

TECHNICAL DATA SHEET

Article No. 9585

Plate Count Agar (PCA), prepared plates

SYNONYMS

Standard Methods Agar, Tryptone Glucose Yeast Agar, Casein peptone dextrose yeast agar

SPECIFICATION

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

Color: yellowish
pH: 7.0 ±0.2 at 25 °C

COMPOSITION IN G/L

Casein peptone	5.00
Yeast extract	2.50
Glucose (Dextrose)	1.00
Agar	15.00

PACKAGING DETAILS

9585-20PLATES

20 prepared plates 90 mm

Content: 21 ±2 ml

Packaging unit: 1 box with 2 packs of 10 plates/pack. Single cellophane.

GUIDELINES

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. The 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, ISO and AOAC's Plate Count Agar. This is the medium of choice for the plate count of any type of sample.

Technique:

Incubation time and temperature depend on the type of microorganism to study. For a general aerobic count, incubate for 3 days at 30 °C. Taking readings after 48 and 72 hours. After incubation, enumerate all colonies that have appeared on the agar surface.

Each laboratory must evaluate the results according to their specifications.

MICROBIOLOGICAL CONTROL

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

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

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

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

Ps. fluorescens ATCC 13525 10 days/ 6,5 ±1 °C acc. ISO 17410.

Microorganism	Growth
<i>Bacillus subtilis</i> ATCC® 6633, WDCM 00003	Good (≥70 %)
<i>Stph. aureus</i> ATCC® 25923, WDCM 00034	Good (≥70 %)
<i>Escherichia coli</i> ATCC® 8739, WDCM 00012	Good (≥70 %)
<i>L. monocytogenes</i> ATCC® 35152, WDCM 00109	Good (≥70 %)
<i>Ps. fluorescens</i> ATCC®13525, WDCM 00115	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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- ISO 4833 (2003) Microbiology of food and animal feeding stuffs. Horizontal method for the enumeration of microorganisms. Colony count technique at 30°C.
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STORAGE

2-14 °C

SHELF LIFE

3.5 months

