

Wang's Semisolid HiVeg™ Medium

MV918

Wang's Semisolid HiVeg Medium is used for transport and storage of cultures of *Campylobacter* species from foods.

Composition ** :

Ingredients	Grams/Litre
HiVeg hydrolysate	10.0
HiVeg peptone	10.0
Dextrose	1.0
Yeast extract	2.0
Sodium chloride	5.0
Sodium bisulphite	0.1
Agar	4.0

Final pH (at 25°C) 7.0 ± 0.2

** Formula adjusted, standardized to suit performance parameters.

Directions :

Suspend 32.1 grams in 900 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 45-50°C and aseptically add 100 ml sterile defibrinated sheep blood. Mix well and dispense aseptically in tubes as desired. Allow the tubes to cool in a upright position.

Principle and Interpretation :

Wang's Semisolid HiVeg Medium is prepared by completely replacing animal based peptones with vegetable peptones that make the medium free of BSE/TSE risks. This medium is the modification of Wang's medium which is an enriched, semisolid medium as recommended by APHA (1,2). It is used for the transport and storage of cultures of *Campylobacter* spp. from food such as undercooked meat, poultry, unpasteurised milk, bile and water.

The medium contains HiVeg hydrolysate and HiVeg peptone which serve as source of nitrogen. Yeast extract provides additional nutritious growth factors. Dextrose is a source of carbon. Sodium bisulphite accelerates growth of organisms. Sodium chloride maintains the osmotic balance. Addition of 0.4% agar makes the medium semisolid for maintaining viability of cultures for transport and storage. Addition of 5-10% defibrinated sheep blood provides additional source of nutrition for growth.

Product Profile :

Vegetable based (Code MV) ©	Animal based (Code M)
MV918 HiVeg hydrolysate HiVeg peptone	M918 Casein enzymic hydrolysate Peptic digest of animal tissue

Recommended for	: Transport and storage of <i>Campylobacter</i> species from foods.
Reconstitution	: 32.1 g/l
Quantity on preparation (500g)	: 15.57 L
pH (25°C)	: 7.0 ± 0.2
Supplement	: Sterile defibrinated Sheep Blood
Sterilization	: 121°C / 15 minutes
Storage	: Dry Medium - Below 30°C, Prepared Medium 2 - 8°C.

Quality Control :**Appearance of powder**

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

Colour and Clarity

Medium amber coloured, clear solution without any precipitate.

Reaction

Reaction of 3.21% w/v aqueous solution is pH 7.0 ± 0.2 at 25°C.

Cultural Response

Cultural characteristics observed after an incubation at 35-37°C for 5 days.

Organisms (ATCC)	Growth*
<i>Campylobacter fetus</i> subspecies <i>jejuni</i> (29428)	luxuriant
<i>Campylobacter jejuni</i> (29528)	luxuriant

Key : * = growth upon subculturing on *Campylobacter* HiVeg Agar Base (MV994)

References :

1. Wang, W-L.L., Luechtefeld N. W., Reller L.B., and Blaser M.J.. 1980. Enriched *Brucella* medium for storage and transport of cultures of *Campylobacter fetus* subspecies *jejuni*. J. Clin. Microbiol. 12:479-480.
2. Downes FP and Ito K (Eds.), 2001, Compendium of Methods For The Microbiological Examination of Foods, 4th ed., APHA, Washington, D.C.