

Standard Nutrient HiVeg™ Agar

MV877

Standard Nutrient HiVeg Agar is used as a general utility medium for cultivation and enumeration of not particularly fastidious microorganisms.

Composition ** :

Ingredients	Grams/Litre
HiVeg peptone No. 1	10.0
HiVeg extract	10.0
Sodium chloride	5.0
Agar	20.0

Final pH (at 25°C) 7.6 ± 0.2

** Formula adjusted, standardized to suit performance parameters.

Directions :

Suspend 45 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 :

Standard Nutrient HiVeg Agar is prepared by using HiVeg peptone No. 1 and HiVeg extract which are of vegetable origin and free from BSE/TSE risks. Standard Nutrient HiVeg Agar is the modification of Standard Nutrient Agar which is formulated as per the recommendation of APHA as a general purpose medium for the cultivation of non-fastidious organisms from water and wastewater, dairy and food products (1, 2).

HiVeg peptone No. 1 provides amino acids and large chain peptides. HiVeg extract provides water soluble substances like carbohydrates, vitamins, organic nitrogen compounds and salts. Sodium chloride maintains osmotic equilibrium.

Quality Control :**Appearance of powder**

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

Gelling

Firm, comparable with 2.0% Agar gel.

Product Profile :

Vegetable based (Code MV)☉		Animal based (Code M)	
MV877 HiVeg peptone No. 1 HiVeg extract		M877 Lean meat Beef extract	
Recommended for	:	Cultivation and enumeration of not particularly fastidious microorganisms.	
Reconstitution	:	45.0 g/l	
Quantity on preparation (500g)	:	11.11 L	
pH (25°C)	:	7.6 ± 0.2	
Supplement	:	None	
Sterilization	:	121°C / 15 minutes.	
Storage	:	Dry Medium - Below 30°C, Prepared Medium 2 - 8°C.	

Colour and Clarity

Light amber coloured, clear to slightly opalescent gel forms in petri plates.

Reaction

Reaction of 4.5% w/v aqueous solution is pH 7.6 ± 0.2 at 25°C.

Cultural Response

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

Organisms (ATCC)	Inoculum (CFU)	Growth	Recovery
<i>Escherichia coli</i> (25922)	10 ² -10 ³	good-luxuriant	>70%
<i>Pseudomonas aeruginosa</i> (27853)	10 ² -10 ³	good-luxuriant	>70%
<i>Salmonella</i> serotype Typhi (6539)	10 ² -10 ³	good-luxuriant	>70%
<i>Staphylococcus aureus</i> (25923)	10 ² -10 ³	good-luxuriant	>70%
<i>Streptococcus pneumoniae</i> (6303)	10 ² -10 ³	good-luxuriant	>70%

References :

- Clesceri L.S. and Greenberg A.E., Truseel R. (Eds.), 1985, Standard Methods for the Examination of Water and Wastewater, 16th ed, APHA, Washington, D.C.
- Speck M. (Ed.), 1984, Compendium of Methods For The Microbiological Examination of Foods, 2nd ed., APHA, Washington, D.C.