CM 20631 - 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 consistsofSalmonella, Shigella and other enteric pathogens. These organisms may find entry into the food system through faecallycontaminated 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, exposuretosteam or heat and other unfavorable conditions. These bacteria may contaminate the product and therefore,arerequired to be isolated using an enrichment medium. Mossel et al formulated EE Broth, Mossel, which is recommendedasanenrichment medium for bile tolerant gram-negative bacteria in the biological examination of foods, animalfeedstuffs. This medium is prepared as per European Pharmacopeia and is in accordance with the harmonized methodofUSP/BP/EP/JP/IP.

COMPOSITION

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

PRINCIPLE
Pancreatic digest of gelatin andglucose 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 neutralizes acids produced bylactose fermenters that otherwise would adversely affect the growth of the organism. Lactose is replaced by glucoseinthis medium as lactose negative, anaerogenic lactose-positive or late lactose fermenting Enterobacteriaceae are oftenmissed by the standard Coli-aerogenes test.

INSTRUCTIONFOR 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

Appearance of Powder	:	Light yellow to greenish yellow colour, 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
Culturecharacteristics observed after incubation.

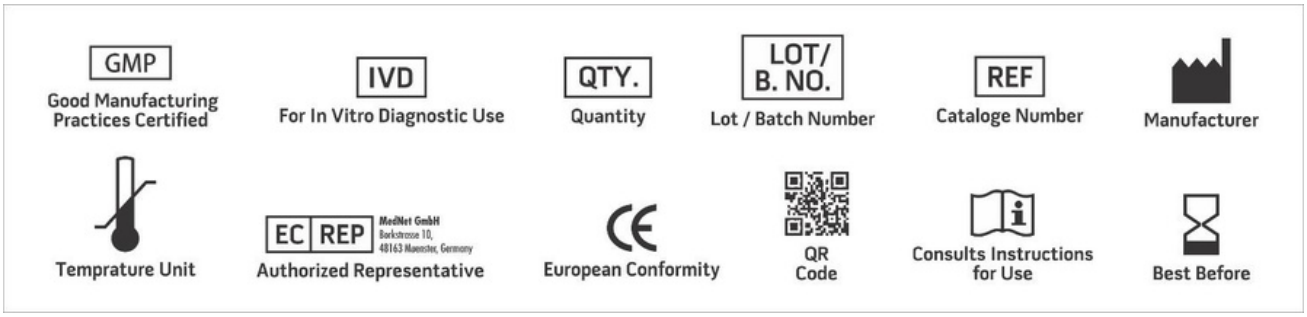
Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temp.	Incubation Period
Escherichia coli	25922	50-100	Luxuriant	30-35°C	24-48 Hours
Escherichia coli	8739	50-100	Luxuriant	30-35°C	24-48 Hours
Pseudomonas aeruginosa	9027	50-100	Luxuriant	30-35°C	24-48 Hours
Pseudomonas aeruginosa	25783	50-100	Luxuriant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

PACKAGING:
In100&500gm packaging size.

STORAGE
Dehydratedpowder, 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
Afteruse,prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES
1. Mossel D.A.A., and Harrewijn G. A., 1972, Alimenta II, 29-30
2. Mossel D.A.A. and Ratto M.A., 1970, Appl. Microbiol., 20:273.
3. Mossel D.A.A. and Shennan J.L. and Clare V., 1973, J. Sci. Fd. Agric., 24 : 499.
4. Mossel D.A.A., Ratto M.A., 1973, J. Fd. Technol., 8 : 97.
5. Mossel D. A. A., Vissar M. and Cornellisen A. M. R., 1963, J. Appl.Bacteriol., 26(3):444.
6. Van Schothurst M. et al, 1966, Vet Med., 13(3):273.
7. The Indian Pharmacopoeia 2010, Govt. of India, 2010. The Controller of Publication, Delhi
8. British Pharmacopoeia, 2016, The Stationery office British Pharmacopoeia
9. European Pharmacopoeia, 2017, European Dept. for the quality of Medicines
10. Japanese Pharmacopoeia, 2016
11. The United States Pharmacopoeia, 2019, The United States Pharmacopeial Convention. Rockville, MD



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

***Forprofessionaluse only.**