Enterobacteria Enrichment Broth, Mossel (Medium 5) IP

Intended Use
Enterobacteria Enrichment Broth, Mossel (Medium 5) IP is used for selective enrichment and detection of *Enterobacteriaceae* in bacteriological examination of foods in accordance with IP.

Summary
Mossel, Visser and Cornelissen developed a culture media for the selective enrichment of *Enterobacteriaceae* that enables the *Enterobacteriaceae* to multiply freely and inhibit accompanying other organisms. This media contains dextrose to facilitate growth of most *Enterobacteriaceae* including *Salmonella* and other non-lactose fermenting organisms. EE Broth should be used as an enrichment broth in conjunction with Violet Red Bile Glucose Agar. When specific organisms, rather than *Enterobacteriaceae* in general, are required, sub-cultures must be made onto lactose differential media e.g. Desoxycholate Citrate Agar, Brilliant Green Agar, Modified, or MacConkey Agar for the detection of non-lactose fermenting or delayed lactose fermenting organisms.

Principle
Pancreatic Digest of Gelatin supplies nutrients, nitrogen compounds and amino acids. Ox bile supports the growth of enteric bacteria and inhibits other bacteria, which do not normally live in the intestine. Brilliant-green specifically inhibits the Gram-positive accompanying flora. Disodium hydrogen phosphate, dihydrate and potassium dihydrogen phosphate are buffering agents.

Formula*

Ingredients	**g/L**
Pancreatic Digest of Gelatin	10.0
Dextrose Monohydrate	5.0
Dehydrated Ox Bile	20.0
Disodium Hydrogen Phosphate, Dihydrate	8.0
Potassium Dihydrogen Phosphate	2.0
Brilliant Green	0.015
Final pH (at 25°C)	7.2 ± 0.2

*Adjusted to suit performance parameters

Storage and Stability
Store dehydrated medium below 30°C in tightly closed container and the prepared medium at 2°C-8°C. Avoid freezing and overheating. Use before expiry date on the label. Once opened keep powdered medium closed to avoid hydration.

Type of specimen
Pharmaceutical samples.

Specimen Collection and Handling
Ensure that all samples are properly labelled. Follow appropriate techniques for handling samples as per established guidelines. Some samples may require special handling, such as immediate refrigeration or protection from light, follow the standard procedure. The samples must be stored and tested within the permissible time duration. After use, contaminated materials must be sterilized by autoclaving before discarding.

Directions
1. Suspend 45.01 g of the powder in 1000 mL purified / distilled water.Mix thoroughly.
2. Heat in free-flowing steam at 100°C for 30 minutes. Avoid overheating of the medium.
3. DO NOT AUTOCLAVE OR REHEAT.
4. Pour into adequate containers.

Quality Control

Dehydrated Appearance: Light yellow to greenish yellow coloured, homogeneous, free flowing powder.
Prepared Appearance: Green to dark green colour clear to slightly hazy with or without trace precipitate.
Growth Promotion Test: Growth promotion is carried out in accordance with the harmonized method of IP and growth is observed after an incubation at 30°C-35°C for 24-48 hours. Subculturing is carried out using Violet Red Bile Glucose Agar (Harmonized) after enrichment in Enterobacteria Enrichment Broth, Mossel (Medium 5) IP at 30 ºC-35ºC for 18-24 hours.
Growth Promoting Properties: The test results observed are within the specified temperature and shortest period of time specified in the test, inoculating ≤ 100 cfu of appropriate microorganism at 30°C-35°C for 24 hours.
Inhibitory Properties: No growth of the test microorganism occurs for the specified temperature and not less than the longest period of the time specified, inoculating > 100 cfu of the appropriate microorganism at 30°C-35°C for 48 hours.

Organism (ATCC)	**Growth**
Escherichia coli (8739)	Good
Pseudomonas aeruginosa (9027)	Good
Staphylococcus aureus subsp. *aureus* (6538)	Inhibited

Note: For inhibition no growth of test microorganism should occur.

Interpretation of Results

1. Acid production causes the colour of EE Broth Mossel to become yellow.
2. A negative reaction results in no colour change and the medium remains green.

Performance and Evaluation

Performance of the product is dependent on following parameters as per product label claim:

1. Directions
2. Storage
3. Expiry

Warranty

This product is designed to perform as described on the label and package insert. The manufacturer disclaims any implied warranty of use and sale for any other purpose.

Reference

1. Mossel, Vissar and Cornellisen. 1963. J. Appl. Bacteriol. 26: 444.
2. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat No.	**Product description**	**Pack Size**
201050050100	Dehydrated Culture Media	100 g
201050050500	Dehydrated Culture Media	500 g