

**Reference** : 03-156 **Product :** 

**TRYPTONE WATER (PEPTONE WATER)** 

# **Specification**

Substrate with low nutrient capacity, for the detection of indol production in coliform microorganisms according to ISO 7251 standard.

### Formula \* in g/L

Casein peptone	10,0
Sodium chloride	5,0

#### Final pH 7.3 ±0,2 at 25 °C

\* Adjusted and /or supplemented as required to meet performance criteria

#### Directions

Dissolve 15 g of powder in 1 L of distilled water and dispense into suitable containers. Sterilize in the autoclave at 121°C for 15 minutes.

#### Description

The standard protocol requires that one loop from each suspected tube is inoculated into 5-10 mL of Tryptone Water. Incubate for 48 hours at 44°C before investigating the indol production with Kovacs' Reagent for Indol.

As an alternative method, Ehrlich's Reagent can also show indol production. After 48 hours of incubation at 37°C, take 0,5 mL of growth and mix it with 0,5 mL of Ehrlich's Reagent. Let them settle a few minutes. A pink colour indicates a positive test. Colour appearance is accelerated if a few drops of a saturated solution of potassium per-sulfate is added. Other authors prefer extraction and concentration of indol with 1 mL of Ether prior to addition of reagent.

## **Quality control**

Incubation temperature: 44°C ± 0.5 Incubation time: 48h +2 h

Inoculum: ≥ 10<sup>3</sup> CFU (specificity) according to ISO 11133:2014/Amd 1:2018 & Adm 2:2021. Add Kovacs Reagent after arowth

#### Microorganism

Salmonella typhimurium ATCC<sup>®</sup> 14028 Escherichia coli ATCC<sup>®</sup> 8739 Escherichia coli ATCC<sup>®</sup> 25922 Proteus hauseri ATCC<sup>®</sup> 13315



Left: Uninoculated tube (Control) Center: S. typhimurium ATCC 14028 Right: Escherichia coli ATCC 25922 Growth Good Good Good Good

Remarks

Indol (-) Indol (+) Indol (+) Indol (+) 37°C / No growth 44°C



Left: Uninoculated tube (Control) Center: S.typhimurium ATCC 14028 Right: Escherichia coli ATCC 25922

#### References

- APHA-AWWA-WEF (1998) Standard Methods for the examination of water and wastewater. 20th ed. APHA. Washington. DC.
- · ATLAS, R.M. & L.C. PARKS (1993) Handbook of Microbiological Media. CRC Press Inc. London.
- · DOWNES, F.P. & K. ITO (2001) Compendium of Methods for the Microbiological Examination of Food. 4th ed. APHA. Washington.
- · ISO 7251 Standard (2005) Microbiology of food and animal feeding stuffs Horizontal method for the detection and enumeration of presumptive Escherichia coli - Most Probable Number Technique.
- . ISO 11133:2014/ Adm 1:2018. Microbiology of food, animal feed and water. Preparation, production, storage and performance testing of culture media.



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Storage

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