

Technical Information

Orange Serum MiVeg Broth

Product Code : VM1934

Application:- Orange Serum MiVeg Broth is recommended for cultivation and enumeration of microorganisms associated with the spoilage of citrus products, cultivation of *Lactobacilli*, other aciduric organisms and pathogenic

Composition

Ingredients	Gms / Litre
MiVeg hydrolysate	10.00
Yeast extract	3.00
Dextrose	4.00
Dipotassium phosphate	2.50
Orange serum (solids from 200 ml)	9.00
Final pH (at 25°C)	5.5±0.2

** Formula adjusted, standardized to suit performance parameters.

Principle & Interpretation

Orange Serum MiVeg Broth is prepared by using MiVeg hydrolysate in place of casein enzymic hydrolysate thus the medium becomes free from BSE/TSE risks. Murdock and Brokaw (1) employed Orange Serum Broth for studies of sanitary control of the processing of citrus concentrates. Hays and Reister recommended Orange Serum Broth, pH 5.5 which is accepted as a control medium by the Citrus Industry since at this reaction, the medium is most productive for the growth of spoilage organisms. The medium is recommended by APHA (2). This medium is the modification of Orange Serum Broth and serves the same purpose. It contains MiVeg hydrolysate and yeast extract which supplies essential nitrogenous nutrients. Dextrose serves as the energy source. Orange serum provides an optimal environment for the recovery of acid tolerant microorganisms from citrus fruit products.

Methodology

Suspend 28.5 grams of powder media in 1000 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. AVOID OVERHEATING.

Quality Control

Physical Appearance

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

Colour and Clarity of prepared medium

Medium to dark amber coloured, clear solution in tubes.

Reaction

Reaction of 2.85 % w/v aqueous solution pH: 5.5 ±0.2 at 25°C

pH range

5.3-5.7

Cultural Response/Characteristics

Cultural characteristics observed after an incubation at 35-37°C for 40-48 hours

Organisms (ATCC)

**Aspergillus niger* (16404)

Growth

good-luxuriant



Dehydrated Culture Media
Bases / Media Supplements

<i>Lactobacillus fermentum</i> (9338)	good-luxuriant
<i>Lactobacillus acidophilus</i> (4356)	good-luxuriant
<i>Leuconostoc mesenteroides</i> (12291)	good-luxuriant
<i>Saccharomyces cerevisiae</i> (9763)	good-luxuriant

Key: * = Incubated at 25-30°C.

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 days.

Further Reading

1. Murdoch and Brokaw, 1958, Food Technol., 12:573.
2. Downes FP and Ito K (Eds.), 2001, Compendium of Methods For The Microbiological Examination of Foods, 4th 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
- **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.

