

TMV 1313 - VIBRIO PARAHAEMOLYTICUS SUCROSE AGAR (as per APHA) (VPSA) (VEG.)

INTENDED USE

For isolation and enumeration of Vibrio parahaemolyticus from seafood.

PRODUCT SUMMARY AND EXPLANATION

This medium is prepared by using vegetable peptones in place of animal based peptones which makes the medium free of BSE/TSE risks. Vibrio Parahaemolyticus Sucrose Veg Agar is the modification of Vibrio Parahaemolyticus Sucrose Agar (VPSA) which is recommended by APHA for isolating and enumerating *Vibrio parahaemolyticus* from sea foods. It is a differential medium (and also selective to some extent) which distinguishes *Vibrio parahaemolyticus* from other marine *Vibrios* species.

Suspected seafood sample when diluted and blended with sterile Veg Peptone Tween Salt Diluent (prepared by dissolving 1.0gm of Veg Peptone and 10.0gm of Tween 80 in 1 litre of distilled water and autoclaved at 121°C for 15 mins), is filtered through HGMF using sterile diluent as a carrier. HGMF is then aseptically transferred to the Tryptone Soya Veg Agar w/ Magnesium Sulphate plates and incubated for 4 hours at 35°C. HGMF is then transferred from TSAMS to the dry VPS Veg Agar plate and incubated for 18 - 20 hours at 42°C.

COMPOSITION

Ingredients	Gms / Ltr
Veg hydrolysate No. 1	5. 0
Veg hydrolysate	5. 0
Yeast extract	7. 0
Sucrose	10.0
Sodium chloride	30.0
Synthetic detergent No. I	1. 5
Bromo thymol blue	0.025
Agar	15.00

PRINCIPLE

Tryptone Soya Veg Agar w/ Magnesium Sulphate plates and incubated for 4 hours at 35°C. HGMF is then transferred from TSAMS to the dry VPS Veg Agar plate and incubated for 18 - 20 hours at 42°C. Veg hydrolysate No.1, Veg hydrolysate and yeast extract provide the necessary nitrogen compounds, growth factors and vitamin B complex for the growth of *Vibrio parahaemolyticus*. Sucrose is the fermentable carbohydrate. Bromo thymol blue is the pH indicator. Synthetic detergent No. 1 inhibits the contaminating gram- positive bacteria. High salt content and alkaline pH of the medium meet the requirement of marine Vibrio and facilitates easy recovery of the organism respectively.

INSTRUCTION FOR USE

- Dissolve 73.52 grams in 1000 ml distilled water.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes
- Heat to boiling to dissolve the medium completely, do not autoclave.
- Mix well and pour into sterile Petri plates.











QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Yellow coloured, may have slightly greenish tinge, homogeneous, free flowing

powder.

Appearance of prepared medium: Blue coloured clear to slightly opalescent gel forms in Petri plates.

pH (at 25°C) : 8.6±0.2

INTERPRETATION

Cultural characteristics observed after an incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Color of the colony	Incubation Temperature	Incubation Period
Staphylococcus aureus	25923	>=10³	Inhibited	0%	-	42°C	18-24 Hours
Vibrio parahaemolyticus	17802	50-100	Luxuriant	>=70%	Blue- green	42°C	18-24 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.

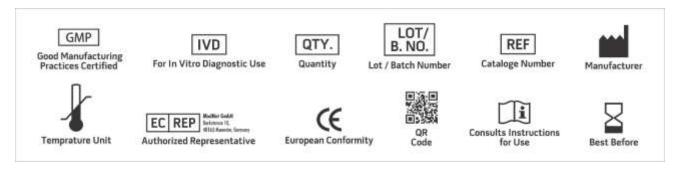
Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

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

REFERENCES

1. Downes F. P. and Ito K., (Eds.), 2001, Compendium of Methods for the Microbiological Examination of Foods, 4th Ed., APHA, Washington, D.C.



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















*For Lab Use Only Revision: 08 Nov., 2019









