

Specification

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

Presentation

	Packaging Details	Shelf Life	Storage
10 Prepared bottles Bottles 250 ml with: 90 ± 3 ml	1 box with 10 bottles 250 ml. Injectable cap: Plastic screw inner cap. The use of syringes needles with a diameter greater than 0.8 mm is not recommended.	12 months	2-25 °C

Composition

Composition (g/l):	
Gelatin peptone.....	10.000
Dextrose.....	5.000
Ox bile.....	20.000
Di-sodium phosphate (2H ₂ O).....	8.000
Monopotassium phosphate.....	2.000
Brilliant green.....	0.015

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 thorough 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 : Green pH: 7.2 ± 0.2 at 25°C

Microbiological control

Growth Promotion Test 50-100 CFU according to harmonized pharmacopoeial monographs and test methods & ISO 11133:2014/A1:2018

Inoculate: 50-100 CFU (productivity) according to harmonized Eur. Pharmacopoeia and ISO 11133 standard.

Analytical methodology according to ISO 11133:2014/A1:2018; A2:2020.

Aerobiosis. Incubation at 30-35 °C. Reading at 18-24h to 72h.

Microorganism

Ps. aeruginosa ATCC® 9027, WDCM 00026
Escherichia coli ATCC® 8739, WDCM 00012
Staphylococcus aureus ATCC® 6538, WDCM 00032
Escherichia coli ATCC® 25922, WDCM 00013
Salmonella typhimurium ATCC® 14028, WDCM 00031
Enterococcus faecalis ATCC® 29212, WDCM 00087

Growth

Good. Recovery in VRBG
 Good. Recovery in VRBG
 Inhibited
 Good. Recovery in VRBG
 Good. Recovery in VRBG
 Inhibited

Sterility Control

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

Check at 7 days after incubation in same conditions.

Reference: 400304ZA Technical Data Sheet

Product: **E.E Mossel Broth - 90 ml**



Bibliography

- EUROPEAN PHARMACOPOEIA 8.0 (2014) 8th ed. § 2.6.13. Microbiological examination of non-sterile products: Test for specified microorganisms. Harmonised Method. EDQM. Council of Europe. Strasbourg.
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- 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.
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- USP 33 - NF 28 (2011) <62> Microbiological examination of non-sterile products: Test for specified microorganisms. Harmonised Method. USP Corp. Inc. Rockville. MD. USA.