



Product Data Sheet

M-ENDO BROTH

Product No. GB-DCM-00356-1A

INTENDED USE

For isolation and enumeration of Enterococci in sewage, water and foods by membrane filter technique.

PRODUCT SUMMARY

It is possible to remove bacteria from fluids by passing them through filters with such small pore size that bacteria are arrested. This filtration technique enables fairly large volumes of water to pass rapidly under pressure, but prevents the passage of any bacteria present. These nutrients are retained on the surface of the membrane which is then brought into contact with suitable liquid nutrients. These diffuse upwards through the pores thereby inducing the organisms to grow as surface colonies which can be counted. M-Endo Broth is used for milk lines of milk handling equipment and for examination of swimming pool waters which use membrane filter technique. Higher counts are given in this medium and is most satisfactory of the many media used, since coliform colonies develop rapidly it doesn't require the preliminary enrichment and saturated relative humidity and results of Standard Methods MPN Test are in good agreement.

Product Specifications

Ingredients	Gms / Ltr
Peptone	20.000
Yeast extract	6.000
Lactose	25.000
Basic fuchsin	1.000
Dipotassium hydrogen phosphate	7.000
Sodium sulphite	2.500

PRINCIPLE

Essential nutrients especially nitrogenous and carbonaceous compounds, long chain amino acids and other essential nutrients provided by peptone and yeast extract provide for the coliforms. Lactose is the fermentable carbohydrate. The growth of gram-positive organisms inhibited by sodium sulphite and basic fuchsin. Phosphates buffer the medium. Coliforms are lactose fermenters and the resulting acetaldehyde reacts with sodium sulphite and basic fuchsin to form red colonies which is similar coloration of the medium. Lactose non-fermenters form colorless colonies.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery at 35-37°C	Color of the colony(on membrane filter)	Incubation Temperature	Incubation Period
Escherichia coli	25922	50-100	Good-luxuriant	>=50%	Pink with metallic sheen	35-37°C	18-48 Hours
Klebsiella aerogenes	13048	50-100	Good-luxuriant	>=50%	Pink to red (may have sheen)	35-37°C	18-48 Hours
Salmonella Typhi	6539	50-100	luxuriant	>=70%	Colorless to very light pink	35-37°C	18-48 Hours
Staphylococcus aureus	25923	50-100	inhibited	0%	-	35-37°C	18-48 Hours
Klebsiella pneumoniae	1383	50-100	Good-Luxuriant	>=50%	Pink to red	35-37°C	18-48 Hours
Salmonella Typhimurium	14028	50-100	Luxuriant	>=70%	Colorless to very light pink	35-37°C	18-48 Hours

INSTRUCTION FOR USE

- Dissolve 61.5 grams in 1000 ml purified / distilled water.
- Heat the medium completely to dissolve, if necessary.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 5 minutes.
- Cool to 45 - 50°C and use as required in membrane filtration technique. The medium should be used on the same day of its rehydration.

Caution: Basic fuchsin is a potential carcinogen and care should be taken to avoid inhalation of the powdered dye and contamination of the skin.



QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Light pink to purple homogeneous free flowing powder

Appearance of prepared medium: Pinkish red colored opalescent solution in tubes

pH (at 25°C) : 7.2 ± 0.2

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°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 they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

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

This product is for research use only.