

## Specification

General purpose solid medium containing animal and plant peptone and neutralisers according to Pharmacopoeial Harmonised Method and ISO Standards, for enumeration of total aerobics in surfaces.

## Presentation

	Packaging Details	Shelf Life	Storage
24 Contact Plates/lrd. Contact Plates - Triple Wrapping with: 15 ± 2 ml	1 box with 4 blisters (PET laminated and PPBO bag) with 6 contact plates/blister. Every pack exhibits an irradiation indicator (8-14kGy).	7 months	2-25 °C

## Composition

Composition (g/l):	
Peptone from casein .....	15.0
Soya peptone.....	5.00
Sodium chloride.....	5.00
Tween 80.....	5.00
Lecithine.....	0.70
Histidin.....	1.00
Sodium thiosulfate.....	0.50
Agar.....	15.0

## Description /Technique

### Description

TSA is a widely used medium containing two peptones which support the growth of a wide variety of organisms, even that of very fastidious ones such as Neisseria, Listeria, Brucella, etc. It is frequently used for routine diagnostic purposes due to its reliability and its easily reproducible results.

Classical media for microbiological examination of non-sterile products according to Pharmacopoeial Harmonised Methods.

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.

### 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 cm<sup>2</sup>.

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 30-35 ° C for 24-72 h (bacteria) and 3-5 days for fungi (yeast & molds). 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 double/triple irradiated wrapping ensures that the package itself doesn't contaminate the environment as the first wrapper is removed just before entering the clean area.

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 : Straw-coloured yellow      pH: 7.3 ± 0.2 at 25°C

### Microbiological control

Growth Promotion Test 50-100 CFU according to harmonized Pharmacopoeia monographs (EP) and test methods & ISO 11133:2014/A1:2018  
Analytical methodology according to ISO 11133:2014/A1:2018; A2:2020.

Aerobiosis. Incubation at 30-35 °C. Read after 18-24 h to 72 h for bacteria and 3-5 days for fungi.

### Microorganism

*Escherichia coli* ATCC® 8739, WDCM 00012  
*Staphylococcus aureus* ATCC® 6538, WDCM 00032  
*Bacillus subtilis* ATCC® 6633, WDCM 00003  
*Aspergillus brasiliensis* ATCC® 16404, WDCM 00053  
*Candida albicans* ATCC® 10231, WDCM 00054  
*Ps. aeruginosa* ATCC® 9027, WDCM 00026

### Growth

Good (≥70%)  
Good (≥70%)  
Good (≥70%)  
Good (≥70%)  
Good (≥70%)  
Good (≥70%)

### 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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