

## Specification

Selective culture medium for the screening of Staphylococci from a variety of samples, acc. to Pharmacopoeias, ISO and DIN standards.

## Presentation

10 Prepared bottles  
Bottle 125 ml  
with: 90 ± 3 ml

### Packaging Details

1 box with 10 bottles 125 ml. metal-non injectable cap.

### Shelf Life

12 months

### Storage

8-25°C

## Composition

Composition (g/l):

Casein Peptone.....	10.0
Sodium pyruvate.....	10.0
Glycine.....	12.0
Meat extract.....	5.00
Lithium chloride.....	5.00
Yeast extract.....	1.00
Agar .....	17.0

## 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* spp. 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 lypolysis 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 can not 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 complet medium by adding 50 mL/L medium Sterile Egg Yolk + Potassium Tellurite emulsion. Homogenize and distribute into plates.

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 ISO 6888.

After 24-48 hours of incubation at 37±1°C, select the colonies which are black, shiny and convex with regular margins surrounded by a clear zone (Lecithinase +). These can be presumply identified as coagulase-positive *Staphylococcus aureus*. To confirm the Coagulase test, inoculate the colony in the medium A. RPF Baird Parker.

**Quality control****Physical/Chemical control**

Color : yellow

pH: 7.2 ± 0.2 at 25°C

**Microbiological control**Add Egg yolk Tellurite - Inoculate : Practical range 100±20 CFU; Min. 50 CFU (Productivity)/10<sup>4</sup>-10<sup>6</sup> (Selectivity).

Distribute the complete medium, cooled at 50°C, in plates

Aerobiosis. Incubation at 37 ± 1°C, reading after 24/44 ± 4h

**Microorganism***Stph. aureus* ATCC® 25923, WDCM 00034*Escherichia coli* ATCC® 8739, WDCM 00012*Staphylococcus aureus* ATCC® 6538, WDCM 00032*Stph. epidermidis* ATCC® 12228, WDCM 00036*Stph. saprophyticus* ATCC® 15305, WDCM 00159**Growth**

Good. Black/grey colonies with halo. Lecithinase (+)

Inhibited

Good. Black/grey colonies with halo. Lecithinase (+)

Black/grey colonies w/o halo. Lecithinase (-)

Black/grey colonies w/o halo. Lecithinase (-)

**Sterility Control**

Incubation 48 hours at 30-35°C and 48 hours at 20-25°C: NO GROWTH

Check at 7 days after incubation in same conditions

**Bibliography**

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