LAURYL TRYPTOSE BROTH (LAURYL SULPHATE BROTH)

Selective medium for coliforms detection in water and wastewater.

TYPICAL FORMULA	(g/l)
Tryptose	20.0
Lactose	5.0
Sodium Chloride	5.0
Sodium Lauryl Sulphate	0.1
Dipotassium Phosphate	2.75
Monopotassium Phosphate	2.75
Final pH 6.8 ± 0.2 at 25°C	

DESCRIPTION

LAURYL TRYPTOSE BROTH provides a selective medium which is used for the detection of coliform organisms in water and wastewater, according to the formula of the American Public Health Association.

PRINCIPLE

Tryptose provides the nitrogen and vitamins required for organism growth. Lactose is the fermentable carbohydrate. Sodium chloride maintains the osmotic balance of the medium. Sodium lauryl sulphate is the selective agent used to inhibit organism other than coliforms. Potassium phosphates are the buffering agents.

PREPARATION

Suspend 35.6 g of powder in 1 liter of distilled or deionized water. Heat until completely dissolved. Dispense into final containers provided with Durham tubes. Autoclave at 121°C for 15 minutes.

TECHNIQUE

Inoculate 1 ml of the sample (or of its serial tenfold diluitions) into a tube of LAURYL TRYPTOSE BROTH. Invert once the tube to permit the coming out of air from the Durham tube. Incubate for 24-48 hours at 36±1°C.

INTERPRETATION OF RESULTS

Turbidity of the medium and formation of gas is a positive presumptive test for the presence of coliforms. Perform indole test directly in the tubes for confirmation.

STORAGE

The powder is very hygroscopic, store the powder at 10-30°C, in a dry environment, in its original container tightly closed and use it before the expiry date on the label or until sings of deterioration or contamination are evident. Store prepared plates at 2-8°C away from light.

WARNING AND PRECAUTIONS

The product does not contain hazardous substances in concentrations exceeding the limits set by current legislation and therefore is not classified as dangerous. it is nevertheless recommended to consult the safety data sheet for its correct use. The product must be used only by properly trained operators.

DISPOSAL OF WASTE

Disposal of waste must be carried out according to national and local regulations in force.

REFERENCES

1. Christen, G.L., P.M. Davidson, J.S. McAllister,.and L.A. Roth (1992). Coliforms an 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 Chemist (1995). Bacteriological analytical manual 8th ed.
4. American Public Health Association (1980) Standard methods for the examination of water and wastewater. 15th ed. APHA.
5. ISO Standard 11866-2 Milk and milk products-Enumeration of presumptive *Escherichia coli*.

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PRODUCT SPECIFICATIONS

NAME
LAURYL TRYPTOSE BROTH (LAURYL SULPHATE BROTH)

PRESENTATION
Dehydrated medium

STORAGE
10-30°C

PACKAGE

Ref.	Content	Packaging
610085	500 g	500 g of powder in plastic bottle
620085	100 g	100 g of powder in plastic bottle
6100855	5000 g	5 kg of powder in plastic container

pH OF THE MEDIUM
6.8 ± 0.2

USE
LAURYL TRYPTOSE BROTH provides a selective medium which is used for the detection of coliform organisms in water and wastewater, according to the formula of the American Public Health Association.

TECHNIQUE
Refer to technical sheet of the product

APPEARANCE OF THE MEDIUM
Dehydrated medium
Appearance: free-flowing, homogeneous
Colour: beige
Prepared medium
Appearance: clear to very slightly opalescent
Colour: light amber

SHELFLIFE
4 years

QUALITY CONTROL
1. Control of general characteristics, label and print

2. Microbiological control
   Inoculum for productivity: 10-100 CFU/ml
   Inoculum for selectivity: 10^4-10^5 UFC/ml
   Inoculum for specificity: ≤ 10^4 UFC/ml
   Incubation conditions: 48 h at 30 ± 1°C

Microorganism	ATCC®	Growth	Gas
Escherichia coli	25922	Good	+
Salmonella thphimurium	14028	Good	-
Staphylococcus aureus	25923	Inhibited	-
Klebsiella pneumoniae	13883	Good	+

TABLE OF SYMBOLS

LOT Batch code	Keep away from heat sources	Manufacturer	Use by	Fragile, handle with care
REF Catalogue number	Temperature limitation	Contains sufficient for <n> tests	Consult instructions for use	

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