



PRODUCT DATA SHEET

SKIM MILK AGAR (PLATE COUNT AGAR)

TM 1608

for determining the microbial count in 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

* Dehydrated powder, store in a dry place, in tightly-sealed containers at 24°C and protect from direct Sunlight.

Instructions for Use

Dissolve 20.00 gms in 1000 ml of 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 (121°C) for 15 minutes. Mix well and dispense as desired.

Appearance: Light yellow coloured clear to slightly opalescent.

pH (at 25°C): 7.0 ± 0.2

Principle

SKIM MILK AGAR is used for determining the microbial count in milk and dairy products. This medium complies with the recommendation of the International Dairy Federation and the DIN Norm 10192 for the examination of milk and dairy products.

A wide range of microorganisms can be cultured and enumerated on this medium. 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.

Interpretation

Cultural characteristics observed after inoculation (10^3 CFU/ml) and incubation at 35 - 37°C for 18 - 24 hours.

Microorganisms	ATCC	Inoculum (CFU)	Growth
<i>Escherichia coli</i>	25922	10^3	Good-luxuriant

<i>Lactococcus lactis spp.Lactis</i>	19435	10 ³	Good-luxuriant
<i>Staphylococcus aureus</i>	25923	10 ³	Good-luxuriant
<i>Listeria monocytogenes</i>	19118	10 ³	Good-luxuriant
<i>Pseudomonas aeruginosa</i>	27853	10 ³	Good-luxuriant
<i>Candida albicans</i>	10231	10 ³	Good-luxuriant

References

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