

Technical Information

Buffered MiVeg Peptone Water w/ NaCl

Product Code : VM2275

Application:- Buffered MiVeg Peptone Water with NaCl is used as a diluent for carrying out microbial limit test from clinical and nonclinical specimens.

Composition**

Ingredients	Gms / Litre
MiVeg peptone	1.0
Potassium dihydrogen phosphate	3.56
Disodium hydrogen phosphate	7.23
Sodium chloride	4.3
Final pH (at 25°C)	7.0±0.2

** Formula adjusted, standardized to suit performance parameters.

Principle & Interpretation

Buffered MiVeg Peptone Water with NaCl is prepared by using vegetables peptones in place of animal based peptones which makes the media BSE/TSE risk free. Edel and Kampelmacher (1) noted that sub lethal injury to *Salmonellae* might occur in many food preservation processes. Preenrichment in a nonselective medium allows to repair of cell damage and facilitates the recovery of *Salmonellae*. Enriching injured cells in Lactose broth (pH 6.9) may be further detrimental to their recovery (2).

Pre-enrichment in this medium results in repair of injured cells at 35°C for 18-24 hours (3). It is modification of Buffered Peptone Water with NaCl. It contains MiVeg peptone which serve as source of carbon, nitrogen, vitamins and minerals. Phosphate maintains the pH & buffers the medium & Sodium chloride maintains the osmotic equilibrium.

Inoculate 10 grams specimen in 50 ml of this medium and incubate at 35°C for 18 hours. Transfer 10 ml from this medium to 100 ml of Tetrathionate MiVeg Broth (VM1032) and incubate at 43°C for 24-48 hours and then subculture on selective plating media. Examine the plates for colonies of *Salmonellae* species.

Methodology

Suspend 16.09 grams of powder media in 1000 ml distilled water. Mix thoroughly. Heat if necessary to dissolve the medium completely. Add 0.1 to 1% w/v polysorbate 20 to 80 if desired. Dispense in tube or flasks and sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

Quality Control

Physical Appearance

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

Colour and Clarity of prepared medium

Light amber coloured, clear solution without any precipitate.

Reaction

Reaction of 1.61 % w/v aqueous solution pH: 7.0 ±0.2 at 25°C

pH range

6.8-7.2

Cultural Response/Characteristics

Cultural characteristics observed after an incubation at 35-37°C for 18-24 hours

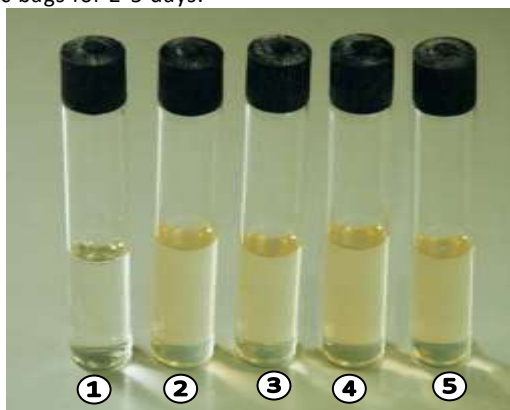
Organisms (ATCC)	Inoculum (CFU)	Growth

<i>Bacillus subtilis</i> (6633)	30-10 ²	good-luxuriant
<i>Escherichia coli</i> (25922)	30-10 ²	good-luxuriant
<i>Salmonella</i> serotype Typhimurium (14028)	30-10 ²	good-luxuriant
<i>Staphylococcus aureus</i> (25923)	30-10 ²	good-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 days.



Vm2275 Buffered MiVeg Peptone Water W/ NaCl

1. Control
2. *Bacillus subtilis*
3. *Escherichia coli*
4. *Salmonella* serotype Typhimurium
5. *Staphylococcus aureus*

Further Reading

1. Edel W. & Kampelmacher E.H., 1973, Bull. Wld. Hlth. Org., 48:167.
2. Angelotti R., 1963, "Microbiological Quality of Foods", Academic Press, New York.
3. Sadowski A.Y., 1977, J. Fd. Technol., 12:85.

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.