

TM 408 – PLATE COUNT AGAR (SPECIAL)

INTENDED USE

For estimation of microbial counts in raw milk and other dairy products.

PRODUCT SUMMARY AND EXPLANATION

Plate Count Agar, special is used for the enumeration of viable bacteria in raw milk, milk and other dairy products.

COMPOSITION

Ingredients	Gms / Ltr
Casein enzymic hydrolysate	6.130
Yeast extract	3.060
Dextrose	1.230
Agar	30.100

PRINCIPLE

This medium consists of Casein enzymic hydrolysate which provides amino acids while yeast extract supplies vitamin B complex and dextrose gives energy to microorganisms. Generally, pour plate technique is followed. The samples are diluted and appropriate dilutions are placed in Petri plates. Sterile molten agar is added to these plates and plates are rotated gently to ensure uniform mixing of the sample with agar.

INSTRUCTION FOR USE

- Dissolve 40.52 grams in 1000 ml purified/distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Mix well and pour into sterile petri plates.

QUALITY CONTROL SPECIFICATIONS

- Appearance of Powder** : Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium : Light yellow coloured, clear to slightly opalescent gel forms in petri plates.
pH (at 25°C) : 7.0 ± 0.2

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
<i>Bacillus subtilis</i>	6633	50-100	Luxuriant	≥70 %	35-37°C	18-48 Hours



<i>Staphylococcus aureus</i>	25923	50-100	Luxuriant	>=70 %	35-37°C	18-48 Hours
<i>Streptococcus pyogenes</i>	19615	50-100	Luxuriant	>=70 %	35-37°C	18-48 Hours
<i>Lactobacillus casei</i>	9595	50-100	Luxuriant	>=70 %	35-37°C	18-48 Hours

PACKAGING:

In pack size of 500 gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.










Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES

1. Atlas R.M., 1993, Handbook of microbiological Media, CRC Press, Inc.

 GMP Good Manufacturing Practices Certified	 Best Before	 QTY. Quantity	 REF Catalogue Number	 Manufacturer
 Temperature Unit	 LOT/ B. NO. Lot / Batch Number	 Consults Instructions for Use	 QR Code	

NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

*For Lab Use Only
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