

Mn HiVeg™ Agar Base**MV771**

Mn HiVeg Agar Base is used for detection of *Leptothrix* species by its ability to oxidize manganous ion.

Composition ** :

Ingredients	Grams/Litre
HiVeg extract	1.0
Yeast extract	0.075
Manganous carbonate	2.0
Ferrous ammonium sulphate	0.15
Sodium citrate	0.15
Agar	12.0

** Formula adjusted, standardized to suit performance parameters.

Directions :

Suspend 15.4 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. Cool to 50-55°C and aseptically add filter sterilized solution of Cyanocobalamin to a final concentration of 0.005 mg/litre.

Principle and Interpretation :

This medium is prepared by replacing Beef extract with HiVeg extract, that makes the medium free of BSE/TSE risks. Mn HiVeg Agar Base is the modification of Mn Agar Base which is formulated in accordance with APHA (1) and is used as a differential medium (2) based on the ability of *Leptothrix* species to oxidize manganous ion. HiVeg extract and yeast extract supply the essential growth nutrients. *Leptothrix-Sphaerotilus* derive energy by oxidation of ferrous sulphate.

Quality Control :**Appearance of powder**

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

Product Profile :

Vegetable based (Code MV) ©	Animal based (Code M)
MV771 HiVeg extract	M771 Beef extract
Recommended for	: Detection of <i>Leptothrix</i> species by its ability to oxidize manganous ion.
Reconstitution	: 15.4 g/l
Quantity on preparation (500g)	: 32.46 L
pH (25°C)	: -
Supplement	: Cyanocobalamin
Sterilization	: 121°C / 15 minutes.
Storage : Dry Medium - Below 30°C, Prepared Medium 2 - 8°C.	

Gelling

Firm, comparable with 1.2% Agar gel.

Colour and Clarity

Yellow coloured, clear to slightly opalescent gel forms with slight precipitate in petri plates.

Cultural Response

Cultural characteristics observed after an incubation at 25°C for 24 - 48 hours.

Organisms (ATCC)	Growth	Manganous oxidation
<i>Leptothrix (Sphaerotilus discophorus)</i>	luxuriant	+
<i>Sphaerotilus natans</i> (13338)	good	-

References :

- Eaton A.D., Clesceri L.S. and Greenberg A.E., (Eds.), 1985, Standard Methods for the Examination of Water and Wastewater, 16th ed, APHA, Washington DC.
- Mulder E.G. and VanVeen W.L., 1963, Antonie Van Leeuwenhoek (Holland), 29:121.