

Product Information

80957 Plate Count Skim Milk Agar (Plate Count Agar with antibiotic free Skim Milk)

For the enumeration of bacteria in milk and dairy products.

Composition:

Ingredients	Grams/Litre
Casein peptone	5.0
Yeast extract	2.5
Skim milk powder (inhibitor-free)	1.0
D(+)-Glucose	1.0
Agar	10.5
Final pH 7.0 +/- 0.2 at 25°C	

According to DIN, prepared media can be stored for up to 3 months in the refrigerator. The temperature should not exceed 5°C. Store dehydrated powder, in a dry place, in tightly-sealed containers at 2-25°C.

Directions :

Suspend 20 g in 1 litre distilled water and let stand for approx. 15 minutes. Dissolve by heating in a water bath while swirling frequently. Autoclave at 121°C for 15 minutes. Cool down to 50°C and pour plates. The plates are clear to opalescent and yellowish.

Principle and Interpretation:

The medium is produced to the recommendations of the International Dairy Federation (Internationaler Milchwirtschaftsverband) (1991) and the DIN Norm 10192 for the examination of milk and dairy products. The addition of skim milk to a superior nutrient base gives the medium the optimal conditions to microorganisms growing in milk. The recovery rate is higher and a wider range of microorganisms can be cultured than in other culture media used for the same purpose (4).

Cultural characteristics after 24 hours at 35°C. The recovery rate is over 70% by an inoculum of 10^3 - 10^5 cfu/ml.

Organisms (ATCC)	Growth
<i>Staphylococcus aureus</i> (25923)	+++
<i>Streptococcus agalactiae</i> (13813)	+++
<i>Bacillus subtilis</i> (16633)	+++
<i>Lactococcus lactis</i> ssp. <i>lactis</i> (19435)	+++
<i>Listeria monocytogenes</i> (19118)	+++
<i>Lactobacillus acidophilus</i> (4356)	+++
<i>Escherichia coli</i> (25922)	+++
<i>Pseudomonas aeruginosa</i> (27853)	+++
<i>Candida albicans</i> (10231)	+++

References:

1. 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).
4. G. Terplan, et al., Zur Eignung verschiedener Nährböden für die Bestimmung der Gesamtkeimzahl der Milch, Arch. Lebensmittelhyg. 18, 9 (1967)

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

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