TMV 150 – LAURYL SULPHATE BROTH (LAURYL TRYPTOSE BROTH) (VEG.)

INTENDED USE

For detection and enumeration of coliform bacteria in water, dairy products and other foods.

PRODUCT SUMMARY AND EXPLANATION

Lauryl Tryptose Broth (Veg) is prepared by replacing Tryptose with Veg Hydrolysate No.1 which is free from BSE/TSE risks. Lauryl Tryptos Broth (Veg) is the modification of Lauryl Tryptose Broth which was formulated by Mallmann and Darby and is recommended by APHA for the presumptive detection of coliforms in water, effluent or sewage by MPN testand for the detection of coliforms in foods. This medium, like the conventional medium is designed to get rich growth and substantial amount of gas from small inocula of coliform organisms. Aerobic spore bearers are completely inhibited. Cowls showed that sodium lauryl sulphate gave selectivity to the medium for coliform bacteria.

The Lauryl Tryptose (Lauryl Sulphate) Broth (Veg) gives a higher colon index than the confirmatory standard methods media and the gas production served not only as a presumptive test but also confirmatory of the presence of the coliforms for routine testing of water.

COMPOSITION

Ingredients	Gms / Ltr
Veg hydrolysate No. 1	20.000
Lactose	5.000
Sodium chloride	5.000
Dipotassium phosphate	2.750
Monopotassium phosphate	2.750
Sodium lauryl sulphate	0.100

PRINCIPLE

This medium consists of Veg Hydrolysate No.1 which provides essential growth substances, such as nitrogen and carbon compounds, sulphate and trace ingredients. The potassium phosphates provide buffering system, while sodium chloride maintains osmotic equilibrium. Sodium lauryl sulphate inhibits organisms other than coliforms.

INSTRUCTION FOR USE

- Dissolve 35.6 grams in 1000 ml purified/distilled water.
- Heat if necessary to dissolve the medium completely.
- Dispense in tubes containing inverted Durham's tubes and sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Light yellow coloured, may have slightly greenish tinge, homogeneous, free flowing powder.

Appearance of prepared medium : Light yellow coloured, clear solution without any precipitate.

pH (at 25°C) : 6.8 ± 0.2

INTERPRETATION

Cultural characteristics observed after incubation.

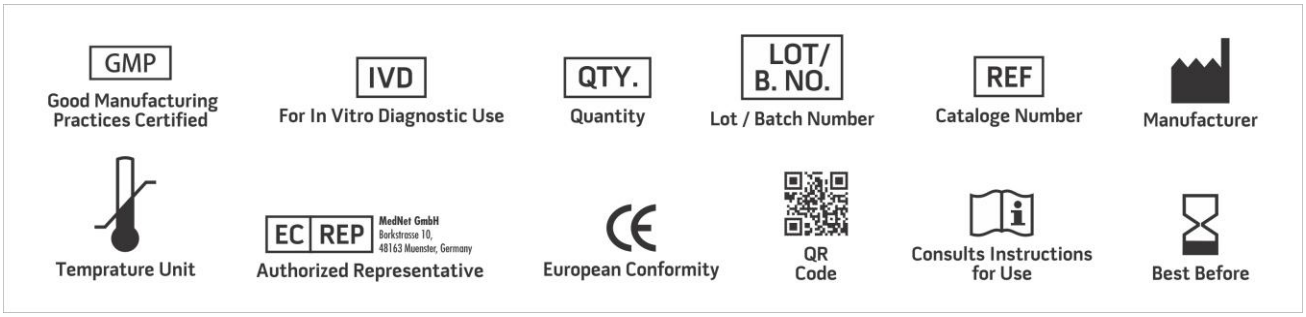
Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Gas	Indole (44°C)	Incubation Temperature	Incubation Period
Enterobacter aerogenes	13048	50-100	Luxuriant	Positive reaction	Negative reaction	35-37°C	18-24 Hours
Enterococcus faecalis	29212	>=10^4	Inhibited	Negative reaction	Negative reaction	35-37°C	18-24 Hours
Escherichia coli	25922	50-100	Luxuriant	Positive reaction	Positive reaction, red ring at the interface of the medium	35-37°C	18-24 Hours
Salmonella serotype Typhimurium	14028	50-100	Luxuriant	Negative reaction	Negative reaction	35-37°C	18-24 Hours
Staphylococcus aureus	25923	>=10^4	Inhibited	Negative reaction	Negative reaction	35-37°C	18-24 Hours

PACKAGING:
In pack size of 100 gm and 500 gm bottles.

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.

REFERENCES
1. Mallmann and Darby, 1941, Am. J. Public Health, 31:127
2. Clesceri, Greenberg and Eaton (Ed), 1998, Standard Methods for the Examination of Water and Wastewater, 20th ed, APHA, Washington, D.C.
3. Downes FP and Ito K (Eds.), 2001, Compendium of Methods For The Microbiological Examination of Foods, 4th ed., APHA, Washington, D.C.
4. Cowls, 1938, J. Am. Water Works Association, 30:979.



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

***For Lab Use Only**

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