



Enterobacteria Enrichment broth Mossel

RDM-EEB-01

Principle

EE Broth Mossel is prepared according to the formula of Mossel, Visser and Cornelissen (1963). Enterobacteria enrichment broth Mossel is used for cultivation of most *Enterobacteriaceae*, thus assuring the detection of *Salmonella*, *Shigella* and other enteric pathogens and lactose-negative organisms. This media is also recommended by USP/EP/IP/JP/BP for testing bile tolerating gram-negative bacteria and microbial limit testing of pharmaceutical products and raw material used in pharmaceutical industries. The medium is prepared in accordance with the harmonized principles of USP/EP/IP/JP. Medium is consisting of pancreatic digest of gelatin, dextrose monohydrate, dehydrated Ox bile, potassium dihydrogen phosphate, disodium hydrogen phosphate and brilliant green. The pancreatic digest of gelatin provide nitrogenous compounds, long chain amino acids, vitamins and other essential growth nutrients. The dextrose monohydrate serves as carbon and energy source. The dehydrated Ox bile and brilliant green are selective agents, inhibits gram-positive bacteria. The potassium dihydrogen phosphate and disodium hydrogen phosphate are buffering agents.

Use: Enterobacteria enrichment broth Mossel is used for cultivation of most *Enterobacteriaceae*, (*Salmonella*, *Shigella*) and other enteric pathogens and lactose- negative organisms. Media is also recommended by USP/EP/IP/JP/BP for testing bile tolerating gram-negative bacteria and microbial limit testing of food products, pharmaceutical products.

Contents*

Ingredients

	Gram/Litre
Pancreatic Digest of Gelatin	10.0000
Dextrose Monohydrate	5.0000
Dehydrated Ox Bile	20.0000
Potassium Dihydrogen Phosphate	2.0000
Disodium Hydrogen Phosphate	8.0000
Brilliant Green	0.0015
pH at 25°C	7.2 ±0.2

* Formula adjusted for optimum performance and parameters

Directions: Dissolve 45.00 grams in 1000 ml distilled water. Heat at 100°C in water bath or flowing steam for 30 minutes, **Do Not Autoclave**. In aseptic condition immediately cool it to 42-45°C and distribute in desire and inoculate pure culture or test sample.

Specimens types analyzed

Pharmaceutical samples, clinical and non-clinical sample.

Precautions to be taken

These microbial media are intended for the in-vitro use only. All the handling, experiments, storage, and discarding should be performed with the help of skilled and knowledgeable technicians and as per the established guidelines. The material should be disposed only after proper sterilization by autoclaving. Please go through the MSDS of the media to avoid any accidents or in emergency.

Performance and Evaluation

The expected performance of the medium is liable to use as per the direction on the label when stored at optimum conditions and within expiry date.

Quality Control

Appearance	Light green colored free flowing, homogeneous powder
Reaction of 4.5% solution	7.2 ±0.2 at 25 °C
pH	7.00- 7.40
Color and clarity of ready medium	Emerald green colored and clear opalescent
Growth Promotion properties	Best at ≤ 100 CFU at 32-37 °C for 18-72 h
Indicative properties	Optimum at ≤ 100 CFU at 32-37 °C for 18-48 h
Negative control	Performed using sterile distilled water

Different Microbial Response

Organism	Inoculum	Growth	Acid production	Incubation
<i>Escherichia coli</i> (ATCC 8739)	50-100	Luxurious	Positive (Yellow color)	30-37°C, 18-24 hours
<i>Pseudomonas aeruginosa</i> (ATCC 27853)	50-100	Luxurious	Negative (No yellow color)	30-37°C, 18-24 hours
<i>Staphylococcus aureus</i> (ATCC 25923)	50-100	Inhibited	--	30-37°C, 18-72 hours

Storage and Shelf Life

Hygroscopic; keep container tightly closed. Store in cool dry place.

Disposal: To avoid the contamination or propagation of any hazardous microbes the used, unusable or modified preparation of this product must be disposed after autoclaving after completion of task.

Reference

1. Atlas, R. M. (2005). *Handbook of media for environmental microbiology*. CRC press.
2. *British Pharmacopoeia*, (2011), The Stationery office British Pharmacopoeia
3. *Difco Manual* (1998). 11th Edition. Difco Laboratories., Division of Becton Dickinson and Company, Sparks, Maryland, USA.
4. *European Pharmacopoeia*, (2011), European Dept. for the quality of Medicines.
5. *Indian Pharmacopoeia*, (2018), Govt. of India, the Controller of Publication, New Delh
6. Mossel, D. A. A., M. Vissar, and A. M. R. Cornellisen. (1963). *The examination of foods for Enterobacteriaceae using a test of the type generally adopted for the detection of salmonellae*. J. Appl. Bacteriol. 26:444-452
7. Rand, M. C., Arnold E. Greenberg, and Michael J. Taras, (1976), *Standard methods for the examination of water and wastewater*. Prepared and published jointly by American Public Health Association, American Water Works Association, and Water Pollution Control Federation.
8. *The Japanese Pharmacopoeia*, 17th Ed. (2016), The Ministry of Health, Labour And Welfare
9. *The United States Pharmacopoeia*, (2014), The United States Pharmacopoeial Convention. 12601 Twinbrook Parkway, Rockvukke, MD 20852.

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