

T.A.T. HiVeg™ Broth Base**MV562**

T.A.T. (Tryptone Azolectin Tween) HiVeg Broth Base with addition of Polysorbate 20 is recommended for sterility testing of highly viscous or gelatinous substances such as salves, ointments.

Composition ** :

Ingredients	Grams/Litre
HiVeg hydrolysate	20.0
Azolectin	5.0

Final pH (at 25°C) 7.2 ± 0.2

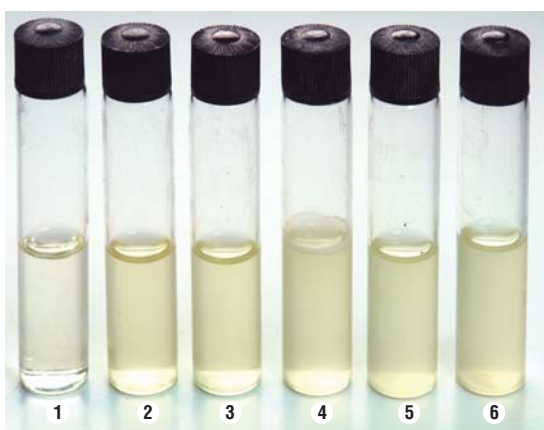
** Formula adjusted, standardized to suit performance parameters.

Directions :

Suspend 25 grams in 960 ml distilled water and add 40 ml of Polysorbate 20. Heat if necessary to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

Principle and Interpretation :

T.A.T. HiVeg Broth Base is prepared by using HiVeg hydrolysate in place of Casein enzymic hydrolysate which makes the medium free of BSE/TSE risks. This medium is the modification of T.A.T. Broth Base originally prepared according to the formula recommended by United States Food and Drug Administration (1) for enrichment and further isolation and cultivation of gram-negative bacteria in cosmetics, tropical drugs and sterility testing of viscous or gelatinous substances. T.A.T. HiVeg Broth Base is used for the same purpose. HiVeg hydrolysate provides the necessary nitrogen, vitamins, amino acids and carbon sources in the medium. Azolectin and polysorbate 20 neutralize the preservatives in the cosmetic or pharmaceutical products, allowing bacteria to grow. Samples to be tested are serially diluted using 1 gram of sample for the master dilution tube. Further, one ml of each dilution is inoculated in 40 ml of T.A.T. HiVeg Broth Base (2). After incubation it is subcultured on MacConkey HiVeg Agar, (MV081) and TSI HiVeg Agar, (MV021).



MV562 T. A. T. HiVeg Broth Base

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| 1. Control | 4. <i>Pseudomonas aeruginosa</i> |
| 2. <i>Bacillus subtilis</i> | 5. <i>Salmonella</i> serotype Typhi |
| 3. <i>Candida albicans</i> | 6. <i>Staphylococcus aureus</i> |

Product Profile :

Vegetable based (Code MV)©	Animal based (Code M)
MV562 HiVeg hydrolysate	M562 Casein enzymic hydrolysate
Recommended for	: Sterility testing of highly viscous or gelatinous substances such as salves, ointments.
Reconstitution	: 25.0 g/l
Quantity on preparation (500g)	: 20.0 L
pH (25°C)	: 7.2 ± 0.2
Supplement	: Polysorbate 20
Sterilization	: 121°C / 15 minutes
Storage	: Dry Medium - Below 30°C, Prepared Medium 2 - 8°C.

Quality Control :**Appearance of powder**

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

Colour and Clarity

Light yellow coloured, clear to slightly opalescent solution.

Reaction

Reaction of 2.5% w/v aqueous solution containing 4.0% v/v polysorbate 20 is pH 7.2 ± 0.2 at 25°C.

Cultural Response

Cultural characteristics observed after an incubation at 35-37°C for 24-48 hours with added Polysorbate 20.

Organisms (ATCC)	Inoculum (CFU)	Growth
<i>Bacillus subtilis</i> (6633)	10 ² -10 ³	good-luxuriant
<i>Candida albicans</i> (10231)	10 ² -10 ³	fair-good
<i>Pseudomonas aeruginosa</i> (27853)	10 ² -10 ³	good-luxuriant
<i>Salmonella</i> serotype Typhi (6539)	10 ² -10 ³	good-luxuriant
<i>Staphylococcus aureus</i> (25923)	10 ² -10 ³	good-luxuriant

References :

- Food and Drug Administration, 1969, Procedure for Examination of Tropical Drugs and Cosmetics.
- MacFaddin J., 1985, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, 1st volume, Williams and Wilkins, Baltimore.