

Gelysate Agar (Plate Count Agar Sugar Free)

Cat. 1187

For the enumeration of microorganisms in butter and other dairy products.

Practical information

Applications	Categories
Non selective enumeration	General use

Industry: Dairy products

Principles and uses

Gelysate Agar (Plate Count Agar Sugar Free) is used for the enumeration of microorganisms in dairy products that are not involved in its production.

Gelatin peptone and casein peptone provide nitrogen, vitamins, minerals and amino acids essential for growth. Sodium chloride maintains the osmotic balance. Bacteriological agar is the solidifying agent. The absence of carbohydrates allows the selective cultivation of the microorganisms we are looking for.

Formula in g/L

Bacteriological agar	15	Casein peptone	7,5
Gelatin peptone	7,5	Sodium chloride	5

Preparation

Suspend 35 grams of the medium in one liter of distilled water. Mix well and heat with frequent agitation. Boil for one minute until the medium dissolves completely. Sterilize in the autoclave at 121 °C for 15 minutes.

Instructions for use

Inoculate and incubate 48 hours at 35± 2 °C, and another 48 hours at 20 °C.

Quality control

Solubility	Appearance	Color of the dehydrated medium	Color of the prepared medium	Final pH (25°C)
w/o rests	Fine powder	Beige	Clear amber slightly opalescent	7,5±0,2

Microbiological test

Incubation conditions: (35±2 °C / 48 h) + (20 °C / 48 h)

Microrganisms	Specification
Candida albicans ATCC 10231	Good growth
Enterococcus faecalis ATCC 11700	Good growth
Bacillus cereus ATCC 11778	Good growth
Escherichia coli ATCC 25922	Good growth
Staphylococcus aureus ATCC 25923	Good growth
Pseudomonas aeruginosa ATCC 27853	Good growth

Storage

Temp. Min.:2 °C
Temp. Max.:25 °C

Bibliography

International Dairy Federation: Methods of sampling milk and milk products. - International Standard, FIL/IDF 50 B (1985).
Internationaler Milchwirtschaftsverband: Zählung von Infektionskeimen in Butter. - Internationaler Standard, 153 (1991).
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