

Technical Data Sheet

GranuCult® plus

m-TGE (modified Tryptone Glucose Meat extract) broth

Ordering number: 1.17337.0500

This medium is recommended for total heterotrophic microorganism detection in water and other liquid samples.

Tryptone Glucose Extract Broth (TGE) is a non-selective nutrient medium and typically used to detect total heterotrophic microorganisms in water, dairy products, and other products like beer, bottled water, cider, soft drinks, and wine samples by membrane filtration technique. It is used where inhibitors are not present. TGE is used as a standard medium for the bacteriological plate count and can also be used for the detection of thermophilic bacteria in milk and dairy products. Tryptone and meat extract provide nitrogenous and carbonaceous compounds, long chain amino acids, vitamin B complex and other essential growth nutrients. Glucose is the energy source.

Typical Composition

GranuCult® plus m-TGE (modified Tryptone Glucose Meat extract) broth	
Enzymatic digest of casein (Tryptone)	10.0 g/l
Meat extract	6.0 g/l
D(+)Glucose (Dextrose)	2.0 g/l
Water	n/a

Preparation

Dissolve 18 g in liter purified water. Autoclave 15 min at 121 °C.

The appearance of the medium is clear and yellowish brown.

The pH value at 25 °C is in the range of 6.8-7.2.

Experimental Procedure and Evaluation

Depend on the purpose for which the media are used.

Incubation: 18-24 h at 30-35 °C aerobically, for up to 5 days for the sterility test at room temperature.

Storage

The product can be used for sampling until the expiry date if stored upright, protected from light and properly sealed at +15 °C to +25 °C.

After first opening of the bottle the content can be used up to the expiry date when stored dry and tightly closed at +15 °C to +25 °C.

Disposal

Please mind the respective regulations for the disposal of used culture medium (e.g. autoclave for 20 min at 121 °C, disinfect, incinerate etc.).

Quality Control

Control strains	Inoculum CFU	Incubation	Recovery rate (%)
<i>Escherichia coli</i> ATCC 25922 [WDCM 00013]	10-100	24 h at 35-37 °C	≥ 70
<i>Enterococcus faecalis</i> ATCC 11700	10-100	24 h at 35-37 °C	≥ 70

Tests are conducted with adsorbent pads in combination with the membrane filtration method. Adsorbent pads in sterile petri-dishes (Petri-Pad; article number PD200447S0) are soaked with 2 mL m-TGE broth. After filtration of the sample using an EZ-PAK® membrane filter (0.45 µm; article number EZHAWG474) the membrane filter is placed on the absorbent pad and incubated as indicated.

Please refer to the actual batch related Certificate of Analysis.

Literature

Walter, William G (1961): Standard methods for the examination of water and wastewater. American Public Health Association.

Ordering Information

Product	Cat. No.	Pack size
GranuCult® plus m-TGE (modified Tryptone Glucose Meat extract) broth	1.17337.0500	500 g
Petri dish with pad	PD20047S0	150 units
EZ PAK mixed cellulose esters (MCE), pore size 0.45 µm, filter diameter 47 mm, gridded white filter	EZHAWG474	4x 150 filters

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