

CM 20754 - GELATIN SALT AGAR

INTENDED USE

For cultivation and differentiation of *Vibrio* species from foods.

PRODUCT SUMMARY AND EXPLANATION

Vibrio's are fairly easy to isolate from both clinical and environmental material, though some species may require growth factors and/or vitamins. Media can be made selective for *Vibrio*'s by adding appropriate selective agents. High concentrations of NaCl and alkaline pH have also been used to select certain *Vibrio* species, based on the ability of most *Vibrios* to grow at pH values above 8.0 and at 3% or higher concentrations of NaCl. *Vibrio* species which require high sodium chloride concentration for growth are called Halophilic or Halophiles. Gelatin Salt Agar is used to screen isolates for salt tolerance. As only halophilic *Vibrio* species grow on Gelatin Salt Agar, it is recommended to inoculate Gelatin Agar in addition. An opaque halo is observed around growth of gelatinase positive organisms.

COMPOSITION

Ingredients	Gms / Ltr
Gelatin	15.000
Peptone	4.000
Yeast extract	1.000
Sodium chloride	30.000
Agar	15.000

PRINCIPLE

Peptone and yeast extract provides essential nutrients required for growth of *Vibrio* species. Gelatin serves as a substrate for gelatinase reaction. Sodium chloride maintains the osmotic equilibrium of the medium.

INSTRUCTION FOR USE

Dissolve 65.0 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 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	Gelatinase reaction	Incubation Temperature	Incubation Period
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Vibrio cholerae	15748	50-100	Luxuriant	>=70%	Positive reaction, opaque halo around the colony	35-37°C	18-24 Hours
Vibrio parahaemolyticus	17802	50-100	Luxuriant	>=70%	Positive reaction, opaque halo around the colony	35-37°C	18-24 Hours
Vibrio vulnificus	29306	50-100	Luxuriant	>=70%	Positive reaction, opaque halo around the colony	35-37°C	18-24 Hours
Vibrio mimicus	33653	>=10 ³	Luxuriant	>=70%	Positive reaction, opaque halo around the colony	35-37°C	18-24 Hours

PACKAGING:

Inpacksize 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. Bruno Gomez-Gil and Ana Roque, Isolation, Enumeration and Preservation of the Vibrionaceae, F.L. Thompson, B. Austin and J. Swings, The Biology of Vibrios, ASM press.
2. FDA Bacteriological Analytical Manual, 2005, 18th Ed., AOAC, Washington, D.
3. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition
4. 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.
5. Salfinger Y., and Tortorello M.L. Fifth (Ed.), 2015, Compendium of Methods for the Microbiological Examination of Foods, American Public Health Association, Washington, D.C.
6. Smith Jr. H. L. and Goodner K., 1958, J. Bacteriol., 76:66.

 Good Manufacturing Practices Certified	 For In Vitro Diagnostic Use	 Quantity	 Lot / Batch Number	 Catalogue Number	 Manufacturer
 Temperature Unit	 Authorized Representative	 European Conformity	 QR Code	 Consults Instructions for Use	 Best Before



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

