

CM 20753 - GELATIN PHOSPHATE SALT AGAR (GPS AGAR)

INTENDED USE

For cultivation and characterization of *Vibrio cholerae* from foods.

PRODUCT SUMMARY AND EXPLANATION

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. Human disease is associated with ingestion of contaminated water or food.

V. cholerae is the etiological agent of a secretory diarrhea spread by the faecal-oral route. The most critical virulence factor of *V. cholerae* is CT, which is responsible for the main symptom of the cholera disease. Gelatin Phosphate Salt Agar is a non-selective medium formulated as per APHA and used for plating enrichment cultures of *V. cholerae* obtained from seafoods or vegetables.

COMPOSITION

Ingredients	Gms / Ltr
Gelatin	10.000
Sodium chloride	10.000
Dipotassium hydrogen phosphate	5.000
Agar	15.000

PRINCIPLE

Gelatinase enzyme producing *Vibrio* degrades gelatin and forms small colonies, which are transparent with a cloudy halo. Gelatinase negative organisms show a satellite growth and may surround the colonies of *V. cholerae* on this medium. Dipotassium phosphate buffers the medium while sodium chloride maintains osmotic balance.

INSTRUCTION FOR USE

- Dissolve 40.0 grams in 1000 ml warm purified/distilled water.
- Heat to boiling to dissolve the medium completely.
- Dispense in tubes or flasks as desired.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.

QUALITY CONTROL SPECIFICATIONS

- Appearance of Powder : Off white to yellow homogeneous free flowing powder.
- Appearance of prepared medium : Light yellow coloured, clear to slightly opalescent gel.
- pH (at 25°C) : 7.2±0.2

INTERPRETATION

Cultural characteristics observed after an incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Colony characteristics	Incubation Temperature	Incubation Period
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Vibrio cholerae	15748	50-100	Good-luxuriant	>=50 %	Transparent colonies with a cloudy halo	35-37°C	18-24 Hours
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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.

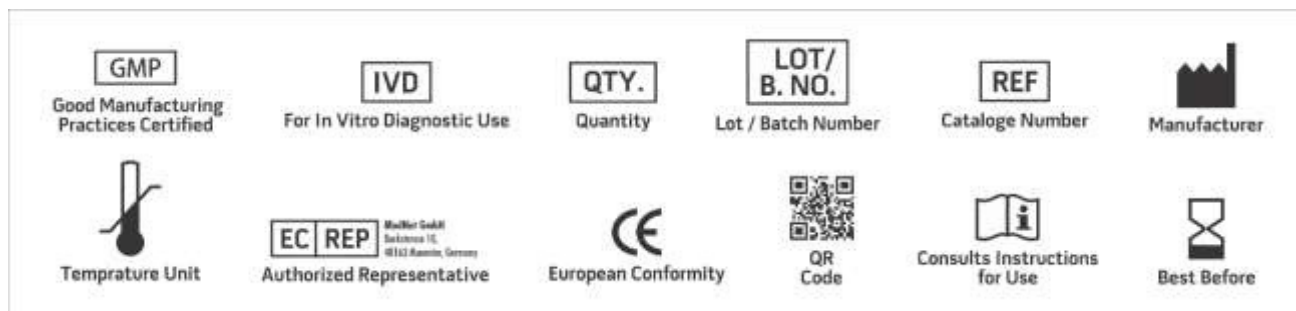
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

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

REFERENCES

1. Bruno Gomez-Gil and Ana Roque, Isolation, Enumeration and Preservation of the Vibrionaceae, Thompson F. L., Austin B. and Swings J., The Biology of Vibrios, ASM press.
2. Collee J. G., Fraser A. G., Marmion B. P., Simmons A., (Eds.), Mackie and McCartney, Practical Medical Microbiology, 1996, 14th Edition, Churchill Livingstone
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.



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

*For Lab Use Only

