

Bases / Media Supplements

# **Technical Information**

### AC MiVeg Broth

## Product Code : VM1875

Application: AC MiVeg Broth is recommended for cultivation of wide variety of microorganisms, and can also be used for sterility testing.

Composition		
Ingredients	Gms / Litre	
MiVeg peptone No. 3	20.00	
MiVeg extact	3.00	
Yeast extract	3.00	
Malt extract	3.00	
Dextrose	5.00	
Ascorbic acid	0.20	
Final pH (at 25°C)	$7.2 \pm 0.2$	

\*\* Formula adjusted, standardized to suit performance parameters.

### **Principle & Interpretation**

AC MiVeg Media are prepared by using MiVeg peptone No.3 and MiVeg extract which are vegetable based peptones instead of animal based peptones, thus making the media BSE/TSE risk free. This media are equivalent to AC Broth. AC MiVeg Broth support an early and luxuriant growth of aerobic anaerobic and microaerophilic microorganisms. Many pathogenic

and saprophytic aerobes can also be grown using AC MiVeg Broth <sup>(1,4,5)</sup> This medium can also be used for sterilit testing of solutions and biological products not containing mercurial preservatives. Some of the media containing sodium thioglycollate exhibit

toxicity for some organisms. This toxicity is not seen in the case of AC MiVeg Broth as reported by Christensen <sup>(2)</sup> and Malin and

Finn <sup>(3)</sup>. Proteose peptone, beef extract, yeast extract and malt extract serve as the carbon and nitrogen sources in addition to being a source of vitamins and cofactors. Dextrose serves as the fermentable carbohydrate and source of energy. Ascorbic acid helps to improve the clarity of the medium.

## Methodology

Suspend 34.2 grams of powder media in 1000 ml of distilled water. Mix throughly. Heat to boiling to dissolve the medium completely. Distribute in tubes or bottles to give the desired depth and sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

If the medium is not used on same day, it is advisable to drive off dissolved gases by boiling or steaming in the autoclave and cool without agitation.

# **Quality Control**

#### Physical Appearance

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

Colour and Clarity of prepared medium

Medium amber coloured, clear solution in tubes.

#### Reaction

Reaction of 3.42% w/v aqueous solution pH: 7.2±0.2 at 25°C

### pH range

7.0-7.4

#### Cultural Response/Characteristics

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





Dehydrated Culture Media Bases / Media Supplements

Organisms (ATCC)	Inoculum (CFU)	Growth	Recovery
Clostridium perfringens (12919)*	10 <sup>2</sup> -10 <sup>3</sup>	luxuriant	>70%
Neisseria meningitidis (13090)	$10^2 - 10^3$	luxuriant	>70%
Streptococcus pneumoniae (6303)	10 <sup>2</sup> -10 <sup>3</sup>	luxuriant	>70%
Streptococcus mitis (9895)	10 <sup>2</sup> -10 <sup>3</sup>	luxuriant	>70%
Staphylococcus aureus (25923)	10 <sup>2</sup> -10 <sup>3</sup>	luxuriant	>70%
Escherichia coli (25922)	10 <sup>2</sup> -10 <sup>3</sup>	luxuriant	>70%
Corynebacterium diphtheria (8024)	10 <sup>2</sup> -10 <sup>3</sup>	luxuriant	>70%
Streptococcus pneumoniae (6305)	10 <sup>2</sup> -10 <sup>3</sup>	luxuriant	>70%
Streptococcus pyogenes (19615)	10 <sup>2</sup> -10 <sup>3</sup>	luxuriant	>70%
Key : *Incubated anaerobically.			

# 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<sup>0</sup> in sealable plastic bags for 2-5 days.

### **Further Reading**

- 1. Paper read at N.Y. Meeting Am. Pub. Health Ass. 1944.
- 2. Malin and Finn, 1951, J. Bact., 62:349.
- 3. Kolb and Schneither, 1950, J. Bact., 59:401.

### **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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