

70159 Tryptone Glucose Extract Agar (TGE Agar)

Tryptone Glucose Yeast Extract Agar is recommended for enumeration of bacteria in water, air, milk and dairy products.

Composition:

Ingredients	Grams/Litre
Tryptone	5.0
Meat extract	3.0
Glucose (Dextrose)	1.0
Agar	15.0
Final pH 7.0 +/- 0.2 at 25°C	

Store prepared media below 8°C, protected from direct light. Store dehydrated powder in a dry place in tightly-sealed containers at 2-25°C.

Appearance: Faint yellow to faint beige to faint brown colored, homogenous, free flowing powder.

Gelling: Firm

Color and Clarity: Light yellow to light beige to light brown colored, clear to slightly opalescent gel forms in petri plates.

Directions:

Suspend 24 g in 1 litre of distilled water. Bring to the boil to dissolve completely. Sterilize by autoclaving at 121°C for 15 minutes. Mix well before pouring. When the dilution of the original specimen is greater than 1 in 10, add 10 ml of sterile 10% solution of Skim Milk powder (Cat. No. 70166) per litre and do not overheat during sterilization.

Principle and Interpretation:

Tryptone and meat extract provide nitrogenous compounds and vitamin B complex. Glucose is the energy source.

Cultural characteristics after 18-24 hours at 35-37°C.

Organisms (ATCC)	Inoculum (CFU)	Growth	Recovery
<i>Bacillus subtilis</i> (6633)	50-100	+++	≥ 70%
<i>Enterobacter aerogenes</i> (13048)	50-100	+++	≥ 70%
<i>Escherichia coli</i> (25922)	50-100	+++	≥ 70%
<i>Lactobacillus casei</i> (9595)	50-100	+++	≥ 70%
<i>Pseudomonas aeruginosa</i> (27853)	50-100	+++	≥ 70%
<i>Staphylococcus aureus</i> (25923)	50-100	+++	≥ 70%
<i>Enterococcus faecalis</i> (29212)	50-100	+++	≥ 70%
<i>Streptococcus pyrogenes</i> (27853)	50-100	+++	≥ 70%



References:

1. L.S. Bowers, J.G. Huker, Tech. Bull. 228, N.Y. State Agr. Exp. Sta (1935)
2. American Public Health Association, Standard Methods for the examination of Dairy Products, 9th Ed., APHA, New York, N. Y. (1948)
3. F.P. Downes, K. Ito, (Eds.), Compendium of Methods for the Microbiological Examination of Foods, 4th Ed., APHA, Washington, D.C. (2001)
4. H.M. Wehr, J.H. Frank, Standard Methods for the Examination of Dairy Products, 17th Ed., APHA Inc., Washington, D.C. (2004)
5. A.D. Eaton, L.S. Clesceri, A.W. Greenberg, (Eds.), Standard Methods for the Examination of Water and Wastewater, 21st Ed., APHA, Washington, D.C. (2005)

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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