

Product Data Sheet

LAURYL TRYPTOSE MANNITOL BROTH W/TRYPTOPHAN

Product No. GB-DCM-00322-1A

INTENDED USE

For detection of Escherichia coli in water.

PRODUCT SUMMARY

Identification of bacteria that constitute the coliform group sometimes is necessary to determine the nature of pollution. It is of particular importance in reference to distinguishing the presence of Escherichia coli, an indicator of fecal contamination. Lauryl Tryptose Mannitol Broth w/ Tryptophan is a single tube medium used for the confirmation of E. coli in drinking water as recommended by report 71. This medium is also recommended by the ISO committee and is also a suitable medium as per the requirements of the EC Directive for the quality of drinking water. This medium may be used in parallel to Lauryl Tryptose Broth to detect non-lactose fermenting strains of E. coli.

Product Specifications

Ingredients	Gms / Ltr
Tryptose	20.000
Mannitol	5.000
Sodium chloride	5.000
Dipotassium phosphate	2.750
Monopotassium phosphate	2.750
Sodium lauryl sulphate	0.100
L-Tryptophan	0.200

PRINCIPLE

This medium consists of Tryptose which is the source of carbon, nitrogen, vitamins, amino acids and other essential growth requirements. Mannitol is the fermentable carbohydrate. Phosphates buffer the medium whereas sodium lauryl sulphate serves to inhibit accompanying non coliform bacteria. L-tryptophan is a substrate of tryptophan deaminase enzyme.

INSTRUCTION FOR USE

- Dissolve 35.8 grams in 1000 ml purified/distilled water.
- Warm gently to dissolve the medium completely. Dispense in tubes with inverted Durham's tubes.
- Sterilize by autoclaving at 115°C for 10 minutes. Cool to 45-50°C.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Gas	Indole Production	Incubation Temperature	Incubation Period
Escherichia coli	25922	50-100	Luxuriant	Positive reaction	Positive reaction, red ring at the interface of the medium	44°C	24 Hours
Enterobacter aerogenes	13048	$\geq 10^4$	Inhibited	-	-	44°C	24 Hours
Staphylococcus aureus subsp. aureus	25923	$\geq 10^4$	Inhibited	-	-	44°C	24 Hours

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Cream to yellow coloured homogeneous free flowing powder.

Appearance of prepared : Yellow coloured, clear solution without any precipitate.

pH (at 25°C) : 6.8 ± 0.2

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

This product is for research use only.