# Anaerobic HiVeg<sup>™</sup> Agar (Brewer)

Anaerobic HiVeg Agar (Brewer) is recommended for the isolation and sensitivity testing of facultative and obligate anaerobes and study of the colonial morphology.

# Composition \*\* :

Ingredients HiVea pentone No. 3	Grams/Litre
HiVeg hydrolysate	5.0
Yeast extract	5.0
Sodium chloride	10.0 5.0
Sodium thioglycollate	2.0
Sodium formaldehyde sulphoxylate	1.0
Resazurin	0.002
Agar	15.0

Final pH (at 25°C ) 7.2  $\pm$  0.2

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

## Directions :

Suspend 53 grams in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

#### Principle and Interpretation :

This medium is prepared by replacing the bovine origin Proteose peptone and Casein enzymic hydrolysate with HiVeg peptone No. 3 and HiVeg hydrolysate respectively thus making the medium BSE/TSE risk free.

Anaerobic HiVeg Agar (Brewer) is the modification of Anaerobic Agar (Brewer) orginially devised by Brewer (1) for use with Brewer anaerobic cover to permit surface growth of anaerobes and microaerophiles on agar without the use of anaerobic jar. For best results, use porous tops on the plates containing the medium during solidification to obtain a dry surface. After inoculation of the medium, cover with Brewer anaerobic petri plate cover. The sealing ring inside the cover should make a perfect contact with the medium and must not be broken till the period of the incubation. HiVeg peptone, HiVeg hydrolysate and yeast extract provide the nitrogen source. Dextrose is a carbon source, sodium thioglycollate and sodium formaldehyde sulphoxylate are the reducing agents. Resazurin serves as the redox indicator.

Product Profile :			
Vegetable based (Code MV)	Animal based (Code M)		
<b>MV491</b> HiVeg hydrolysate HiVeg peptone No. 3	<b>M491</b> Casein enzymic hydrolysate Proteose peptone		
Recommended for	<ul> <li>Isolation and sensitivity testing of facultative and obligate anaerobes and study of the colonial morphology.</li> </ul>		
Reconstitution	: 53.0 g/l		
Quantity on preparation (500g)	: 9.43 L		
pH (25°C)	7.2 ± 0.2		
Supplement	: None		
Sterilization	: 121°C / 15 minutes.		
Storage : Dry Medium - Below 30°C, Prepared Medium 2 - 8°C.			

## Quality Control :

#### Appearance of powder

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

# Gelling

Firm, comparable with 1.5% Agar gel.

#### **Colour and Clarity**

Light amber coloured, clear to slightly opalescent gel forms in petri plates which turns red on standing due to aeration. **Reaction** 

Reaction of 5.3% w/v aqueous solution is pH  $~7.2~\pm~0.2$  at  $25^{\circ}C$ 

#### **Cultural Response**

Cultural characteristics observed after an incubation  $% 10^{-1}$  at 35-37°C for 18 - 48 hours.

Organisms (ATCC)	Inoculum (CFU)	Growth	Recovery
Clostridium botulinum (19397)	10 <sup>2</sup> - 10 <sup>3</sup>	luxuriant	>50%
Clostridium perfringens (12924)	10 <sup>2</sup> - 10 <sup>3</sup>	luxuriant	>50%
Clostridium sporogenes (11437)	10 <sup>2</sup> - 10 <sup>3</sup>	luxuriant	>50%

# References :

1. Brewer, 1942, Science, 95, 587.