Technical Information

CPC MiVeg Agar Base

Product Code : VM2241

Application:- CPC MiVeg Agar Base is used for the cultivation and identification of *Vibrio* species from foods.

Composition

Ingredients	Gms / Litre
MiVeg peptone	10.0
MiVeg extract	5.0
Cellobiose	15.00
Sodium chloride	20.0
Bromo thymol blue	0.04
Cresol red	0.04
Agar	15.0
Final pH (at 25°C)	7.6±0.2

** Formula adjusted, standardized to suit performance parameters.

Principle & Interpretation

CPC MiVeg Agar Base is prepared by using MiVeg peptone and MiVeg extract instead of Peptic digest of animal tissue and Beef extract respectively used in the conventional medium, thereby making the medium BSE/TSE risks free. This medium is the modification of Cellobiose Polymyxin and Colistin (CPC) Agar Base formulated as per APHA (1) for the cultivation and identification of *Vibrio* species from foods. This is a selective and differential agar medium, designed to differentiate *Vibrio vulnificus* from other *Vibrios*(1). *Vibrio cholerae* strains except *Vibrio cholera* 01-classical biotype grow while most *Vibrio parahaemolyticus* strains do not grow on this medium.

It contains MiVeg extract and MiVeg peptone supplies the essential nitrogenouscompounds to the growing *Vibrios*. Cellobiose is fermented by some *Vibrios* and is indicated by the pH indicator bromo thymol blue which turns yellow at acidic pH. Cresol red is the pH indicator of alkaline range which turns red at alkaline pH. Alkaline pH of the medium enhances the recovery of *Vibrios*.

Inoculate culture in Alkaline Miveg Peptone water (VM1618). Then transfer a loopful from the surface growth of this to the CPC Agar surface by streaking. Incubate at 40 - 42°C for 18 to 24 hours.

Typical colonies of *Vibrio cholerae* on this medium is small, smooth, opaque and green to purple in color . It contains two pH indicators viz. bromo thymol blue and cresol red. A purple background will also develop upon extended incubation.

Methodology

Suspend 32.54 grams of powder media in 500 ml distilled water. Mix thoroughly. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45°C and aseptically add reconstituted contents of 1 vial of CPC Supplement (MS2110). Mix well and pour into sterile petri plates.

Quality Control

Physical Appearance

Light brown coloured, homogeneous, free flowing powder

Gelling

Firm, comparable with 1.5% Agar gel.

Colour and Clarity of prepared medium

Olive-green to light brown coloured, clear to slightly opalescent gel forms in petri plates.

Reaction

Reaction of 6.5 % w/v aqueous solution pH: 7.6 ±0.2 at 25°C

pH range

7.4-7.8

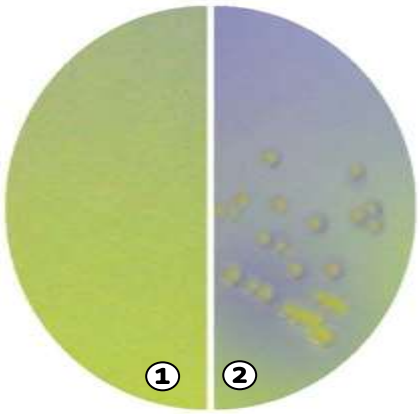
Cultural Response/Characteristics

Cultural characteristics observed after an incubation at 40±2°C for 18-24 hours

Organisms (ATCC)	Inoculum (CFU)	Growth	Recovery	Colour of colony
Vibrio cholerae (15748)	10^2-10^3	good - luxuriant	>70%	green - purple
Vibrio parahaemolyticus (17802)	10^2-10^3	inhibited	-	-

Storage and Shelf Life

Dried Media: Store below 30°C in tightly closed container and use before expiry date as mentioned on the label.
Prepared Media: 2-8^0 in sealable plastic bags for 2-5 days.



VM2241 CPC Mi Veg Agar Base

1. Control
2. *Vibrio cholerae*

Further Reading

1. Vanderzant C and Splittstoesser DF (Eds.), 1992, Compendium of Methods For The Microbiological Examination of Foods, 3rd ed., APHA, Washington, D.C.

Disclaimer :

- User must ensure suitability of the product(s) in their application prior to use.
- The product conform solely to the technical information provided in this booklet and to the best of knowledge research and development work carried at **CDH** is true and accurate
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