



PRODUCT DESCRIPTION

AS-1328

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Plate Count Agar (PCA)

Standard Methods Agar | Tryptone Glucose Yeast Extract Agar

Document Control

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Technical Review

Hassan Salimi, Technical Director, AuSaMicS Pty Ltd (18+ years culture media formulation)

Overview

Plate Count Agar (PCA), also known as Standard Methods Agar or Tryptone Glucose Yeast Extract Agar, is a non-selective solid culture medium used for the enumeration of viable aerobic microorganisms. It supports the growth of a broad range of non-fastidious bacteria and is the reference medium for Total Viable Count (TVC) determinations.

PCA is globally recognised and widely specified in regulatory, standardised, and routine microbiological testing, including ISO 4833, FDA-BAM, and APHA methods. It is an essential medium for food safety, water quality testing, pharmaceutical microbiology, environmental monitoring, and quality control laboratories.

AuSaMicS Plate Count Agar is manufactured under controlled conditions to ensure consistent performance, reproducibility, and reliable colony recovery.

Applications

- Enumeration of aerobic bacteria in food and beverage products
- Microbiological analysis of meat, dairy, produce, and poultry
- Hygiene and sanitation monitoring in food processing environments
- Shelf-life and product stability testing
- Potable, process, and wastewater microbiological analysis
- Surface and environmental monitoring for regulatory reporting
- Microbial limit testing aligned with USP and EP requirements
- Air and surface contamination monitoring in cleanrooms
- Teaching, training, and research laboratories
- Studies of microbial physiology and colony morphology

Key Features

- Non-selective formulation for total viable count determination
- Balanced nutrient composition supporting non-fastidious aerobic bacteria
- International standard compliance (ISO, FDA, APHA)
- Clear, transparent medium for accurate colony counting
- Reliable and reproducible performance across routine and regulatory testing

Typical Colony Characteristics



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After incubation at 30–35°C for 48–72 hours, aerobic bacteria form well-defined, countable colonies suitable for enumeration and morphological observation.

Chemical Composition (per litre)

Component	Quantity
Tryptone	5.0 g
Yeast Extract	2.5 g
Glucose (Dextrose)	1.0 g
Agar	15.0 g

Total: 23.5 g/L Final pH: 7.0 ± 0.2 at 25°C

Preparation Instructions

- Suspend 23.5 g of dehydrated medium in 1 L purified water
- Heat with agitation to dissolve completely
- Sterilise by autoclaving at 121°C for 15 minutes
- Cool to 45–50°C, mix well
- Pour plates or dispense as required

Incubation

Parameter	Condition
Temperature	30–35°C
Time	48–72 hours
Atmosphere	Aerobic

Quality & Compliance

- Manufactured under controlled conditions
- Batch-to-batch consistency verified by quality control testing
- Conforms to ISO 4833, FDA-BAM, and APHA performance expectations
- Supported by Technical Data Sheet (TDS) and Certificate of Analysis (COA)

Storage & Stability

Dehydrated Medium



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- Store at 10–30°C
- Keep container tightly closed
- Protect from moisture and light

Prepared Plates

- Store at 2–8°C
- Protect from light
- Recommended use within 7 days

HS Tariff Classification

HS Code: 3822.00 — Prepared diagnostic or laboratory reagents

Why Buy Plate Count Agar from AuSaMicS?

- Australian-based supplier with fast local dispatch
- Reference-grade quality comparable to global brands
- Clear technical documentation and responsive support
- Competitive pricing without compromising performance

Intended Use & Disclaimer

For laboratory, food, environmental, and industrial microbiology use only. Not intended for diagnostic or clinical use in humans or animals.

References

- ISO 4833 – Enumeration of microorganisms
- FDA-BAM – Aerobic Plate Count
- APHA – Standard Methods for the Examination of Water and Wastewater

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