

# **Technical Information**

## **Andrade MiVeg Peptone Water**

### Product Code:VM1885

**Application:-** Andrade MiVeg Peptone Water is a basal medium to which various carbohydrates can be added to study fermentation reactions, particularly of members of the *Enterobacteriaceae*.

# Composition\*\*

Ingredients	Gms / Litre	
MiVeg peptone	10.0	
Sodium chloride	5.0	
Andrade indicator	0.10	
Final pH (at 25°C)	$7.4 \pm 0.2$	

<sup>\*\*</sup> Formula adjusted, standardized to suit performance parameters.

## Principle & Interpretation

Andrade MiVeg peptone water contain MiVeg peptone instead of Peptic digest of animal tissue so that the medium becomes free from of BSE/TSE risks associated with animal based peptone.

This media is used for studying the various carbohydrate fermentation patterns of different organisms. MiVeg peptone like the peptone used inconventional medium is free from fermentablecarbohydrates (1, 2) and the medium is also free from nitrates which may interfere with gas production. Andrade indicator is a solution of acid fuchsin which when titrated with sodium hydroxide; changes colour from pink to yellow. The Andrade indicator changes colour from yellow to pink as the pH decreases (2). The medium is pink when hot but becomes straw coloured on cooling. Test carbohydrate solutions should be sterilized separately and aseptically added to sterile Andrade MiVeg Peptone Water. The biochemical identification of organisms capable of growing in this medium is made by various sugar fermentation results (1,3,4).

Use preidentified (by Gram staining & colony morphology), fresh cultures of organism. For further confirmation of cultures, biochemical tests are required.

### Methodology

Suspend 15.1 grams of powder media in 1000 ml distilled water. Mix thoroughly. Dissolve the medium completely and dispense in test tubes containing inverted Durham's tubes. Sterilize by autoclaving at 15lbs pressure (121°) for 15 minutes. Cool to room temperature and aseptically add sterile stock solution of carbohydrate to a final concentration of 0.5% to 1.0%(w/v).

# **Quality Control**

#### Physical Appearance

Light yellow coloured with pink tinge, homogeneous, free flowing powder.

#### Colour and Clarity of prepared medium

Light pink coloured, clear solution without any precipitate.

### Reaction

Reaction of 1.51% w/v aqueous solution pH 7.4±0.2 at 25°C

#### pH range

7.2-7.6

### CulturalResponse/Characteristics

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

Organisms (ATCC)	Inoculum (CFU)	Growth	Acid	Acid**
Escherichia coli (25922)	102	luxuriant	-	+
Salmonella serotype Typhi(653	102	luxuriant	-	+





Shigella sonnei (25931) 102 luxuriant - +

Key: \* Acid = Acid in absence of added Dextrose.

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# 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. Cowan S.T. and Steel K.J., 1974, Manual of Identification of Medical Bacteria, 2<sup>nd</sup> ed., Cambridge United Press.
- 2. MacFaddin J.F., 1985(ed), Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol I, Williams and Wilkins, Baltimore.
- 3. Finegold S.M. and Baron E.J., 1986, Bailey and Scott's Diagnostic Microbiology, 7<sup>th</sup> ed., The C.V. Mosby Co., St. Louis.
- 4. Murray PR, Baron, Pfaller, Tenover and Yolken (Eds.) 2003, In Manual of Clinical Microbiology, 7th ed., ASM, 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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