Cool to 45-50°C add 2 vials of Chromogenic *Listeria* Set Supplement acc. to ISO 11290 (ref. SL 0001). Mix well and pour into sterile Petri dishes .

Procedure:

Detection and enumeration of *Listeria monocytogenes* according to standard method: Refer to standards ISO 11290-1 and ISO 11290-2

Morphology colony:

***Listeria* species:** blue to blue-green colonies, round regular, without any opaque halo, diameter from 1 to 2 mm;

***Listeria monocytogenes* :** colonies with *Listeria* spp. Characteristics and surrounded by an opaque halo. *L. monocytogenes* strains grow as typical colonies in 24 hours

Storage / Shelf life

- ★ Once opened keep powdered medium closed to avoid hydration at 2 - 25°C
- ★ The expiration date is indicated on the label.

Packaging: 500 g

Supplement: Chromogenic *Listeria* Set Supplement acc. to ISO 11290 2 x 5 vials 1+1/500 ml Ref. SL 0001



For the confirmation of *Listeria* spp.

Formula in g/L

Tryptone.....	17,00	Soy peptone.....	3,00
Yeast extract.....	6,00	Glucose.....	2,50
Sodium chloride	5,00	Agar	15,00
Dipotassium hydrogen phosphate.....	2,50		

Final pH at 25°C: 7,3 ± 0,2

Principle:

TSYEA LAB-AGAR™ acc. to ISO 11290 is a general purpose medium which supports the growth of a wide variety of microorganisms.

The formula conforms to ISO 11290-1 and is used for the confirmation of *Listeria monocytogenes* colonies and to subculture suspected *Listeria* colonies.

Tryptone, Yeast extract and Soy peptone provide nitrogen, vitamins, minerals and amino acids essential for growth. Glucose is the fermentable carbohydrate providing carbon and energy. Dipotassium phosphate acts as a buffer system.

This medium is used to select colonies for the confirmation of *Listeria* spp. After incubation in *Listeria* acc. to Oxford LAB-AGAR™ (Ref. PS 104); *Listeria* acc. to Palcam LAB-AGAR™ (Ref. PS 102) or Chromogenic *Listeria* acc. LAB-AGAR™ acc. to ISO 11290 (Ref. PS 165), take 5 suspected *Listeria* spp colonies, and inoculate them in TSYEA LAB-AGAR.

Preparation: suspend 51 grams of the medium in one liter of distilled water. Mix well and dissolve by heating with frequent agitation until complete dissolution. Sterilize in autoclave at 121°C for 15 minutes. Cool to 45-50°C, mix well and dispense into Petri dishes.

The prepared medium should be stored at 8-15°C.

Procedure:

- ★ Inoculate and incubate at 37±1°C during 18-24 hours or until growth is satisfactory.

Storage / Shelf life

- ★ Once opened keep powdered medium closed to avoid hydration at 2 - 30°C
- ★ The expiration date is indicated on the label.

Microbiological test

The following results were obtained in the performance of the medium from type cultures after incubation at a temperature of 37±1°C and observed after 18-24 hours.

Microorganisms	Growth
<i>Listeria monocytogenes</i> ATCC 19111	Good
<i>Listeria innocua</i> ATCC 33090	Good

Packaging: 500 g



For cultivation of detection of hemolytic activity of fastidious microorganisms, confirmation of *Bacillus cereus* (ISO 7932) and *Listeria monocytogenes* (ISO 11290).

Formula in g/L			
Enzymatic digest of animal tissues	15,00	Yeast extract	5,00
Sodium chloride	5,00	Agar	15,00
Liver digest	2,50		

Final pH at 25°C: 7,2 ± 0,2

Principle

Blood No 2 LAB-AGAR™ is a medium rich in nutritional properties. It is used for the isolation, cultivation and recovery of fastidious microorganisms and study of hemolysis activity. Liver extract and yeast extract provide nitrogen, vitamins, minerals and amino acids essential for growth. Sodium chloride maintains osmotic equilibrium. The blood provides growth factor for the microorganisms and is the basis for determining hemolytic reactions.

