

TM 1608 - SKIM MILK AGAR (PLATE COUNT AGAR) (PCA)

INTENDED USE

For determining the microbial count in milk and dairy products.

PRODUCT SUMMARY AND EXPLANATION

Skim Milk Plate Count Agar complies with the recommendation of the International Dairy Federation and the DIN Norm 10192 for the examination of milk and dairy products.

COMPOSITION

Ingredients	Gms / Ltr
Casein enzymic hydrolysate	5.000
Yeast extract	2.500
Skim milk powder	1.000
Glucose	1.000
Agar	10.500

PRINCIPLE

Casein enzymic hydrolysate provides amino acids and other complex nitrogenous substances. Yeast extract supplies vitamin B complex. Addition of skim milk in the medium makes the conditions optimal for microorganisms which grow in milk. Awide range of microorganisms can be cultured and enumerated on this medium.

INSTRUCTION FOR USE

- Dissolve 20 grams in 1000 ml distilled water.
- Allow it to stand for about 15 minutes, place in a cold water bath and heat gently with frequent shaking 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 an incubation.

Microorganism	АТСС	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
Staphylococcus aureus	25923	50-100	Luxuriant	>=70%	35-37°C	18-24 Hours









Lactococcus lactis spp. Lactis	19435	50-100	Luxuriant	>=70%	35-37°C	18-24 Hours
Listeria monocytogenes	19118	50-100	Luxuriant	>=70%	35-37°C	18-24 Hours
Bacillus cereus	11778	50-100	Luxuriant	>=70%	35-37°C	18-24 Hours
Escherichia coli	25922	50-100	Luxuriant	>=70%	35-37°C	18-24 Hours
Pseudomonas aeruginosa	27853	50-100	Luxuriant	>=70%	35-37°C	18-24 Hours
Candida albicans	10231	50-100	Luxuriant	>=70%	35-37°C	18-24 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

- $1. \ \, \text{DIN Deutsches Institut für Normung e.V.: Mikrobiologische Milchuntersuchung; Bestimmung der Keimzahl (Referenzverfahren) DIN 10192.}$
- 2. Internationaler Milchwirtschaftsverband: Milch u. Milchprodukte, Zählung von Mikroorganismen (Koloniezählung bei 30 °C) Internationaler Standard 100 (1991).
- 3. Internationaler Milchwirtschaftsverband: Flüssige Milch. Zählung von psychotrophen Mikroorganismen (Koloniezählung bei 6,5°C). Internationaler Standard 101 (1991).















NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices. *For Lab Use Only Revision: 08 Nov., 2019







