

Lauryl Tryptose Broth



Selective medium used for the isolation and determination of coliforms in water and wastewater.

*Equally use with NIER (MB-L1085N) and MB-L2188.

• CONTENTS (Liter)

Tryptose	20.0 g
Lactose	5.0 g
Sodium Chloride	5.0 g
Sodium Lauryl Sulphate	0.1 g
Dipotassium Phosphate	2.75 g
Monopotassium Phosphate	2.75 g
Final pH = 6.8 ± 0.2 at 25°C.	

• PROCEDURE

Suspend 35.6 G of powder in 1 L of distilled or deionized water, suspend 71.2 G of powder in 1L of distilled or deionized water for double strength or suspend 106.8 G of powder in 1L of distilled or deionized water for triple strength. Heat to boiling until completely dissolved. Sterilize by autoclave at 121°C for 15 minutes. Cool to 45-50°C in water bath. Mix well. Dispense in tubes. If necessary aseptically add 2 vials of MUG supplement (MB-M1820).

MUG supplement

1vial contents (each vial is sufficient for 500mL of medium)

MUG 0.05 g

• INTERPRETATION

Lauryl Tryptose Broth is a selective medium used for the isolation and determination of coliform in water and wastewater. Tryptose provides essential growth substances, such as nitrogen and carbon compounds, sulphate and trace ingredients. Potassium phosphates are buffering agent. Sodium chloride maintains osmotic balance. Sodium lauryl sulphate inhibits organisms other than coliforms.

• TECHNIC

Inoculate the specimen with stab using a sterile needle to the medium. Shake gently for spreading microorganism. Incubate at 35 ± 1 °C for 24 ± 2 hours. If gas production is not observed, incubate the medium at 35 ± 1°C for 48 ± 3 hours. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous.

Color: light beige.

Prepared medium

Appearance: clear to very slightly opalescent.

Color: light amber.

Incubation conditions: 35 ± 1°C / 24 ± 2 hours up to 48 ± 3 hours.

Microorganism	ATCC	Inoculum CFU	Growth	Gas
<i>Escherichia coli</i>	25922	50-100	good	+
<i>Salmonella typhimurium</i>	14028	50-100	good	-
<i>Staphylococcus aureus</i>	25923	≥10 ³	inhibited	-
<i>Klebsiella pneumoniae</i>	13883	50-100	good	+

• STORE

The powder is very hygroscopic. Store the powder at room temperature, in a dry environment, in its original container tightly closed and use it before the expiry date on the label or until signs of deterioration or contamination are evident. Store prepared medium at 2-8°C.

• REFERENCES

1. Christen, G.L., P.M. Davidson, J.S. McAllister, and L.A. Roth (1992). Coliforms and other indicator bacteria, p. 247-267.
2. Eaton, A.D., L.S. Clesceri, and A.E. Greenberg (ed.) Standard methods for the examination of water and wastewater, 19th ed.
3. Association of Official Analytical Chemists. (1995). Bacteriological analytical manual, 8th ed.
4. American Public Health Association (1980). Standard methods for the examination of water and wastewater. 15th ed. APHA Inc. Washington DC.
5. ISO Standard 11866-2 Milk and milk products- Enumeration of presumptive *Escherichia coli*.
6. Refer to the NIER.

• PACKAGE

Cat. No : MB-L1085 Lauryl Tryptose Broth	500 G
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