TECHNICAL DATA SHEET

Article No. 9887

Baird Parker Agar Base, ready-to-use medium

SPECIFICATION

Ready-to-use solution, bottles, sterile. Solid, selective culture medium for the screening of Staphylococci from a variety of samples, acc. to Ph.Eur./USP, DIN and ISO 5944:2001, ISO 6888, ISO 22718.

Colour:	Yellow
pH:	7.2 ± 0.2 at 25 ºC

COMPOSITION IN G/ L

Casein peptone	10.00
Sodium pyruvate	10.00
Glycine	12.00
Meat extract	5.00
Lithium chloride	5.00
Yeast extract	1.00
Agar	17.00

PACKAGE DETAILS

9887-10x90ML

Bottle size	125 ml
Volume	90 ± 3 ml
Packaging unit	10 bottles

1 box with 10 x 90 ml in 125 ml bottles. Injectable cap: Plastic screw inner cap.
For the use of syringe needles with a diameter ≤ 0.8 mm.

9887-10x180ML

Bottle size	250 ml
Volume	180 ± 5 ml
Packaging unit	10 bottles

1 box with 10 x 180 ml in 250 ml bottles. Injectable cap: Plastic screw inner cap.
For the use of syringe needles with a diameter ≤ 0.8 mm.

DESCRIPTION/ TECHNIQUE

Description:
Baird Parker Agar Base is recommended for the detection and enumeration of staphylococci in food and other material, since it allows a good differentiation of coagulase-positive strains. The growth of the accompanying bacteria is usually suppressed by the high concentration in lithium, glycine and pyruvate. Lithium and glycine enhances the growth of staphylococci. Occasionally the medium may grow some Bacillus species, yeast and very rarely, Proteus. The growth of Proteus species can be suppressed by adding 50 mg/L of sulphamethazine.
The presence of tellurite and egg yolk, which must be added to the medium after sterilization, allows the differentiation of presumptive pathogenic staphylococcal colonies. There is a high correlation between the coagulase test and the presence of clear zones of lipolysis in this medium, which is due to the staphylococcal lecithinase. Studies show that almost 100% of coagulase-positive staphylococci are capable of reducing tellurite, which produces black colonies, whereas other staphylococci cannot always do so.

Technique:
To use, the contents of the bottle should be poured into plates. The melting of the culture medium should be carried out according to the manufacturer's instructions, either in a water bath or microwave oven. Never apply direct heat to melt a medium. The melting temperatures and times depend on the shape of the container, the volume of medium and the heat source. Before melting any medium loosen the screwcap of the container to avoid breaking the container. The medium should be melted only once and used. Media with
agar should not be melted repeatedly as their characteristics change with each remelting. Overheating should be avoided as much as prolonged heating, especially with regard to media with an acidic or alkaline pH. Once melted pour the plates using aseptic techniques.
Prepare the complete medium by adding 50 mL/L medium sterile egg yolk + potassium tellurite emulsion (Art. no. 9557). Plates should be used on the same day of preparation or within 48 hours, to avoid the loss of definition in the precipitated zones. The medium base, without yolk or tellurite, is perfectly stable and therefore can be melted repeatedly.
To inoculate, follow standard laboratory methods or the applicable norms. Spiral plate method, streak plating, econometric methods, dilution banks or spread plating.
The use methodology is according to EN ISO 6888.
The inoculation is carried out by spreading 0,5 mL of sample over each plate with a Drigalsky loop.
After 24-48 hours of incubation at 37 ± 1 ºC, select the colonies which are black, shiny and convex with regular margins surrounded by a clear zone. These can be presumptively identified as coagulase-positive Staphylococcus aureus.

MICROBIOLOGICAL CONTROL

Add Egg yolk Tellurite (Art.no. 9557) - Inoculate : Practical range 100 ± 20 CFU. min. 50 CFU (productivity) / 10^4-10^6 CFU (selectivity) / ≥ 10^3 CFU (selectivity)
Distribute the complete medium, cooled at 50ºC, in plates

Analytical methodology according to ISO 11133:2014/A1:2018; A2:2020

Aerobiosis. Incubation at 37 ºC ± 1, reading after 24-48 ± 2h

Microbiological control according to ISO 11133:2014/A1:2018.

Microorganism	Growth
Stph. aureus ATCC® 25923, WDCM 00034	Good. Black/grey colonies with halo. Lecithinase (+)
Escherichia coli ATCC® 8739, WDCM 00012	Inhibited
Staphylococcus aureus ATCC® 6538, WDCM 00032	Good. Black/grey colonies with halo. Lecithinase (+)
Stph. epidermidis ATCC® 12228, WDCM 00036	Black/grey colonies w/o halo. Lecitinase (-)
Stph. saprohyticus ATCC® 15305, WDCM 00159	Black/grey colonies w/o halo. Lecitinase (-)

Sterility control:
Incubation 48 hours at 30-35 ºC and 48 hours at 20-25 ºC: NO GROWTH.
Check at 7 days after incubation in same conditions.

REFERENCES

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· FIL-IDF 60:2001 Standard. Lait et produits à base de lait - Detection des staphylocoques à coagulase positive - Technique du nombre le plus probable. Brussels.
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· ISO 6888-1:1999/Adm.2:2018. Standard. Microbiology of food and animal feeding stuffs - Horizontal method for the enumeration of coagulase-positive staphylococci (*Staphylococcus aureus* and other species)- Part 1 Technique using Baird-Parker Agar medium. Adment 2: Inclusion of an alternative confirmation test using RPFA stab method.
· ISO 6888-2:1999 Standard. Microbiology of food and animal feeding stuffs - Horizontal method for the enumeration of coagulasepositive staphylococci - Part 1 Technique using rabbit plasma fibrinogen agar medium. Geneva.
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· ISO 22718 Standard (2015) . Cosmetics - Microbiology - Detection of Staphylococcus aureus.
· USP 31 - NF 26 (2008) <61> Microbial Limit Tests. US Phamacopoeial Conv. Inc. Rockville. MD. USA.
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STORAGE

8 - 25 °C

SHELF LIFE

12 months unopened from date of manufacture

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Th. Geyer GmbH & Co. KG
Dornierstr. 4 – 6
D-71272 Renningen
Tel.: +49 7159 1637-0
Fax: +49 7159 1637-710
renningen@thgeyer.de
www.thgeyer.de

BW-Bank (Swift/BIC SOLADEST600)
IBAN DE85600501010002036302
Postbank Stuttgart (Swift/BIC PBNKDEFFXXX)
IBAN DE32600100700000020708
Deutsche Bank (Swift/BIC DEUTDESSXXX)
IBAN DE06600700700125518100

St.-Nr. 70093/40018 / USt-IdNr. DE147510304
Amtsgericht Stuttgart / HRA-Nr. 254140
Persönlich haftende Gesellschafterin:
Geyer Beteiligungsgesellschaft mbH
Amtsgericht Stuttgart / HRB-Nr. 252035
Geschäftsführer: Lutz-Alexander Geyer /
Oliver-Alexander Geyer / André Meise / Ralf Streicher