Condalab

Reference: 5168 **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

	Packaging Details	Shelf Life	Storage
10 Prepared bottles Bottle 125 ml with: 100 ± 3 ml	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.	12 months	2-25 ºC

Composition

Composition (g/l):

Gelatin peptone	10.000
Glucose monohydrate	5.000
Dehydrated Ox bile	20.000
Di-sodium phosphate ($2H_20$)	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.

Directions for Use:

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 ºC.

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 25ºC

Microbiological control

Inoculate: 10-100 CFU accord. to Eur. Pharm. & 100 ± 20 CFU; min. 50 CFU (productivity)/ 10^4-10^6 CFU (selectivity) acc. to ISO.

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

Aerobiosis. Incubation: 30-35 ºC. Reading at 24h (E.P.) / 37 ± 1 ºC. Reading at 24 h (ISO)

Note: results ATCC® 8739/6538/9027 (30-35 ºC) (EP) & ATCC® 8739/14028/19433/(37 ºC) (ISO).

Microorganism	Growth
Escherichia coli ATCC® 8739, WDCM 00012	Good. Recovery in VRBG
Ps. aeruginosa ATCC® 9027, WDCM 00026	Good. Recovery in VRBG
Staphylococcus aureus ATCC® 6538, WDCM 00032	Inhibited
Enterococcus faecalis ATCC® 19433, WDCM 00009	Inhibited
Mixture E. coli ATCC® 8739 + E. faecalis ATCC® 19433	> 10 CFU. Characteristic colonies of *E. coli*
Mixture S. typhimuriumi ATCC® 14028 + E. faecalis ATCC® 19433	> 10 CFU. Characteristic colonies of *Salmonella*

Sterility Control

Incubation 48 h at 30-35 ºC and 48 h at 20-25 ºC: NO GROWTH.
Check at 7 days after incubation in same conditions.

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.

· 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.

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