Tryptose Lauryl sulfate Mannitol Tryptophan Broth

Art. No. 02-460

Specification

Liquid medium used for the production of indol and gas in a single tube, according to ISO 9308-1/2 standards.

Formula* in g/L

Tryptose	20,00
Mannitol	5,00
Sodium chloride	5,00
Monopotassium phosphate	2,75
Dipotassium phosphate	2,75
Sodium Lauryl sulfate	0,10
L-Tryptophan	0,20
Final pH 6,8 ± 0,2 at 25°C	

^{*} Adjusted and /or supplemented as required to meet performance criteria

Directions

Dissolve 35,8 g of powder in 1 L of distilled water, heating if necessary. Distribute in tubes containing Durham's tubes and sterilize in the autoclave at 121°C for 15 minutes. **Do not overheat.**

Description

This broth is described in the ISO 9308-1 Standard as an alternative medium for the production of indol and gas in a single tube and to confirm the presence of thermotolerant coliforms and the presumptive presence of *E. coli* in water samples.

Technique

Tubes are inoculated from suspicious colonies from a filter membrane and then incubated at 44°C for 24 hours. Gas production, which appears in the Durham tubes, confirms the presence of thermotolerant coliforms. If after the addition of 0,2-0,3 mL of Kovacs' Reagent (Art. No. RE0007) a cherry red colour appears on the surface of the medium (Indol +), a presumptive presence of *E. coli* is considered and should be confirmed.

References

• ISO Standard 9308:1990. Water quality detection and enumeration of coliform organisms, thermotolerant coliform organisms and presumptive *E.coli*. Part 1. Membrane filtration method. Part 2. MPN method.

Storage

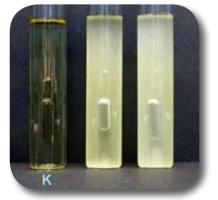
For laboratory use only. Keep tightly closed, away from bright light, in a cool dry place (+4°C to 30°C and <60% RH).

Quality control

Incubation temperature: $44^{\circ}C \pm 2,0$

Incubation time: 24 h **Inoculum:** 10-100 CFU

Microorganism	Growth	Remarks	
Escherichia coli ATCC 8739	Good	Indol (+) Gas (+)	
Escherichia coli ATCC 25922	Good	Indol (+) Gas (+)	
Salmonella typhimurium ATCC 14028	Good	Indol (-) Gas (-)	



Left (K): Uninoculated tube (Control) Centre: Salmonella typhimurium ATCC 14028 Right: Escherichia coli ATCC 25922



Indol test