This medium has been recommended by ISO normative 7932 for the confirmation of *Bacillus cereus*. Incubate at 30°C for 24±2 hours and interpret the hemolysis reaction. The *Bacillus cereus* has positive reaction of β-hemolysis. The width of the hemolysis zone may vary.

It is also medium recommended by ISO normative 11290 for the confirmation of *Listeria monocytogenes*. The normative recommends incubation at 35°C or 37°C for 18-24 hours. A zone of β-hemolysis is considered a positive reaction

Preparation: suspend 42,5 grams of the medium in 950 ml of distilled water. Mix well and dissolve by heating with frequent agitation until complete dissolution. Sterilize in autoclave at 121°C for 15 minutes. Cool to 45-50°C and aseptically add 50 ml defibrinated sheep blood. Mix well and pour into Petri dishes.

Procedure:

- ★ Inoculate sample onto the surface of the medium, streak for isolation with an inoculating loop
- ★ Incubate: aerobic, with 5-10 % CO₂ atmosphere; at 37±1°C for 18 - 24 hours

Storage / Shelf life

- ★ Once opened keep powdered medium closed to avoid hydration at 2 - 30°C
- ★ The expiration date is indicated on the label.

Microbiological test

The following results were obtained adding 5% sheep defibrinated blood in the performance of the medium from type culture after incubation at a temperature 37±1°C and observed 24-48 hours

Microorganisms	Growth	Hemolysis
<i>Streptococcus pneumoniae</i> ATCC 6303	Good	Alpha
<i>Streptococcus pyogenes</i> ATCC 19615	Good	Beta
* <i>Bacillus cereus</i> ATCC 11778	Good	Beta
** <i>Listeria monocytogenes</i> ATCC 19111	Good	Beta

* Incubate at 30°C for 24±2 hours according to ISO 7932

** Incubate at 35 or 37°C for 18-24 hours according to ISO 11290

Packaging: 500 g



For the differentiation of Enterobacterales, particularly *Proteus* spp. from *Salmonella*.

Formula in g/L

Peptone	1,00	Potassium dihydrogen phosphate.....	2,00
Glucose.....	1,00	Sodium chloride.....	5,00
Phenol red	0,012	Agar	12,00

Final pH at 25°C: 6,8 ± 0,2

Principle:

Urea LAB-AGAR™ Base acc. to ISO 6579 can be used for the differentiation of the urea activity of Enterobacterales as well as microorganisms of the families of *Brucella*, *Bacillus*, *Micrococcus*, *Mycobacteria* and *Proteus*.

Urea is a source of nitrogen for those organisms producing urease. Peptone provides nitrogen and other co-factor essential for growth. Monopotassium phosphate provides buffering capacity. Glucose is a fermentable carbohydrate carbon and energy source. Sodium chloride maintains the osmotic balance. Phenol red is the pH indicator.

Preparation: dissolve 2,1 grmas of the medium in 95 ml of distilled water. Mix well and dissolve by heating with frequent agitation until complete dissolution. Sterilize in autoclave at 121°C for 15 minutes. Cool to 50-55°C and add aseptically 5 ml of Urea Sterile Solution 40 % (ref. SL 0041) or one vial of Urea Sterile Solution 40 % (ref. SL 00111) . Mix well and dispense tubes. Allow to cool in a slanted position in order to obtain short butts. The prepared medium should be stored at 2-8°C.

Procedure:

- ★ Prepare a heavy suspension of the organism isolated from plated media and inoculate the Urea LAB-AGAR™ Base acc. to ISO 6579.
- ★ Loosen closure on the tube before incubating.
- ★ Incubate at 37°C ± 1°C or 36±2°C to 24 hours.

