

Specification

Medium for aerobic plate counts by the surface inoculation method (standard Plate Count Agar) according to ISO 4833, 8552 & 17410 Standards and IFU No. 6.

Presentation

	Packaging Details	Shelf Life	Storage
30 Prepared Plates			
55 mm Plates for filtration purposes with: 9 ± 1 ml	1 box containing: 5 plastic bags with 6 plates of 55 mm/ bag.	6 months	2-25°C

Composition

Composition (g/l):

Peptone from Casein	5.0
Yeast extract.....	2.5
D(+) Glucose.....	1.0
Agar.....	14.0

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.

Technique:

Collect, dilute and prepare samples and volumes to be filtered as required according to specifications, directives, official standard regulations and/or expected results.

Filter the sample through a 0.45 mm pore membrane and apply it onto the surface of the agar.

Incubate the plates aerobically at $30 \pm 1^\circ\text{C}$ for 24-48-72 h.

(Incubation times greater than those mentioned above or different incubation temperatures may be required depending on the sample, on the specifications,...)

After incubation, enumerate all the colonies on the surface of the membrane.

Calculate total microbial count per ml of sample by multiplying the average number of colonies per membrane by the inverse dilution factor. Report results as Colony Forming Unit (CFU's) per ml along with incubation time and temperature.

Quality control

Physical/Chemical control

Color : Yellowish pH: 7 ± 0.2 at 25°C

Microbiological control

Membrane Filtration /Practical range 100 ± 20 CFU; Min. 50 CFU (Productivity)./ 10^4 - 10^6 CFU for Selectivity.

Aerobiosis. Incubation at $30 \pm 1^\circ\text{C}$, reading at 24-48-72 h

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 ($\geq 70\%$)

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Good ($\geq 70\%$)

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

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