

Specification

Medium with neutralisers for the enumeration of Enterobacteria.

Presentation

30 Contact Plates

Contact Plates - Double Wrapping

with: 15 ± 2 ml

Packaging Details

1 box with 5 blisters (PET laminated and PPBO bag)
with 6 contact plates/blister.

Shelf Life

7 months

Storage

2-25 °C

Composition

Composition (g/l):

Yeast extract.....	3.000
Peptone from gelatin.....	7.000
Bile salts mixture	1.500
D(+)Glucose.....	10.00
Sodium chloride.....	5.000
Neutral red.....	0.030
Crystal violet.....	0.002
Lecithine.....	0.700
Polysorbate 80.....	5.000
Histidin.....	1.000
Sodium Thiosulfate 5H ₂ O.....	0.500
Agar.....	13.000

Description /Technique

Description

This medium is a modification of the Violet Red Bile Agar and the MacConkey Agar as described by Mossel et al. The addition of glucose to the Violet Red Bile Agar enhances both the growth of the most fastidious enterobacteria and the recovery of those having suffered from adverse conditions. Mossel himself realized that by removing the lactose and keeping the glucose, the medium's efficiency remained stable.

The addition of the neutralizing agents TLHTh (Tween 80 - Lecithin - Histidine - Sodium Thiosulphate) may inactivate a variety of disinfectants.

- * The combination of lecithin, polysorbate 80 and histidine neutralizes aldehydes and phenolic compounds.
- * The combination of lecithin and polysorbate 80 neutralizes the quaternary ammonium compounds.
- * The polysorbate 80 neutralizes hexachlorophene and mercurial derivatives.
- * Sodium thiosulphate neutralizes halogen compounds.
- * Lecithin neutralizes chlorhexidine.
- * Histidine neutralizes formaldehyde.

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Technique

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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 a 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 35±2 ° C for 24±2 hours 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 : Red - Brownish

pH: 7.4 ± 0.2 at 25°C

Microbiological controlInoculate: 10-100 CFU accord. to Eur. Pharm. & 100 ± 20 CFU; min. 50 CFU (productivity)/ 10⁴-10⁶ CFU (selectivity) acc. to ISO.

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

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

Aerobiosis. Incubation: 30-35 °C. Reading at 24h (E.P.) / 37 ± 1 °C. Reading at 24 h (ISO)

Note: results ATCC® 8739/6538/9027 (30-35 °C) & ATCC® 8739/25922/19433/14028 (37 °C).

Microorganism*Staphylococcus aureus* ATCC® 6538, WDCM 00032*Ps. aeruginosa* ATCC® 9027, WDCM 00026*Salmonella typhimurium* ATCC® 14028, WDCM 00031*Escherichia coli* ATCC® 25922, WDCM 00013*Escherichia coli* ATCC® 8739, WDCM 00012 (32,5°C)*Escherichia coli* ATCC® 8739, WDCM 00012 (37°C)**Growth**

Inhibited

Good (50%) -Colourless colonies

Good (≥50%)- Red purple colonies

Good (≥50%)- Red purple colonies

Good (≥50%)- Red purple colonies

Good (≥50%)- Red purple colonies

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.

Bibliography

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