

B. C. Motility Test HiVeg™ Medium**MV906**

B. C. Motility Test HiVeg Medium is used for cultivation and examination of motility of *Bacillus cereus* strains.

Composition ** :

Ingredients	Grams/Litre
HiVeg hydrolysate	10.0
Yeast extract	2.5
Dextrose	5.0
Disodium phosphate	2.5
Agar	3.0

Final pH (at 25°C) 7.4 ± 0.2

** Formula adjusted, standardized to suit performance parameters.

Directions :

Suspend 23 grams in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. Dispense in 2-3 ml amounts in screw capped tubes. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Allow the tubes to cool in an upright position.

Principle and Interpretation :

B. C. Motility Test HiVeg Medium is prepared by replacing Casein enzymic hydrolysate with HiVeg hydrolysate which is free of BSE/TSE risks. This medium is modification of B.C. Motility Test Medium formulated as per APHA (1) for examination of motility of *Bacillus cereus*.

The medium contains HiVeg hydrolysate, yeast extract and dextrose that provide nutrients. Disodium phosphate helps in maintaining the pH. Agar content of the medium is crucial for determining motility. 0.3% agar renders medium semisolid in which motile bacteria produce diffused turbidity due to growth, while nonmotile bacteria exhibit a line of growth along the line of inoculation. This medium is inoculated by stabbing down the center with 3 mm loopful of culture and incubated at 18 - 24 hours at 30°C. Rhizoid strains of *Bacillus cereus* var *mycooides* produce characteristic fuzzy growth due to expansion of the filamentous growth but they are not motile by means of flagella.

Quality Control :**Appearance of powder**

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

Product Profile :

Vegetable based (Code MV)Ⓢ	Animal based (Code M)
MV906 HiVeg hydrolysate	M906 Casein enzymic hydrolysate

Recommended for : Cultivation and examination of motility of *Bacillus cereus*

Reconstitution : 23.0 g/l

Quantity on preparation (500g) : 21.73 L

pH (25°C) : 7.4 ± 0.2

Supplement : None

Sterilization : 121°C / 15 minutes.

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

Gelling

Semisolid, comparable with 0.3% Agar gel.

Colour and Clarity

Yellow coloured, clear to slightly opalescent gel forms in tubes as butts.

Reaction

Reaction of 2.3% w/v aqueous solution is pH 7.4 ± 0.2 at 25°C.

Cultural Response

Cultural characteristics observed after an incubation at 30°C for 18 - 24 hours.

Organisms (ATCC)	Growth	Motility
<i>Bacillus anthracis</i> (14578)	luxuriant	-
<i>Bacillus cereus</i> (10876)	luxuriant	+
<i>Bacillus cereus</i> var <i>mycooides</i>	luxuriant	-
<i>Bacillus thuringiensis</i> (10792)	luxuriant	+

Key : + = Positive reaction, growth away from stab inoculation
- = Negative reaction, growth along the stab inoculation

References :

- Downes FP and Ito K (Eds.), 2001, Compendium of Methods For The Microbiological Examination of Foods, 4th ed., APHA, Washington, D.C.