Sulphate Reducing HiVeg™ Medium (Triple Pack) MV803

Sulphate Reducing HiVeg Medium is recommended for enumeration of sulphate reducing bacteria in water samples.

Composition ** :

Ingredients	Grams/Litre
Part A:	
HiVeg peptone	2.0
HiVeg extract	1.0
Magnesium sulphate. $7H_2O$	2.0
Sodium sulphate	1.5
Dipotassium phosphate	0.5
Calcium chloride	0.1
Part B:	
Ferrous ammonium sulphate. $6H_2O$	0.392
Sodium ascorbate	0.1
Part C:	
Sodium lactate	3.5

Final pH (at 25°C) 7.5 ± 0.2
** Formula adjusted, standardized to suit performance parameters.

Directions :

Suspend 6.07 grams of dehydrated medium of Part A in 900 ml distilled water. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. On the day of use prepare solution of Part B in 100 ml distilled water. Sterilize by filtration through a 0.45 µm membrane filter and aseptically add this 100 ml solution to 900 ml Part A medium. Then separately sterilize the Part C by autoclaving at 15 lbs pressure (121°C) for 15 minutes and aseptically add to the mixture of Part A and B. Mix well and aseptically transfer the complete medium to sterile screw capped tubes filling them completely.

Principle and Interpretation :

Sulphate Reducing HiVeg Medium is prepared by using vegetable peptones in place of animal based peptones which makes the medium free from BSE/TSE risks. Sulphate Reducing HiVeg Medium is the modification of Sulphate Reducing Medium which is formulated in accordance with APHA (1) for enumeration of sulphate reducing bacteria. Sulphate reducing bacteria such as *Desulfovibrio* converts sulphate to sulphide which reacts with ferrous ions to give a black colour within 4 to 21 days at 20 - 30°C.
The tubes are filled completely to create anaerobic conditions. When sample volume is greater than 10 ml, sample is passed through a 0.45 µm membrane filter and the filter is transferred to screw-capped test tubes containing medium, and observed for colour change.

Product Profile :

Vegetable based (Code MV)◉	Animal based (Code M)
MV803 HiVeg peptone HiVeg extract	**M803** Peptic digest of animal tissue Beef extract

Recommended for	:	Enumeration of sulphate reducing bacteria in water samples.
Reconstitution	:	6.07 g/l of Part A + 0.492 g/l of Part B + 3.5 g/l of Part C
Quantity on preparation (500g)	:	49.69 L (A+B+C)
(100g)	:	9.93 L (A+B+C)
pH (25°C)	:	(Part A) : 7.5 ± 0.2
Supplement	:	None
Sterilization	:	(Part A & C) : 121°C / 15 minutes
	:	(Part B) : Filtration

Storage : Dry Medium - Below 30°C, Prepared Medium 2 - 8°C.

Quality Control :

Appearance of powder
Part A : Yellow coloured, may have slightly greenish tinge, homogeneous, free flowing powder.
Part B : Creamish white coloured, homogeneous, free flowing powder.
Part C: Colourless solution.

Colour and Clarity
Light yellow coloured, clear to slightly opalescent solution in tubes.

Reaction
Reaction of 0.61grams in 90 ml aqueous solution of Part A is pH 7.5 ± 0.2 at 25°C .

Cultural Response
Cultural characteristics observed after an incubation at 20-30°C for upto 4-21 days.

Organisms (ATCC)	Inoculum (CFU)	Growth
Desulfovibrio desulfuricans (29577)	10^2-10^3	luxuriant
Thiobacillus thioxidans (19377)	10^2-10^3	good-luxuriant

References :

1. Eaton A.D., Clesceri L.S. and Greenberg A.E., (Eds.), 1992, Standard Methods for the Examination of Water and Wastewater, 18th ed, APHA, Washington. D.C.

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

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