

Specification

Solid selective culture medium for the screening of staphylococci from a variety of samples, according to pharmacopoeias and ISO standards.

Presentation

	Packaging Details	Shelf Life	Storage
30 Contact Plates Contact Plates - Double Wrapping with: 15 ± 2 ml	1 box with 5 blisters (PET laminated and PPBO bag) with 6 contact plates/blister.	7 months	2-14 °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	15.0
Egg Yolk Emulsion.....	50.0 ml
Potassium Tellurite 1%.....	10.0 ml

Description /Technique

Description
Baird Parker Agar 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 presence of tellurite and egg yolk 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
Contact plates are used in the microbiological control of disinfection and cleaning of surfaces. It acts simultaneously as a sampler and incubation culture medium without the need for any other intermediate steps.
The plates come in a form appropriate for this function and can be used with different culture media depending on the type of microbe that needs to be controlled. On average the plates provide a contact surface of approximately 25 cm².
To use, remove the cover and gently press the culture medium on the surface to be controlled, ensuring contact between the two surfaces. The Contact plate is removed and covered with the lid to prevent air contamination. It is advisable that the lid is secured with adhesive tape and the bottom labelled with the sampling data (place, date and time).
If the sample surfaces are rough, the contact plates will not make good contact, even when the pressure is increased. In these cases it is advisable to delineate an sample surface area of 25 cm squared and rub this area vigorously with a wet sterile swab and then rub the swab over the Contact plate.
If verifying the effectiveness of a cleaning or disinfection process, contact plates should be used within two hours after the end of the process, ensuring that the sample surface is dry. It is advisable to always include positive controls, sampling the area before disinfection or dirty areas beside the disinfected area.
The technician will determine the frequency of sampling and disinfection according to performance criteria. Apply the agar directly onto surface to be monitored ensuring that the pressure is distributed over the whole plate for 10 seconds. Clean the surface where the sample was collected in order to remove any traces of agar.
The inoculated plates are incubated at 37±1 ° C for 24-48±2 and examined daily.

Note: Contact plates are used for monitoring the microbiological contamination of surface and air inside cleanrooms, isolators, RABS, food industries and hospitals.

The plates must be kept in their original packaging (blisters) to guarantee their stability at the end of their expiration date.

Quality control

Physical/Chemical control

Color : yellow

pH: 7.2 ± 0.2 at 25°C

Microbiological control

Inoculate: Practical range 100 ± 20 CFU. min. 50 CFU (productivity)/ 10⁴-10⁶ (selectivity) and <100 UFC (specificity-PhEur) and ≥10³ UFC (specificity-ISO).

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

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

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

S. aureus and *E. coli* double incubation temp. 30-35 °C / 37°C

Microorganism

Escherichia coli ATCC® 8739, WDCM 00012

Staphylococcus aureus ATCC® 6538, WDCM 00032

Stph. epidermidis ATCC® 12228, WDCM 00036

Stph. saprophyticus ATCC® 15305, WDCM 00159

Stph. aureus ATCC® 25923, WDCM 00034 (37°C)

Stph. aureus ATCC® 6538, WDCM 00033 (32,5°C)

Escherichia coli ATCC® 8739, WDCM 00012 (32,5°C)

Growth

Inhibited

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

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

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

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

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

Inhibited

Sterility Control

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

Check at 7 days after incubation in same conditions.

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