

Specification

Substrate for dilution and non-selective enrichments in microbiology and for the research of indole production in coliforms formulated according to ISO 7251 standard.

Presentation

10 Prepared bottle
Bottle 125 ml
with: 100 ± 3 ml

Packaging Details

1 box with 10 bottles 125 ml. Injectable cap: Plastic screw inner cap. The use of syringes needles with a diameter greater than 0.8 mm is not recommended.

Shelf Life

16 months

Storage

8-25°C

Composition

Composition (g/l):

Peptone from casein (Tryptone).....10.0

Sodium chloride.....5.00

Description /Technique

Description:

Diluent and non-selective pre-enrichment medium that has the property of revitalization of the peptone water.

Inoculate according to final purpose, samples and validated methods.

This media is also ideal for determination of the indole test on samples suspected to be contaminated Enterobacteriaceae.

Technique

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

Physical/Chemical control

Color : Yellowish

pH: 7.2 ± 0.2 at 25°C

Microbiological control

Prepare Tubes - Inoculate 10^2 - 10^4 CFU (Specificity)3

Aerobiosis. Incubation at 44 °C \pm 0,5. Reading at 48h \pm 2h.

Microorganism

Escherichia coli ATCC® 25922, WDCM 00013

Proteus hauseri ATCC® 13315

Salmonella typhimurium ATCC® 14028, WDCM 00031

Escherichia coli ATCC® 8739, WDCM 00012

Proteus hauseri ATCC® 13315 (44°C)

Growth

Good - Positive Indole

Good - Positive Indole

Good- Negative Indol

Good - Positive Indole

Inhibited

Sterility Control

Incubation 48 hours at 30-35°C and 48 hours at 20-25°C: NO GROWTH

Check at 7 days after incubation in same conditions

Bibliography

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- 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.