Trypticasein Glucose Extract Agar

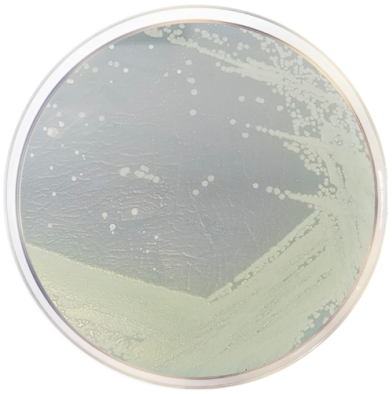
Cat. 1041

For the plate count of bacteria in potable water, wastewater, air, milk and dairy products.

Practical information

Aplications	Categories
Non selective enumeration	General use

Industry: Water / Dairy products



Principles and uses

Trypticasein Glucose Extract Agar is used for the enumeration of bacteria from potable water, wastewater, air, milk and dairy products by the plate count method. This medium is recommended by APHA for the heterotrophic plate count procedure in testing bottled water.

Casein peptone and beef extract provide nitrogen, vitamins, minerals and amino acids essential for growth. D-Glucose is a source of fermentable carbohydrate as the carbon and energy source. Bacteriological agar is the solidifying agent.

Formula in g/L

Bacteriological agar	15	Casein peptone	5
D-Glucose	1	Beef extract	3

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

Preparation

Suspend 24 grams of medium in one liter of distilled water. Mix well and dissolve by heating with frequent agitation. Boil for one minute until complete dissolution. Sterilize in autoclave at 121 ºC for 15 minutes. Cool to 45-50 ºC, mix well and dispense into plates.

Instructions for use

Inoculate and incubate at 35±2 ºC for 18-24 hours.

Quality control

Solubility	Appareance	Color of the dehydrated medium	Color of the prepared medium	Final pH (25ºC)
w/o rests	Fine powder	Toasted	Clear amber, slightly opalescent	7,0±0,2

Microbiological test

Incubation conditions: (35±2 ºC / 18-24 h).

Microorganisms	Specification	Characteristic reaction
Enterococcus faecalis ATCC 11700	Good growth	

Bacillus cereus ATCC 11778	Good growth	
Salmonella typhimurium ATCC 14028	Good growth	
Escherichia coli ATCC 25922	Good growth	
Staphylococcus aureus ATCC 25923	Good growth	
Pseudomonas aeruginosa ATCC 27853	Good growth	Pigment production

Storage

Temp. Min.:2 ºC
Temp. Max.:25 ºC

Bibliography

Standard Methods for the Examination of Water and Wastewater. 1 1th Edition APHA Inc. New York, 1960.
Standard Methods for the examination of dairy products, 1 6th ed. American Public Health Association; Washington D.C. Marshall, R.T. (1993).
Standard Methods for the examination of water and wastewater 1 8th ed. American Public Health Association, Washington D.C. 1992.