Result:

- ★ Positive urease tubes turn the phenol red indicator a deep violet red colour (alkalization)

Storage / Shelf life

- ★ Once opened keep powdered medium closed to avoid hydration at 2 - 30°C
- ★ The expiration date is indicated on the label.



Microbiological test

The following results were obtained in the performance of the medium from type cultures after incubation at a temperature of $37\pm 1^{\circ}\text{C}$; $36\pm 2^{\circ}\text{C}$ and observed after 24 hours

Microorganisms	Growth	Urease
Enterobacter aerogenes ATCC 13048	Good	- / no change of color in the medium
Escherichia coli ATCC 25922	Good	- / no change of color in the medium
Klebsiella pneumoniae ATCC 13883	Good	+ / red or purple medium
Proteus vulgaris ATCC 13315	Good	+ / red or purple medium
Salmonella Typhimurium ATCC 14028	Good	- / no change of color in the medium

Packaging: 500 g

Supplements:	Urea Sterile Solution 40 %	100 ml	ref. SL 0041
	Urea Sterile Solution 40 %	10 x 5 ml	ref. SL 0111



For the selective enrichment of Salmonella. According to ISO 6579-1 standard.

Formula in g/L

Beef extract	4,30	Enzymatic digest of casein.....	8,60
Ox bile	4,78	Sodium chloride.....	2,60
Calcium carbonate	38,70	Sodium thiosulphate	47,80
Brilliant green.....	0,0096		

Final pH at 25°C: 8,0 ± 0,2

Principle:

MKTn Broth is recommended by ISO 6579 to be used as a selective enrichment broth for the detection of Salmonella spp. in all food types, including milk and dairy products, molluscan, shellfish and other fish product and in environmental swabs.

Beef extract and casein peptone provide nitrogen, vitamins, minerals and amino acids essential for growth. Calcium carbonate is neutralizer absorbs toxic metabolites. Ox bile, brilliant green and novobiocin inhibit bacteria other than Salmonella. Selectivity is also obtained by both sodium thiosulphate and tetrathionate, suppressing coliforms. Tetrathionate is formed in the medium with iodine included in the medium. Bacteria containing the enzyme tetrathionate reductase will thrive in this medium. Sodium chloride supplies essential electrolytes for transport and osmotic balance

Preparation: suspend 89,5 grams of the medium in one liter of distilled water by heating for 5 minutes. DO NOT AUTOCLAVE! Immediately cool to 50°C and add 4 vials of Novobiocin Supplement (ref.SL 0055).

Add 20 ml of a iodine and potassium iodide solution (20 g of iodine and 25 g of potassium iodide in 100 ml of sterile distilled water). Homogenize gently and dispense into sterile containers.

The prepared medium should be stored at 2-8°C.

Procedure:

Pre-enrichment and selective enrichment

- ★ Add 25 g of the samples to 225 ml Buffered Peptone Water (Ref. BT 5020) and incubate at 34-38°C for 18±2 hours
- ★ Transfer 0,1 ml of the pre-enrichment culture to 10 ml of Rappaport Vassiliad Soy Broth (ref. PW 4245). Incubate at 41,5°C for 24±3 hours
- ★ Transfer 1 ml of the pre-enrichment culture to 10 ml of MKTn Broth. Incubate at 37±1°C for 24±3 hours

Storage / Shelf life

- ★ Once opened keep powdered medium closed to avoid hydration at 2 - 30°C
- ★ The expiration date is indicated on the label.



Microbiological test

The following results were obtained in the performance of the medium from type cultures after incubation at a temperature of $37 \pm 1^\circ\text{C}$ and observed after 24 ± 3 hours

Microorganisms	Growth
Escherichia coli ATCC 25922	Inhibited
Salmonella Typhimurium ATCC 13048	Good

Packaging: 500 g

Novobiocin Supplement 10 vials/ 1 vial / 250 ml Ref. SL 0055



Chromogenic, selective medium for the isolation and presumptive identification of *Salmonella* spp. from environmental and other samples. According to the ISO 6579 norm.

