M-Nutrient Broth

Intended Use
M-Nutrient Broth is recommended for enumeration of bacteria using membrane filter technique.

Summary
M-Nutrient broth was originally developed as Nutrient Broth as mentioned in Standard Methods for Examination of Water and Waste Water. This medium is used for enumeration of non-fastidious bacteria using membrane filter technique. This medium has relatively simple formulation with high amount of peptic digest of animal tissue and low amount of yeast extract. These nutrients support the growth of non-fastidious microorganisms and thus enables the user to enumerate and cultivate the bacteria in any liquid materials using membrane filtration technique.

Principle
Peptic digest of animal tissue provides necessary nitrogen source. Yeast extract supplies vitamin B complex. Sterile cotton absorbent pads are saturated with M-Nutrient Broth (about 2 mL). Sterile membrane filters used for filtering water samples are aseptically placed on the saturated cotton absorbent pads.

Formula*

Ingredients	**g/L**
Peptic Digest of Animal Tissue	40.0
Yeast Extract	6.0
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
Water and Waste Water 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 46.00 g of the powder in 1000 mL purified / distilled water.
2. Heat if necessary, to ensure complete solution. Dispense as desired
3. Sterilize by autoclaving at 121°C (15 psi) for 15 minutes as per validated cycle.

Quality Control
Dehydrated Appearance: Cream to yellow coloured, homogenous free flowing powder.
Prepared Appearance: Amber to dark amber coloured, clear solution without any precipitate.
Cultural Response: Cultural characteristics observed after an incubation at 35°C-37°C for 18-48 hours.

Organism (ATCC)	**Growth**
Escherichia coli (25922)	Good
Enterococcus faecalis (29212)	Good
Pseudomonas aeruginosa Strain Boston 41501 (27853)	Good
Staphylococcus aureus subsp. *aureus* (25923)	Good
Staphylococcus epidermidis strain PCI 1200 (12228)	Good

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. Eaton A. D., Clesceri L. S. and Greenberg A. E., (Ed.), 1995, Standard Methods for the Examination of water and Wastewater, 19th Ed., American Public Health Association, Washington, D.C.
2. MacFaddin J. F., 1985, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol. 1, Williams and Wilkins, Baltimore.
3. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat No.	Product description	Pack Size
201130080500	Dehydrated Culture Media	500 g