TM 740 – NUTRIENT AGAR (WITH 3% SALT)

INTENDED USE

For cultivation of salt tolerance *Vibrio* species.

PRODUCT SUMMARY AND EXPLANATION

Vibrios are fairly easy to isolate from both clinical and environmental materials, though some species may require growth factors and vitamins. Vibrio parahaemolyticus is the leading cause of bacterial diarrhea associated with the consumption of contaminated food products. Media can be made selective for Vibrios by adding appropriate selective agents. High concentrations of NaCl and alkaline pH have also been used to select certain Vibrio species, based on their ability to grow at pH values above 8.0 and at 3% or higher concentrations of NaCl. *Vibrio cholerae* is a non-halophilic Vibrio, which cannot grow in media with a concentration of sodium chloride greater than 5-6% and is able to grow in media lacking NaCl (1). High Salt Nutrient Agar is recommended for the isolation, cultivation and confirmation of salt-tolerant *Vibrio* species in products intended for human consumption or animal feeding stuffs in accordance with ISO Committee under specification ISO/DIS 8914:1990.

COMPOSITION

Ingredients	Gms / Ltr
Peptone	5.000
Meat extract	5.000
Agar	15.000
Sodium chloride	30.000

PRINCIPLE

The medium consists of Meat extract and peptone which provide the necessary nitrogen compound, carbon, vitamins and minerals. Sodium chloride maintains osmotic equilibrium of the medium.

INSTRUCTION FOR USE

- Dissolve 55.0 grams in 1000 ml purified/distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Mix well and pour into sterile Petri plates.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Cream to yellow coloured homogeneous free flowing powder

Appearance of prepared medium : Light yellow coloured, clear to slightly opalescent gel forms in Petri plates.

pH (at 25°C) : 8.5 ± 0.2

INTERPRETATION

Cultural characteristics observed after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
Vibrio cholerae	15748	50-100	Good-luxuriant	>=50%	35-37°C	18-24 Hours
Vibrio parahaemolyticus	17802	50-100	Good-luxuriant	>=50%	35-37°C	18-24 Hours

PACKAGING:
In pack size of 500 gm bottles.

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.

REFERENCES
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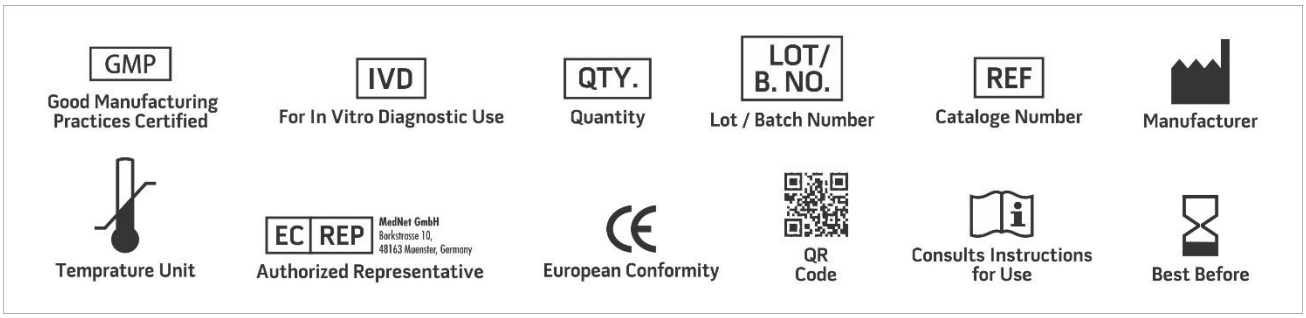
3. International Organization for Standardization (ISO), 1990, Draft ISO/DIS 8914:1990
4. Isenberg, (Ed.), 1992, Clinical Microbiology Procedures Handbook, Vol. I, American Society for Microbiology, Washington, D.C.
5. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.
6. Salfinger Y., and Tortorello M.L. Fifth (Ed.), 2015, Compendium of Methods for the Microbiological Examination of Foods, 5th Ed., American Public Health Association, Washington, D.C.



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