

# PLATE COUNT AGAR (PCA)

**INTENDED USE** 

Plate Count Agar or Standard Method Agar is used for the enumeration of bacteria in water, wastewater, food, and dairy products.

FORMULA Ingredients in grams per liter of purified water

Casein peptone	5.00	
Yeast extract	2.50	
Dextrose	1.00	
Agar	15.00	
Adjusted and/or supplemented as required to meet performance criteria.		

**STORAGE** Bottles: 2 - 25°C Dehydrated media: 2 - 30°C

The expiration date on the product label applies to the product in its intact packaging when stored as directed.

## DIRECTIONS FOR PREPARATION

# For dehydrated media

- 1. Dissolve 23.5 g in 1 L of purified water. Mix thoroughly.
- 2. Heat with frequent agitation and boil for one minute to completely dissolve the medium.
- 3. Autoclave for 15 minutes at 121°C.

#### For bottle media

- 1. Heat the bottle at 95-100°C in water bath.
- 2. Mix well and cool to 45-47°C.
- 3. Poor in Petri plate and let solidified on a cool horizontal surface.

## LIMITATION OF THE PROCEDURE

This product is for laboratory use only.

QUALITY CONTROL

<u>Physical appearance</u>: Prepared medium is solid, amber <u>Final pH</u>:  $7.0 \pm 0.2$  at 25°C

## Expected Cultural Response

Organism	Inoculum CFU	Incubation	Results
Bacillus subtilis ATCC 6633 • WDCM 00003	10-10 <sup>2</sup>	3 days at 30°C	Growth
Escherichia coli ATCC 8739 • WDCM 00012	10-10 <sup>2</sup>	3 days at 30°C	Growth
Staphylococcus aureus ATCC 6538 • WDCM 00032	10-10 <sup>2</sup>	3 days at 30°C	Growth

This is an example of organisms routinely used for testing

REFERENCE

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- 4. U.S. Food and Drug Administration. 1998. Bacteriological analytical manual, 8th ed. AOAC International, Gaithersburg, Md. USA.
- 5. ISO 6730:2005 [IDF 101:2005]. Milk Enumeration of colony-forming units of psychrotrophic microorganisms - Colony-count technique at 6.5°C.
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