

## **CM 22019-EE BROTH MOSSEL (ENTEROBACTERIA ENRICHMENT BROTH, MOSSEL) (as per USP/BP/JP/EP/IP)**

### **INTENDED USE**

For selective enrichment of Enterobacteriaceae.

### **PRODUCT SUMMARY AND EXPLANATION**

The family Enterobacteriaceae consists of Salmonella, Shigella and other enteric pathogens. These organisms may find entry into the food system through faecally contaminated water. But majority of these organisms are eliminated under the stringent food processing parameters. However, some of these organisms may remain viable or become sub-lethally injured during the changes in pH, exposure to steam or heat and other unfavorable conditions. These bacteria may contaminate the product and therefore, are required to be isolated using an enrichment medium. Mossel et al formulated EE Broth, Mossel, which is recommended as an enrichment medium for bile-tolerant gram-negative bacteria in the biological examination of foods, animal feedstuffs. This medium is prepared as per European Pharmacopoeia and is in accordance with the harmonized method of USP/BP/EP/JP/IP.

### **COMPOSITION**

Ingredients	Gms / Ltr
<b>Dehydrated ox-bile</b>	20.000
<b>Pancreatic digest of gelatin</b>	10.000
<b>Disodium hydrogen phosphate, dihydrate</b>	8.000
<b>Glucose</b>	5.000
<b>Potassium dihydrogen phosphate</b>	2.000
<b>Brilliant green</b>	0.015

### **PRINCIPLE**

Pancreatic digest of gelatin and glucose allows the growth of most of the members of Enterobacteriaceae. Brilliant green and dehydrated ox-bile are inhibitory agents for gram-positive bacteria. Phosphates act as a good buffering agent and neutralize acids produced by lactose fermenters that otherwise would adversely affect the growth of the organism. Lactose is replaced by glucose in this medium as lactose-negative, anaerogenic lactose-positive or late lactose fermenting Enterobacteriaceae are often missed by the standard Coli-aerogenes test.

### **INSTRUCTION FOR USE**

Dissolve 45.01 grams in 1000 ml distilled water.

Dispense into tubes or flasks as desired.

Heat in free-flowing steam or boiling water (100°C) for 30 minutes and cool immediately.

**Note:** Do not autoclave.

### **QUALITY CONTROL SPECIFICATIONS**

<b>Appearance of Powder</b>	:	Light yellow to greenish yellow colour, homogeneous free flowing powder
<b>Appearance of prepared medium</b>	:	Emerald green coloured, clear solution without any precipitate
<b>pH (at 25°C)</b>	:	7.2±0.2

### **INTERPRETATION**

Culture characteristics observed after incubation.



Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temp.	Incubation Period
<i>Escherichia coli</i>	25922	50-100	Luxuriant	30-35°C	24-48 Hours
<i>Escherichia coli</i>	8739	50-100	Luxuriant	30-35°C 30-	24-48 Hours
<i>Pseudomonas aeruginosa</i>	9027	50-100	Luxuriant	35°C 30-	24-48 Hours
<i>Pseudomonas aeruginosa</i>	25783	50-100	Luxuriant	35°C 30-	24-48 Hours
<i>Enterobacter aerogenes</i>	13048	50-100	Luxuriant	35°C 30-	24-48 Hours
<i>Proteus mirabilis</i>	25933	50-100	Luxuriant	35°C 30-	24-48 Hours
<i>Salmonella enteritidis</i>	13079	50-100	Luxuriant	35°C 30-	24-48 Hours
<i>Staphylococcus aureus</i>	25923	≥1000	Inhibited	35°C 30-	24-48 Hours
<i>Staphylococcus aureus</i>	6538	≥1000	Inhibited	35°C	24-48 Hours

### PACKAGING:

In100&500gm 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

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9. European Pharmacopoeia, 2017, European Dept. for the quality of Medicines
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 GMP Good Manufacturing Practices Certified	 IVD For In Vitro Diagnostic Use	 QTY. Quantity	 LOT/ B. NO. Lot / Batch Number	 REF Catalogue Number	 Manufacturer
 Temperature Unit	 EC REP Authorized Representative MedNet GmbH Buckrose 10, 48163 Moenster, Germany	 European Conformity	 QR Code	 Consults Instructions for Use	 Best Before

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

**\*For professional use only.**

