



Product Data Sheet

GELATIN AGAR

Product No. GB-DCM-00231-1A

INTENDED USE

For cultivation and identification of Vibrio species.

PRODUCT SUMMARY

Members of the genus Vibrio are facultative anaerobes capable of both respiratory and fermentative metabolisms. The natural habitat for Vibrio species is aquatic, in both fresh water and salt water. The growth and biochemical reactivity of most species are enhanced in different test media supplemented with 1- 2 % sodium chloride. Vibrios 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 Vibrio's to grow at pH values above 8.0 and at 3% or higher concentrations of NaCl. Gelatin Agar is formulated in accordance with APHA for the cultivation and characterization of Vibrio species from foods and faeces. Clinical specimens must be obtained early in the disease as possible because the duration of excretion of the pathogen is short. Weigh 25 grams of sample such as seafood or vegetables either blended or cut into small pieces and add into 2 flasks. Add 225 ml Alkaline Peptone Water to one flask and 225 ml of Glucose Phosphate Broth in another flask. Mix well. Incubate at $35^{\circ} \pm 2^{\circ}\text{C}$ for 6 to 8 hours. Inoculate one loopful from each flask on the non-selective Gelatin Agar. V. cholerae appear transparent and usually have a characteristic cloudy zone around colony, which becomes more definite after few minutes of refrigeration. When these colonies are viewed in oblique light they appear iridescent green to bronze coloured and finely granular.

Product Specifications

| Ingredients | Gms / Ltr |
|--------------------|------------------|
| Gelatin | 30.000 |
| Tryptone | 10.000 |
| Sodium chloride | 10.000 |
| Agar | 15.000 |

DISPOSAL

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

PRINCIPLE

Gelatin serves as a substrate for gelatinase reaction. Sodium chloride maintains the osmotic equilibrium of the medium and tryptone is source of amino acids for the growing bacteria.

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.
- Cool to 45-50°C. 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 Yellow coloured, clear to slightly opalescent gel forms in Petri plates

pH (at 25°C) : 7.2 ± 0.2

| Microorganism | ATCC | Inoculum (CFU/ml) | Growth | Recovery | Color of the colony | Incubation Temperature | Incubation Period |
|-------------------------|-------|-------------------|-----------|-------------|---|------------------------|-------------------|
| Vibrio cholerae | 15748 | 50-100 | luxuriant | $\geq 70\%$ | Positive reaction, | 35-37°C | 24-48 Hours |
| Vibrio parahaemolyticus | 17802 | 50-100 | luxuriant | $\geq 70\%$ | Clear zone around the colony within 24-48 hours | 35-37°C | 24-48 Hours |

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.

This product is for research use only.