

Specification

General purpose solid medium with neutralisers for hygiene monitoring.

Presentation

	Packaging Details	Shelf Life	Storage
80 Plates /Irradiated Contact Plates - Triple Wrapping with: 15 ± 2 ml	1 box with 8 RD-PACK with 10 contact plates/pack.; and double wrapping cellophane. Every pack exhibits an irradiation indicator (8-14kGy)	4 months	2-14 °C

Composition

Composition (g/l):	
Peptone from Casein	5.00
Yeast extract.....	2.50
D(+) Glucose.....	1.00
Histidin.....	1.00
Lecithine.....	0.70
Polysorbate 80.....	5.00
Sodium Thiosulfate.....	0.50
Agar.....	15.00

Description /Technique

Description

The Plate Count Agar formulation is according to that of Buchbinder et al. as recommended in their study of media for the plate count of microorganisms.

The original formulation of the standardized agar for dairy microbiology has been modified in order to avoid the addition of milk. This new composition allows the growth of most microorganisms without any further additions.

This medium's formulation is equivalent to that described by the 'Standard Methods for the Examination of Dairy products', the USP's 'Tryptone Glucose Yeast Agar', the 'Deutsche Landwirtschaft' and to the APHA and AOAC's Plate Count Agar. This is the medium of choice for the plate count of any type of sample.

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 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). For a general aerobic count, incubate for 3 days at 30°C. Taking readings after 48 and 72 hours.

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.

Quality control

Physical/Chemical control

Color : Yellowish pH: 7.2 ± 0.2 at 25°C

Microbiological control

Inoculate: Practical range 100 ± 20 CFU. Min. 50 CFU (Productivity).

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

Aerobiosis. Incubation at 30 ± 1 °C, reading at 72 ± 3h

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

Microorganism

Bacillus subtilis ATCC® 6633, WDCM 00003

Escherichia coli ATCC® 8739, WDCM 00012

L. monocytogenes ATCC® 35152, WDCM 00109

Staphylococcus aureus ATCC® 6538, WDCM 00032

Growth

Good (≥70%)

Good (≥70%)

Good (≥70%)

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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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