



Reference: 064PA0024I

Scharlau Microbiology - Technical Data

Product: **Plate Count agar (PCA) double wrap**

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

20 Plates /Irradiated
90 mm - Double wrapping
with: 21 ± 2 ml

Packaging Details

1 box with 2 cellophane bags (double wrapping) with 10 plates/bag. Side labeling. Every pack exhibitis a irradiation indicator stacked on the side of the bag.(8 -14kGy).

Shelf Life

3,5 months

Storage

2-14 °C

Composition

Composition (g/l):

Casein peptone..... 5.00

Yeast extract.....2.50

Dextrose..... 1.00

Agar..... 15.0

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

Technique:

The incubation time and temperature depend on the type of microorganism under study. For a general aerobic count, incubate for 3 days at 30°C. Taking readings after 48 and 72 hours.

After incubation, enumerate all the colonies that have appeared onto the surface of the agar.

Each laboratory must evaluate the results according to their specifications.

Quality control**Physical/Chemical control**

Color : Yellowish

pH: 7.0 ± 0.2 at 25°C

Microbiological control

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

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

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

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

Ps. fluorescens ATCC 13525 (10 days/ 6,5 °C ±1) acc. ISO 17410**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*Ps. fluorescens* ATCC® 13525, WDCM 00115*Stph. aureus* ATCC® 25923, WDCM 00034**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.

Bibliography

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