HS HiVeg™ Medium MV245

HS HiVeg Medium is used for cultivation of aerobic as well as anaerobic bacteria and sterility testing.

Composition** :

Ingredients	Grams/Litre
HiVeg hydrolysate	15.00
Yeast extract	5.00
Sodium hydrosulphite	0.50
Sodium chloride	2.50
Dextrose	5.50
Resazurin	0.001
Agar	1.00

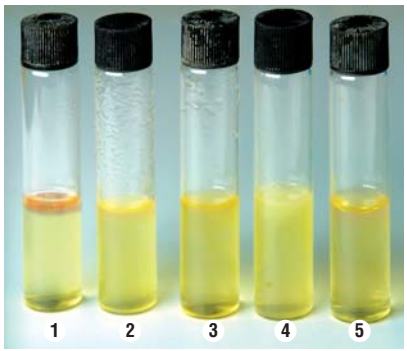
Final pH (at 25°C) 7.1 ± 0.2
** Formula adjusted, standardized to suit performance parameters

Directions :

Suspend 29.5 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.
Note : If more than the upper one-third of the medium has acquired a pink colour, the medium may be restored once by heating in a water bath or in free flowing steam until the pink colour disappears.

Principle and Interpretation :

HS HiVeg medium is prepared by completely replacing animal based peptones with vegetable peptones which are free of BSE/TSE risks. HS HiVeg medium is the modification of the medium which was described by Bonnel and Raby for use in sterility testing (1). It is similar to Fluid Thioglycollate HiVeg Medium (MV009) where sodium hydrosulphite is substituted for sodium thioglycollate to obtain oxidized and reduced conditions which are appropriate for the growth of aerobes as well as anaerobes (1, 2). HS HiVeg medium like the conventional medium can be used for the sterility testing of biological and pharmaceutical products. Bonnel and Raby used HS Medium for control tests on blood products and isolation of *Corynebacteria, Streptococci, Staphylococci,* enteric bacilli, *Neisseriae, Clostridia* etc.
HiVeg hydrolysate and yeast extract supply essential nutrients such as amino acids, carbon, sulphur and minerals. Sodium hydrosulphite helps to create anaerobic atmosphere as it is an oxygen scavenger. Dextrose is the fermentable carbohydrate and resazurin is the redox indicator.



MV245 HS HiVeg Medium
1. Control
2. *Clostridium perfringens*
3. *Corynebacterium diphtheriae*
4. *Enterobacter aerogenes*
5. *Staphylococcus aureus*

Product Profile :

Vegetable based (Code MV)◉	Animal based (Code M)
MV245 HiVeg hydrolysate	**M245** Casein enzymic hydrolysate

Recommended for	:	Cultivation of aerobic as well as anaerobic bacteria and sterility testing.
Reconstitution	:	29.5 g/l
Quantity on preparation (500g)	:	16.94 L
pH (25°C)	:	7.1 ± 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.
Colour and Clarity
Light straw coloured solution with upper 10% of less medium having pinkish tinge on standing, with slight opalescence.
Reaction
Reaction of 2.95% w/v aqueous solution is pH 7.1 ± 0.2 at 25°C.
Cultural Response
Cultural characteristics observed after an incubation at 35-37°C for 18 - 48 hours.

Organisms (ATCC)	Inoculum(CFU)	Growth
**Clostridium perfringens* (12924)	10^2 -10^3	good-luxuriant
Corynebacterium diphtheriae (11913)	10^2 -10^3	good-luxuriant
Enterobacter aerogenes (13048)	10^2 -10^3	good-luxuriant
Staphylococcus aureus (25923)	10^2 -10^3	good-luxuriant
Streptococcus pyogenes (19615)	10^2 -10^3	good-luxuriant

Key : * = incubated anaerobically

References :

1. Bonnel and Raby, 1958, Proc. 7th Cong. Int. Soc. Blood Transfusion, 317, Rome.
2. WHO, 1960, Technical Report Series No. 200, WHO, Geneva.

◉ Prepared from GMO free Vegetable proteins replacing Animal based peptones. Freedom from BSE/TSE worries.