

## Specification

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

## Presentation

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

### Packaging Details

1 box with 10 bottles 125 ml. metal-non injectable cap.

### Shelf Life

12 months

### Storage

2-25°C

## Composition

Composition (g/l):

Gelatin peptone.....	10.000
Dextrose.....	5.000
Ox bile.....	20.000
Di-sodium phosphate (2H <sub>2</sub> 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 : Dark green

pH: 7.2 ± 0.2 at 25°C

**Microbiological control**

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

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

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

Good. Recovery in RBVG

Good. Recovery in RBVG

Inhibited

Good. Recovery in RBVG

Inhibited

Good. Recovery in RBVG

**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**

- 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.
- PASCUAL ANDERSON. M<sup>o</sup>.R<sup>o</sup>. (1992) Microbiología Alimentaria. Díaz de Santos. S.A. Madrid.
- USP 33 - NF 28 (2011) <62> Microbiological examination of non-sterile products: Test for specified microorganisms. Harmonised Method. USP Corp. Inc. Rockville. MD. USA.