

TM 1804- EE BROTH, MOSSEL (ISO 21528-1:2004, ISO 7402:1993)

INTENDED USE

For selective enrichment of Enterobacteriaceae in bacteriological examination of foods.

PRODUCT SUMMARY AND EXPLANATION

Enterobacteria Enrichment Broth Mossel is a highly enrichment medium used for bile-tolerant Gram-negative bacteria. It was developed by Mossel, Visser, and Cornelissen to facilitate the growth of Enterobacteriaceae. The medium is used as an enrichment broth, providing a rich environment for the recovery of damaged or injured cells. The composition of EE Broth, Mossel medium is recommended by the ISO, for selective enrichment of Enterobacteriaceae.

COMPOSITION

Ingredients	Gms / Ltr
Dehydrated Ox-bile	20.000
Pancreatic digest of Gelatin	10.000
Disodium hydrogen phosphate	6.450
Glucose monohydrate	5.000
Potassium dihydrogen phosphate	2.000
Brilliant green	0.014

PRINCIPLE

The medium contains Pancreatic digest of Gelatin which provides nitrogen, vitamins, and amino acids in the medium. Glucose is the carbon source to enhance organism growth. Dehydrated Ox-bile and Brilliant green are the selective agents inhibiting Gram-positive bacteria, particularly bacilli and fecal *streptococci*. Sodium phosphate and Potassium phosphate are strong buffering agents.

INSTRUCTION FOR USE

- Dissolve 43.46 grams in 1000ml distilled water.
- Dispense 100ml portions in 250ml flasks or in 10ml portions into tubes. Stopper with cotton plugs or loose-fitting caps.
- Gently heat in boiling water at 100°C for 30 minutes with gentle swirling to dissolve the medium completely. Do Not Autoclave.

Note: Avoid overheating of the medium.

QUALITY CONTROL SPECIFICATIONS

Appearance of Dehydrated powder	: Light yellow to greenish yellow, Homogeneous free flowing powder
Appearance of Prepared medium	: Emerald green coloured, clear solution without any precipitate
pH (at 25°C)	: 7.2± 0.2

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Acid production	Incubation Temperature	Incubation Period
<i>Proteus mirabilis</i>	25933	50-100	Luxuriant	Positive reaction, Yellow colour	35-37°C	20-24 Hours



<i>Escherichia coli</i>	25922	50-100	Luxuriant	Positive reaction, Yellow colour	35-37°C	20-24 Hours
<i>Shigella boydii</i>	12030	50-100	luxuriant	Negative reaction, No colour change	35-37°C	20-24 Hours
<i>Enterobacter aerogenes</i>	13048	50-100	Luxuriant	Positive reaction, Yellow colour	35-37°C	20-24 Hours
<i>Salmonella enteritidis</i>	13076	50-100	Luxuriant	Variable reaction	35-37°C	20-24 Hours
<i>Staphylococcus aureus</i>	25923	≥1000	Inhibited	-	35-37°C	20-24 Hours

PACKAGING

In 100 & 500 gm packaging size.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers below 25°C and protect from direct Sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.










Product Deterioration: Do not use, if powder show evidence of microbial contamination, discoloration, drying, or other signs of deterioration.

DISPOSAL

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES

1. The United States Pharmacopoeia. Amended Chapters 61, 62 & 111, The United States Pharmacopoeial Convention Inc., Rockville, MD. (2009).
2. Directorate for the Quality of Medicines of the Council of Europe (EDQM). The European Pharmacopoeia, Amended Chapters 2.6.12, 2.6.13, 5.1.4, Council of Europe, 67075 Strasbourg Cedex, France. (2007).
3. Mossel, Vissar, and Cornellsen. J. Appl. Bacteriol. 26:444. (1963).
4. Sorrells, K. M., M. L. Speck, and J. A. Warren. Pathogenicity of *Salmonella gallinarum* after metabolic injury by freezing. Appl. Microbiol. 19:39-43. (1970).
5. International Organization for Standardization (ISO).,2004. Microbiology of food and animal feeding stuffs - Horizontal methods for the detection and enumeration of Enterobacteriaceae. BS ISO 21528-1:2004.

 Good Manufacturing Practices Certified	 Best Before	 Quantity	 Catalogue Number	 Manufacturer
 Temperature Unit	 Lot / Batch Number	 Consults Instructions for Use	 QR Code	

NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

***For Lab Use Only**

Revision: 14th July 2020