🎸 Condalab

Standard Count Agar

For total microbial plate count in milk, milk products, water and waste water.

Practical information

Aplications Selective enumeration Categories Mesophilic aerobic

Industry: Water / Dairy products



Cat. 1178

Principles and uses

Standard Count Agar is recommended to enumerate the aerobic bacteria in milk, dairy products, drinking water and wastewater. It is specially suitable to prepare special culture media that need to be rich in nutrients.

Casein and meat peptone provide nitrogen, vitamins, minerals and amino acids essential for growth. Sodium chloride supplies essential electrolytes for transport and osmotic balance. Bacteriological agar is the solidifying agent.

Formula in g/L

Bacteriological agar 12	Casein peptone	5
Meat peptone 3	Sodium chloride	5

Typical formula g/L * Adjusted and/or supplemented as required to meet performance criteria.

Preparation

Suspend 25 grams of medium in 1 liter of distilled water. Mix well and dissolve by heating with frequent agitation. Boil for one minute until complete dissolution. Dispense into appropriate containers and sterilize in autoclave at 121 °C for 15 minutes. Cool to 50 °C, mix well and dispense into plates.

Instructions for use

- Inoculate the plates by the surface plating or pour plate techniques.

- Incubate at a temperature of 35±2 °C for 18-24 hours.

- Count the developed colonies.

Quality control

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

Microbiological test

Incubation conditions: (35±2 °C / 18-24 h)

Bacillus cereus ATCC 11778 Escherichia coli ATCC 25922 Staphylococcus aureus ATCC 25923 Pseudomonas aeruginosa ATCC 27853 Specification Good growth Good growth Good growth

Good growth

Storage

Temp. Min.:2 °C Temp. Max.:25 °C

Bibliography

Downes F. P. and Ito K., (Eds.), 2001, Compendium of Methods for the Microbiological Examination of Foods, 4th Ed., APHA, Washington, D.C. Standard Methods for the Examination of Dairy Products, 13th Ed. APHA, 1972. American Public Health Association.