

# Milk Plate Count Agar



Medium used for the cultivation and enumeration of the microorganisms in milk and dairy products.

## • CONTENTS (Liter)

Tryptone	5.0 g
Yeast Extract	2.5 g
Glucose	1.0 g
Skim Milk Powder	1.0 g
Agar	13.0 g
Final pH = 6.9 ± 0.1 at 25°C	

## • PROCEDURE

Suspend 22.5 G of powder in 1 L of distilled or deionized water. Heat to boiling until completely dissolved. Sterilize by autoclave at 121°C for 15 minutes. Cool to 45 - 50°C in water bath. Mix well. Pour into petri dishes.

## • INTERPRETATION

Milk Plate Count Agar is a medium used for the cultivation and enumeration of the microorganisms in milk and dairy products. Tryptone and yeast extract provide nitrogen, carbon, vitamins and minerals. Glucose is a carbon source. Skim milk powder provides nutrients for the growth of microorganisms. Agar is the solidifying agent.

## • TECHNIC

Inoculate the plates with spreading the specimen on surface of the medium using a sterile loop. Incubate at 35 ± 2°C for 18 - 48 hours. Refer appropriate references for recommended test procedure.

## • QUALITY CONTROL FOR USE

### Dehydrated medium

Appearance: free-flowing, homogeneous

Color: light beige

### Prepared medium

Appearance : slightly opalescent

Color: light amber

Incubation conditions: 35 ± 2 °C / 18 - 48 hours

Microorganism	ATCC	Inoculum CFU	Growth
<i>Escherichia coli</i>	25922	50-100	good
<i>Staphylococcus aureus</i>	25923	50-100	good
<i>Streptococcus thermophilus</i>	19258	50-100	good
<i>Candida albicans</i>	10231	50-100	good

**• STORE**

The powder is very hygroscopic. Store the powder at room temperature, in a dry environment, in its original container tightly closed and use it before the expiry date on the label or until signs of deterioration are evident. Store prepared medium at 2 - 8°C.

**• REFERENCES**

1. KKlose,G.O. (1968). Susswaren. 14: 778-782.
2. 2. Thomas, S.O., Jenkins C. (1940). Proc. Soc. Appl. Agric. 38-40.

**• PACKAGE**

Cat. No : MB-M1073 Milk Plate Count Agar	500 G
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