

**Casitone Glycerol Yeast Autolysate HiVeg™ Broth Base****MV381**

Casitone Glycerol Yeast Autolysate HiVeg Broth Base is used as a maintenance medium for Iron bacteria, especially those belonging to the *Sphaerotilus-Leptothrix* group.

**Composition \*\* :**

Ingredients	Grams/Litre
HiVeg hydrolysate	5.0
Yeast autolysate	1.0

\*\* Formula adjusted, standardized to suit performance parameters.

**Directions :**

Suspend 6 grams in 1000 ml distilled water containing 10ml glycerol. Heat if necessary to dissolve the medium completely. Dispense into test tubes and sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. If desired 1.5% agar may be added to form CGY HiVeg Agar.

**Principle and Interpretation :**

Casitone Glycerol Yeast Autolysate HiVeg Broth Base is prepared by using HiVeg hydrolysate in place of Casein enzymic hydrolysate which makes the medium free of BSE/TSE risks. Casitone Glycerol Yeast Autolysate (CGY) HiVeg Broth Base is the modification of CGY Broth Base which is formulated in accordance with APHA (1). This medium supports growth of Iron bacteria especially those belonging to the *Sphaerotilus-Leptothrix* group but not the more rapidly growing organisms. BOD-lactate broth is used as a partially selective medium for *Sphaerotilus* (2). Pure cultures are isolated from BOD-lactate broth by picking a filament and streaking on 0.05% HiVeg extract No. 1 agar. After 24 hours incubation at 25°C, the typical curling filaments are transferred to CGY HiVeg Broth which functions as a good maintenance medium. If a pellicle with no underlying turbidity develops in 2 to 3 days, filament is transferred to CGY HiVeg Agar slant. In addition alfalfa straw or pea straw may also be used for enrichments.

**Quality Control :****Appearance of powder**

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

**Product Profile :**

Vegetable based (Code MV) ©	Animal based (Code M)
<b>MV381</b> HiVeg hydrolysate	<b>M381</b> Casein enzymic hydrolysate

**Recommended for** : Maintenance medium for Iron bacteria, especially those belonging to the *Sphaerotilus-Leptothrix* group.

**Reconstitution** : 6.0 g/l

**Quantity on preparation (500g)** : 83.33 L

**(100g)** : 16.66 L

**pH (25°C)** : -

**Supplement** : Glycerol

**Sterilization** : 121°C / 15 minutes.

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

**Colour and Clarity**

Light yellow coloured, clear solution without any precipitate.

**Cultural Response**

Cultural characteristics observed after an incubation at 25-30°C for upto 3 days.

Organisms (ATCC)	Inoculum (CFU)	Growth
<i>Sphaerotilus natans</i> (13338)	10 <sup>2</sup> -10 <sup>3</sup>	luxuriant

**References :**

- Eaton A.D., Clesceri L.S. and Greenberg A.E., (Eds.), 2005, Standard Methods for the Examination of Water and Wastewater, 21<sup>st</sup> ed., APHA, Washington, DC
- Armbuster E.H., 1969, Appl. Microbiol., 17:320.