Formula in g/L			
Peptone.....	10,00	Selective compounds.....	12,00
Chromogenic mixture	0,90	Agar	15,00

Final pH at 25°C: 7,2 ± 0,2

Principles:

The selectivity of the medium is improved by a cephalosporin which inhibits the growth of *Pseudomonas* by sodium desoxycholate which suppresses the growth of Gram-positive and some Gram-negative bacteria and by Tergitol-4 which is active mainly against the growth of *Proteus* spp.

The differentiation between the *Salmonella* and non-*Salmonella* colonies is achieved by:

- a chromogenic substrate for a specific esterase enzyme of *Salmonella*, that is split with the liberation of an insoluble magenta-red dye
- a chromogenic glucopyranoside derivative which is split by β -glucosidase with the formation of insoluble blue-green dye.

The chromogenic and selective compounds of the medium allow the detection also of the rare lactose positive *Salmonella* strains. Chromogenic *Salmonella* LAB-AGAR™ is useful for the detection of *S. Typhi* and *S. paratyphi*. Sometimes rare strains of *Pseudomonas* and *Aeromonas* can cultivate with magenta-red colonies. These strains can be easily differentiated with the oxidase test.

Preparation: suspend 19 grams of the medium in 500 ml of distilled water. Mix well and add one vial (vial A) of *Salmonella* Chromogenic Supplement (ref. SL 0061). Heat with frequent agitation. Sterilize in autoclave at 121°C for 15 minutes. Cool to 45-50°C, add one vial (vial B) reconstituted in 2 ml of sterile distilled water of *Salmonella* Chromogenic Supplement (ref. SL 0061). Mix well and pour into Petri dishes.

The prepared medium should be stored at 8-15°C.

Technique:

- ★ Chromogenic *Salmonella* LAB-AGAR™ can be used according to the usual laboratory practices for *Salmonella* isolation with direct plating or after the enrichment in non-selective liquid media
- ★ Incubate the inoculated plates at 37°C ± 1°C for 18-24 hours and observe for the presence of typical magenta-red colonies

Colour colony:

- ★ *Salmonella* spp – magenta-red
- ★ *Escherichia coli* – colourless
- ★ *Proteus* spp. – pale brown or green
- ★ *Klebsiella* spp. – blue –green

Storage / Shelf life

- ★ Once opened keep powdered medium closed to avoid hydration at 2 - 8°C
- ★ The expiration date is indicated on the label.

Packaging: 500 g

Supplement: *Salmonella* Chromogenic Supplement 5+5 vials. 2 vials /500 ml Ref. SL 0061



Flask: 100 ml

Formula:

Egg`s Yolk Tellurite Sterile Emulsion 20%.....100 ml

Uses

For the detection and enumeration of coagulase positive Staphylococci.

Egg`s Yolk Tellurite Emulsion, sterilized and stabilized, for use in microbiology applications, ready for use with Baird Parker LAB-AGAR™ Base acc. to ISO 6888-1 (ref. PS 33) for selection of coagulase positive Staphylococci. The addition of Egg yolk and Potassium tellurite helps to differentiate these microorganisms from others capable of growing in the base agar, through the detection of lecithinase and the formation of black colonies.

Precautions:

- ★ For Laboratory use only
- ★ The supplement should be used only by adequately trained personnel with knowledge of microbiological techniques in the laboratory.
- ★ Consult the material safety data sheet before the use.
- ★ Do not use beyond stated expiry date

Storage / Shelf life

- ★ Store at 2-8°C - When stored as directed the supplement remains stable until the expiry date shown on the label
- ★ The expiration date is indicated on the label



Flask: 100 ml

Formula:

Egg`s Yolk Tellurite Sterile Emulsion 20%.....100 ml

Uses

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