

CM 21560 - SALINE NUTRIENT AGAR FOR VIBRIO (ISO 21872-1-2017)

INTENDED USE

Recommended for enrichment of *Vibrio parahaemolyticus* and *Vibrio cholerae* species.

PRODUCT SUMMARY AND EXPLANATION

Vibrio species 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 *Vibrio* species by adding appropriate selective agents. This medium is recommended by ISO to isolate *Vibrio* species from food, animal feeding stuff and environmental samples from areas in food production and food handling.

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.

COMPOSITION

Ingredients	Gms / Ltr
Agar	15.000
Sodium chloride	10.000
Meat extract	5.000
Peptone	3.000

PRINCIPLE

Peptone and Meat extract provide the necessary nitrogen compounds, carbon, vitamins and also some trace ingredients necessary for the growth of bacteria. Sodium chloride maintains the osmotic equilibrium of the medium.

INSTRUCTION FOR USE

Dissolve 33.0 grams in 1000 ml distilled water.

Heat to boiling to dissolve the medium completely.

Sterilize by autoclaving at 15 psi (121°C) for 15 minutes.

Cool to 45-50°C.

Mix well and pour into sterile Petri plates.

Alternatively, the medium can be dispensed into tubes to prepare slants.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Cream to yellow homogeneous free flowing powder
Appearance of prepared medium	: Light yellow coloured clear to slightly opalescent gel forms in Petri plates
pH (at 25°C)	: 7.2±0.2

INTERPRETATION

Cultural characteristics observed after an incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
---------------	------	-------------------	--------	----------	------------------------	-------------------



Vibrio parahaemolyticus	10885	50-100	Good-luxuriant	>=50%	37°C	24 ± 3 Hours
Vibrio furnissii	11218	50-100	Good-luxuriant	>=50%	37°C	24 ± 3 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.

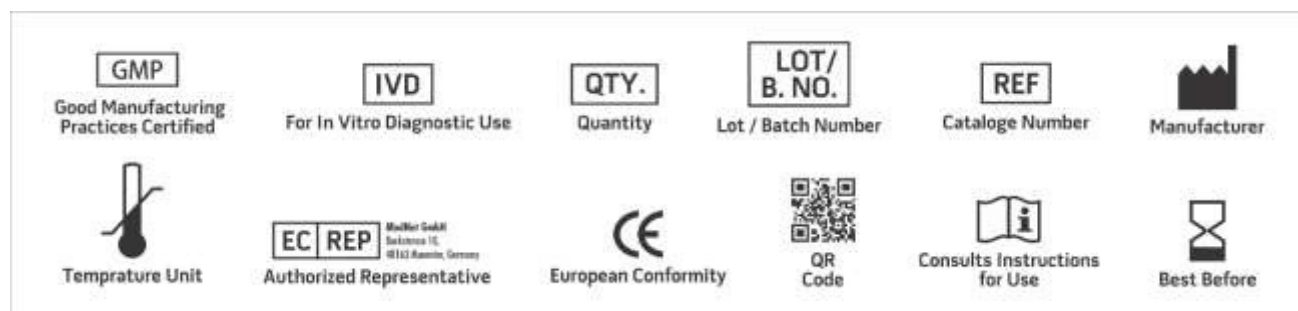
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

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

REFERENCES

1. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
2. 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.
3. Microbiology of food and animal feeding stuffs - Horizontal method for detection of potentially enteropathogenic Vibrio spp.- Part 1: International Organization for Standardization (ISO), 21872-1:2017



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