

## TM 775 -M-LAURYL SULPHATE BROTH (ISO 9308-1:2000)

### INTENDED USE

For enumeration of *Escherichia coli* in water by membrane filter technique.

### PRODUCT SUMMARY AND EXPLANATION

M-lauryl sulphate broth is used for the enumeration of coliforms in water, using membrane filter. Scientist 'Burman' substituted Teepol in place of bile salts in the Membrane Enriched Teepol Broth, a membrane filtration test medium used to detect coliform organisms in water. Membrane Lauryl Sulphate Broth is similar to Membrane Enriched Teepol Broth except that the selective agent Teepol has been replaced by 0.1% (w/v) sodium lauryl sulphate. The composition & performance criteria of this medium are as per the specifications laid down in ISO 9308-1:2000.

### COMPOSITION

Ingredients	Gms / Ltr
Peptic digest of animal tissue	39.000
Lactose	30.000
Yeast extract	6.000
Sodium lauryl sulphate	1.000
Phenol red	0.200

### PRINCIPLE

The medium contains Peptic digest of animal tissue and Yeast extract which provide carbon, nitrogen, amino acids, minerals, vitamins, trace elements and other essential nutrients for growth. Lactose serves as a fermentable carbohydrate source. Phenol red is the indicator and change from red to yellow because of the acid production from the fermentation. Sodium lauryl sulphate inhibits gram positive organisms.

### INSTRUCTION FOR USE

- Dissolve 76.20 grams in 1000ml distilled water.
- Gently heat to boiling with swirling and dissolve the medium completely.
- Dispense as desired.
- Sterilize by autoclaving at 15 psi (121°C) for 15 minutes.
- Cool to 45-50°C before use.

### QUALITY CONTROL SPECIFICATIONS

Appearance of Dehydrated powder	:	Light yellow to pink, homogeneous free flowing powder
Appearance of Prepared medium	:	Red coloured, clear solution
pH (at 25°C)	:	7.4± 0.2

### INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth on membrane (at 35-37°C)	Colour of colony on membrane	Growth on membrane (at 43-45°C)	Colour of colony on membrane	Incubation period
<i>Escherichia coli</i>	25922	50-100	Luxuriant	Yellow	Luxuriant	Yellow	18 Hours



<i>Enterobacter aerogenes</i>	13048	50-100	Luxuriant	Yellow	Inhibited	-	18 Hours
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### PACKAGING

In 500 gm packaging size.

### STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers below 25°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 powder show evidence of microbial contamination, discoloration, drying, or other signs of deterioration.

### DISPOSAL

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

### REFERENCES

1. Burman N. P., 1967, Proc. Soc. Wat. Treat. Exam., 16:40.
2. International Organization for Standardization, 1990, Draft ISO/DIS: 9308-1.
3. Burman N. P., 1967, Rec. Adv. in Bacteriological Examination of waters; C.H. Collins (Ed.), Butterworth, London.

 GMP Good Manufacturing Practices Certified	 Best Before	 QTY. Quantity	 REF Catalogue Number	 Manufacturer
 Temperature Unit	 LOT/ B. NO. Lot / Batch Number	 Consults Instructions for Use	 QR Code	

**NOTE:** Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

**\*For Lab Use Only**

**Revision: 9<sup>th</sup> July 2019**