

# Plate Count Agar [PCA]

For total microbial plate count in milk and other materials of sanitary significance

## Formula in grams per liter:

Casein Peptone	5,00	Yeast Extract	2,5
Dextrose	1,00	Bacteriological Agar	15,00

Final pH: 7,0 ± 0,2 at 25 °C

## Preparation:

Suspend 23,5 grams of the medium in one liter of distilled water. Heat agitating frequently until boiling and completely dissolved. Dispense into appropriate containers and sterilize at 121 °C (15 lbs. sp) for 15 minutes.

## Uses:

Standard Methods Agar is recommended by APHA when enumerating bacteria of sanitary interest, which are indicators of contamination or microbial load in foods. In general, 1 ml. of the appropriate dilution is added to the sterile agar at a temperature of 44-45°C, mixed gently and poured into sterile Petri dishes.

Incubate the Petri dishes at a specified temperature and time period and count the developed colonies. Consult the specific texts of APHA for the particular sample applications.

## Microbiological Tests:

Microorganisms	Growth
<i>Escherichia coli</i> ATCC 25922	Satisfactory
<i>Escherichia coli</i> ATCC 13762	Satisfactory
<i>Staphylococcus aureus</i> ATCC 25923	Satisfactory
<i>Staphylococcus epidermidis</i> ATCC 12228	Satisfactory

