

## PLATE COUNT AGAR TRYPTONE (TRYPTIC) GLUCOSE YEAST AGAR STANDARD METHODS AGAR

**(ISO 4833 / APAT CNR IRSA 7050)**
**IVD in Class A, EU Reg. 2017/746**

 For in vitro diagnostic use **IVD**

Plate Count Agar is a Standard Methods medium used for enumerating aerobic bacteria in water, wastewater, foods and dairy products. This medium is also recommended as a general plating medium for determining aerobic bacterial populations.

### DESCRIPTION

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### PRINCIPLE

Plate Count Agar contains Pancreatic Digest of Casein and Yeast Extract which provide the carbon and nitrogen sources required for growth of a wide variety of organisms. Glucose is an energy source. This formula is specified in Standard Methods for the Examination of Water and Wastewater.

COMPOSITION	g/L
Pancreatic Digest of Casein	5.0
Yeast Extract	2.5
Glucose	1.0
Agar	15.0

**Final pH 7,0 ± 0,2 at 25°C**

### WARNING AND PRECAUTIONS

**For in vitro diagnostic use.**

Observe the precautions normally taken when handling laboratory reagents.

**Dehydrated medium: HIGHLY HYGROSCOPIC.** During the handling, wear dust protection mask. Avoid the eye contact. Do not use beyond the expiration date or if the product shows signs of deterioration, an altered color or has compacted.

**Prepared Medium:** The product does not contain hazardous substances in concentrations exceeding the limits set by current legislation and therefore is not classified as dangerous.

**Safety Data Sheet** is available on request for professional users.

All waste must be disposed of according to local directives.

### STORAGE AND STABILITY

<b>Dehydrated medium:</b>	10-30°C
<b>Prepared medium:</b>	10-25°C

The product is stable until the expiration date indicated on the label under the recommended storage conditions.

### PREPARATION

**Dehydrated medium:** Suspend 23.5 g of the powder in 1 liter of distilled or deionized water. Mix well. Heat to boil shaking frequently until completely dissolved. Sterilize in autoclave at 121°C for 15 minutes.

**Prepared medium (bottles, tubes):** Melt the content of the bottle/tubes in a water bath at 100°C until completely dissolved. Then screw the cap and check the homogeneity of the dissolved medium, if it is the case turning the bottle/tube upside down. Cool at 45-50°C, mix well avoiding foam formation and aseptically distribute into Petri dishes.

### PROCEDURE

1. Perform serial dilutions of the test sample in order to achieve a colony count of between 15 and 300 colonies per plate. Use a suitable diluent such as Buffered Peptone Water or Maximum Recovery Broth.
2. Inoculate the medium by pour plating, spread plating or membrane filtration method.
3. Incubation conditions may vary depending on the organisms under study. For a general aerobic count, incubate aerobically at 30°C for 72 hours.

### RESULTS

Count colonies on all plates containing 15-300 colonies. Report the count as CFU per ml of sample allowing for dilution factors.

### QUALITY CONTROL

**Dehydrated medium:** free-flowing, homogeneous, light beige.

**Prepared medium:** Slightly opalescent, amber.

**Typical response after incubation at 30±1°C for 72±3 hours, in aerobiosis**

MICROORGANISM	GROWTH
Escherichia coli ATCC 25922	Good

### REFERENCES

- Standard Methods for the Examination of Dairy Products, 12th Ed., 1967.
- Standard Methods for the Examination of Water and Wastewater, 12th Ed., 1961.
- Association of Official Agricultural Chemists, 10th Ed., 1965.
- Methods and Standards for the Production of Certified Milk; 1953-1954.
- Recommended Methods for Microbiological Examination of Foods; APHA, 1958.
- Rapporto Istituzionale 96/35. Metodi di analisi per il controllo microbiologico degli alimenti
- ISO 4833 Microbiology - General Guidance for the enumeration of microorganisms. Colony count technique at 30°C. 1991-03-01
- ISO 4833:2013 – Microbiology of the food chain – Horizontal method for the enumeration of microorganisms – Part 1: Colony count at 30°C by the pour plate technique – Part 2: Colony count at 30 °C by the surface plating technique.

### PRESENTATION

**Packaging**
**REF.**
**Dehydrated medium:  
PLATE COUNT AGAR**

100 g (4.2 L)	11130
500 g (21.2 L)	10130
5 Kg (212.7 L)	13130

**Prepared medium:  
PLATE COUNT AGAR**

6 x 100 mL bottles	63314
6 x 200 mL bottles	63214
12 x 200 mL bottles	63514
20 x 10 ml tubes	5043/20
20 x 22 mL tubes	17205/20
20 pcs (90 mm ready-to-use plates)	2354479/20
20 pcs (60 mm ready-to-use plates)	2404480/20
20 RODAC Plates	31000

### SYMBOLS


**Read the instructions**

**Biological hazard**

**CE Mark (product complies with the requirements of Regulation (EU) 746/2017)**

**Temperature limitation**

**Use by**

**For in vitro diagnostic use**

**Manufacturer**