

# 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°C ± 2,0

**Incubation time:** 24 h

**Inoculum:** 10-100 CFU

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



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



Indol test