

Technical Information

Pre - Enrichment MiVeg Broth Base

Product Code :VM2178

Application:- Pre-Enrichment MiVeg Broth Base is used for isolation and enrichment of *Yersinia enterocolitica* from foods.

Composition

Ingredients	Gms / Litre
MiVeg special peptone	10.0
Yeast extract	20.0
Disodium phosphate	7.1
Sodium chloride	1.0
Potassium chloride	1.0
Final pH (at 25°C)	8.3 ± 0.2

** Formula adjusted, standardized to suit performance parameters.

Principle & Interpretation

Pre-Enrichment MiVeg Broth Base is prepared by adding MiVeg special peptone in place of Peptone special thus making the medium free from BSE/TSE risks. Pre-Enrichment MiVeg Broth Base is the modification of Pre-Enrichment Broth Base which was formulated as recommended by APHA (1) for isolation and enrichment of *Yersinia enterocolitica*, a foodborne pathogen responsible for gastroenteritis (2).

Yeast extract and MiVeg special peptone provides necessary nutrients like vitamin B complex, nitrogen compounds and trace ingredients. Sodium chloride and disodium phosphate maintains any osmotic and pH imbalance respectively. Magnesium sulphate, calcium chloride and potassium chloride supplies ions required for the microbial growth. Prepare 1:10 homogenate of food sample by weighing 25 gm of food and adding it to Pre-Enrichment MiVeg Broth. Homogenate is obtained either by blending or using a stomacher. Incubate at 10°C for upto 3 days. Inoculate this pre-enriched culture in PSB MiVeg Broth Base (VM1941) and incubate at 25°C. Streak onto MacConkey MiVeg Agar (VM1081) or SS MiVeg Agar (VM1108) after 3 and 5 days.

Methodology

Suspend 39.1 grams of powder media in 980 ml distilled water. Mix thoroughly and heat if necessary to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Cool to 45°C and aseptically add filter sterilized magnesium sulphate (0.1%) and calcium chloride (0.1%) solution. Mix well and dispense into sterile tubes.

Quality Control

Physical Appearance

Light yellow coloured, may have slightly greenish tinge, homogeneous, free flowing powder.

Colour and Clarity of prepared medium

Yellow coloured, clear solution with slight precipitate.

Reaction

Reaction of 3.91% w/v aqueous solution is pH 8.3 ± 0.2 at 25°C.

pH Range

8.1 - 8.5



Dehydrated Culture Media
Bases / Media Supplements

Cultural Response/Characteristics

Cultural characteristics observed after an incubation at 30-32°C for 18-24 hours.

Organisms (ATCC)	Inoculum (CFU)	Growth
<i>Yersinia enterocolitica</i> (27729)	10 ² -10 ³	luxuriant

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° in sealable plastic bags for 2-5 day.

Further Reading

1. Vanderzant C and Splittstosser D (Eds.), 1992, Compendium of Methods For The Microbiological Examination of Foods, 3rd ed., APHA, Washington, D.C.
2. Schiemann, 1979, Can. J. Microbiol., 25: 1298.

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.
- **Central Drug House Pvt. Ltd.** reserves the right to make changes to specifications and information related to the products at any time.
- Products are not intended for human or animal diagnostic or therapeutic use but for laboratory, research or further manufacturing of diagnostic reagents extra.
- Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for infringement of any patents. Do not use the products if it fails to meet specifications for identity and performance parameters.

