

Reference: 4043

Technical Data Sheet

Product: EE MOSSEL BROTH

Specification

Liquid culture medium used for the enrichment of enterobacteria according to the ISO standard and the Pharmacopeial Harmonised Method.

Presentation

20 Tubes	Packaging Details	Shelf Life	Storage
Tube 16 x 113 mm	16x113 mm glass tubes, ink labelled, metal-Non injectable cap 20 tubes	12 months	8-25ºC
with: 9 ± 0,1 ml	per box		

Composition

Composition (g/l):	
Gelatin peptone	10.000
Dextrose	5.000
Ox bile	20.000
Di-sodium phosphate (2H,0)	8.000
Monopotassium phosphate	2.000
Brilliant green	
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Description / Technique

Description:

As the name suggests, this medium is for the enrichment of enterobacteria, and is a modification by Mossel (1963) of the classic Brilliant Green Bile 2% Broth . Substitution of lactose by glucose makes it more suitable for enteric bacteria detection, (including both gas or non-gas-producers), in food and other samples.

Technique:

The most common technique is as follows: the sample to be studied is added to sterile broth in a proportion of 10%. After through homogenization, the mixture is incubated for a period of 24 -48 hours at 30-35 °C.

After incubation, subcultures are performed on a solid media appropriate for the selective isolation of enterobacteria (18-24h).

For this step, Violet Red Bile Glucose Agar is recommended, although MacConkey, VRBLA, deoxycholate or brilliant green based media can also be used.

Presumptive colonies isolated on this media, can be verified following the usual methodology.

Note: temperatures or culture media may vary according to normatives adopted by the laboratory.

Quality control

Physical/Chemical control

Color: Dark green pH: 7.2 ± 0.2 at 25°C

Microbiological control

Growth Promotion Test according to harmonized pharmacopoeial monographs and test methods & ISO 11133:2014

Aerobiosis. Incubation at 30-35°C. Reading at 18-24h

Microorganism

Ps. aeruginosa ATCC® 9027, WDCM 00026 Salmonella typhimurium ATCC® 14028, WDCM 00031 Staphylococcus aureus ATCC® 6538, WDCM 00032 Escherichia coli ATCC® 8739, WDCM 00012 Enterococcus faecalis ATCC® 19433, WDCM 00009

Growth

Good. Recovery in RBVG Good. Recovery in RBVG Inhibited Good. Recovery in RBVG 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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- · ISO 21528-1:2004 Standard. Microbiology of food and animal feeding stuffs Horizontal methods for the detection and enumeration of Enterobacteriaceae Part 1: Detection and enumeration by MPN technique with pre-enrichment.
- . ISO 11133:2014/ Adm 1:2018. Microbiology of food, animal feed and water. Preparation, production, storage and performance testing of culture media.
- · MOSSEL, VISSER & CORNELISSEN (1963) The examination of foods for Enterobacteriaceae using a test of the type generally adopted for the detection of salmonellae J. Appl. Bact. 26:444-452.
- · PASCUAL ANDERSON. Mª.Rº. (1992) Microbiología Alimentaria. Díaz de Santos. S.A. Madrid.
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