

LAURYL PEPTO BROTH

Medium for coliforms detection in water and wastewater.

TYPICAL FORMULA	(g/l)
Tryptone	20.0
Lactose	5.0
Sodium Chloride	5.0
Sodium Lauryl Sulfate	0.1
Dipotassium Hydrogen Phosphate	2.75
Potassium Dihydrogen Phosphate	2.75
Final pH = 6.8± 0.2 at 25 °C.	

DIRECTIONS

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, in amounts of 10 ml. Sterilize in autoclave at 121 °C for 15 minutes.

DESCRIPTION

LAURYL PEPTO BROTH is prepared according to Mollan's and Ourby's formula and is recommended by ISO 4831, FDA and APHA as liquid medium for the presumptive determination of coliforms in foodstuffs, water and sewage and by ISO 7251 for the determination of *E. coli*.

TECHNIQUE

Prepare the test sample and the decimal dilutions in accordance with the specific Laboratory method using Maximum Recovery Diluent (Cat. N°401691) or other suitable diluent. By means of a sterile pipette transfer to each tube of Lauryl Pepto Broth 1 ml of the test sample or of its dilutions. Incubate at 30 °C or 37 °C for 24 ± 2 hours and for further 24 hours if neither gas nor opacity is evident after 24 hours. From each of the incubated tubes inoculate with a loop a tube of Brilliant Green Bile Broth 2% (confirmation medium) and incubate at 30 °C or 37°C for 24 ± 2 hours and for further 24 hours if neither gas nor opacity is evident after 24 hours. For each dilution of incubated confirmation liquid medium count the total number of tubes in gas formation or observed. Express the result as the Most Probable Number of coliforms on the basis of gas production in the Brilliant Green Bile Broth 2% tubes after 48 hours incubation.

QUALITY CONTROL

Dehydrated medium

Appearance: free-flowing, homogeneous.

Color: light tan.

Prepared medium

Appearance: slightly opalescent.

Color: light amber.

Incubation conditions: 36 ± 1 °C for 24 ± 2 hours.

Microorganism	ATCC	Growth	Gas
<i>Escherichia coli</i>	25922	good	+
<i>Klebsiella pneumoniae</i>	13883	good	+
<i>Pseudomonas aeruginosa</i>	27853	good	-
<i>Staphylococcus aureus</i>	25923	partially inhibited	-
<i>Citrobacterfreundii</i>	43864	good	+
<i>Enterococcus faecalis</i>	19433	partially inhibited	-



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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 signs of deterioration or contamination are evident. Store prepared tubes at 2-8 °C.

REFERENCES

1. APHA (1992) Compendium of Methods for Microbiological Examination of Foods, 3rd Ed.
2. APHA (1985) Standard Methods for the Examination of Water and Wastewater, 16th Ed.
3. International IDF Standard 170: 1994-Milk and milk products: enumeration of presumptive *E. coli* content by MPN technique.
4. FDA (1995). Bacteriological Analytical Manual, 8th ed.
5. ISO 4831 Microbiology-General guidance for the enumeration of coliforms- MPN technique, 2nd ed., 1991-03-01.
6. ISO 7251 Microbiology-General guidance for the enumeration of presumptive *E. coli*- MPN technique, 2nd ed., 1993-12-15.

PRESENTATION











Product	REF	
LAURYL PEPTO BROTH (14.0 l)	610189	500 g
LAURYL PEPTO BROTH (2.8 l)	620189	100 g

TABLE OF SYMBOLS

 Batch code	 Caution, consult accompanying documents	 Manufacturer	 Contains sufficient for <n> tests	 Keep away from heat source
 Catalogue number	 Fragile, handle with care	 Use by	 Temperature limitation	



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