# Gelatin Agar

## Intended Use
Gelatin agar is a medium recommended for cultivation and identification of *Vibrio* species.

## Summary & Principle
Members of the genus *Vibrio* are facultative anaerobes capable of both respiratory and fermentative metabolism. 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 *Vibrios* 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. Gelatin Agar is formulated in accordance with APHA for the cultivation and characterization of *Vibrio* species from foods and faeces.

## Formula*

| **Ingredients** | **g/L** |
|---|---|
| Gelatin | 30.0 |
| Casein enzymic hydrolysate | 10.0 |
| Sodium chloride | 10.0 |
| Agar | 15.0 |
| Final pH (at 25°C) | 7.2 ± 0.2 |

*Adjusted to suit performance parameters

## Storage and Stability
Store dehydrated medium below 30°C in tightly closed container and the prepared medium at 2ºC-8°C. Avoid freezing and overheating. Use before expiry date on the label. Once opened keep powdered medium closed to avoid hydration.

## Type of Specimen
Food samples
Clinical samples - faeces

## Specimen Collection and Handling
Ensure that all samples are properly labelled.
Follow appropriate techniques for handling samples as per established guidelines.
Some samples may require special handling, such as immediate refrigeration or protection from light, follow the standard procedure.
The samples must be stored and tested within the permissible time duration.
After use, contaminated materials must be sterilized by autoclaving before discarding.

## Directions
1. Suspend 65.00 g of the powder in warm preheated 1000 mL purified / distilled water.
2. Heat to boiling to dissolve the powder completely.
3. Sterilize by autoclaving at 121°C (15 psi) for 15 minutes as per validated cycle.
4. Mix well and pour into sterile petridishes.

## Quality Control
**Dehydrated appearance:** Cream to yellow coloured, homogenous, free flowing powder,
**Prepared Appearance:** Off white colour with brownish tinge clear to slightly opalescent gel forms in petridishes.
**Cultural response:** Cultural characteristics observed after an incubation of 24-48 hours at 35ºC-37ºC.

| Organism (ATCC) | Growth |
|---|---|
| *Vibrio cholerae* (15748) | Good |
| *Vibrio parahaemolyticus* (17802) | Good |

## Interpretation of results

1. *V. cholerae* appear transparent and usually have a characteristic cloudy zone around colony, which becomes more definite after few minutes of refrigeration.
2. When these colonies are viewed in oblique light, they appear iridescent green to bronze coloured and finely granular.

## Performance and Evaluation

Performance of the product is dependent on following parameters as per product label claim:

1. Directions
2. Storage
3. Expiry

## Precautions/Limitations

Clinical specimens must be obtained early in the disease as possible because the duration of excretion of the pathogen is short.

## Warranty

This product is designed to perform as described on the label and package insert. The manufacturer disclaims any implied warranty of use and sale for any other purpose.

## Reference


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. Downes F. P. and Ito K., (Eds.), 2001, Compendium of Methods for the Microbiological Examination of Foods, 4th Ed., APHA, Washington, D.C.
3. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.


## Product Presentation:

| Cat No. | Product description | Pack Size |
|---|---|---|
| 201070040500 | Dehydrated Culture Media | 500 g |