

TGB HiVeg™ Agar

MV791

TGB HiVeg Agar is recommended for enumeration of bacteria in water, air, milk and other dairy products.

Composition ** :

Ingredients	Grams/Litre
HiVeg hydrolysate	5.0
HiVeg extract	3.0
Glucose	1.0
Agar	15.0

Final pH (at 25°C) 7.0 ± 0.2

** Formula adjusted, standardized to suit performance parameters.

Directions :

Suspend 24 grams in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

Principle and Interpretation :

TGB HiVeg Agar is prepared by replacing Casein enzymic hydrolysate and Beef extract of bovine origin by HiVeg hydrolysate and HiVeg extract respectively which are of vegetable origin, hence free of BSE/TSE risks. TGB HiVeg Agar is a modification of Glucose Skim Milk Agar designed by Bowers and Huker (1). It is used for cultivation and enumeration of bacteria in milk and other dairy products (2) and for the standard plate count of food (3) and water (4).

HiVeg hydrolysate, HiVeg extract provide nitrogenous and carbonaceous compounds and other nutrients essential for the growth of organisms. Glucose serves as an energy source.

This medium can be also used for pour plate technique. Usually 1 ml samples of appropriate dilutions of the test sample are pipetted in to sterile petriplates and molten, cooled TGB HiVeg Agar is added followed by gentle mixing so as to get uniform mixing. Incubate plates for 48 -72 hours at 35°C.

Quality Control :**Appearance of powder**

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

Gelling

Firm, comparable with 1.5% Agar gel

Colour and Clarity

Light yellow coloured, clear to slightly opalescent gel forms in petri plates.

Reaction

Reaction of 2.4% w/v aqueous solution is pH 7.0 ± 0.2 at 25°C.

Product Profile :

Vegetable based (Code MV)©	Animal based (Code M)
MV791 HiVeg hydrolysate HiVeg extract	M791 Casein enzymic hydrolysate Beef extract

Recommended for : Enumeration of bacteria in water, air, milk and other dairy products.

Reconstitution : 24.0 g/l

Quantity on preparation (500g) : 20.83 L

(100g) : 4.16 L

pH (25°C) : 7.0 ± 0.2

Supplement : None

Sterilization : 121°C / 15 minutes.

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

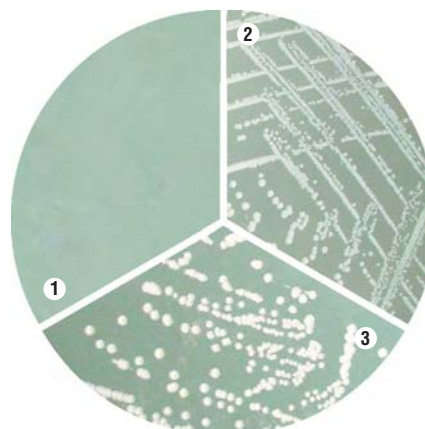
Cultural Response

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

Organisms (ATCC)	Inoculum (CFU)	Growth	Recovery
<i>Bacillus subtilis</i> (6633)	10 ² -10 ³	luxuriant	> 70%
<i>Enterococcus faecalis</i> (29212)	10 ² -10 ³	luxuriant	> 70%
<i>Escherichia coli</i> (25922)	10 ² -10 ³	luxuriant	> 70%
<i>Lactobacillus casei</i> (9595)	10 ² -10 ³	luxuriant	> 70%
<i>Pseudomonas aeruginosa</i> (27853)	10 ² -10 ³	luxuriant	> 70%
<i>Staphylococcus aureus</i> (25923)	10 ² -10 ³	luxuriant	> 70%
<i>Streptococcus pyogenes</i> (19615)	10 ² -10 ³	luxuriant	> 70%

References :

- Bowers and Huker, 1935, Tech. Bull. 228, N.Y. State Agr. Exp. Sta.
- Standard Methods for the Examination of Dairy Products. 17th Edition, 2004 Edited by H. Michael Wehr and Joseph H. Frank.
- Frances Pouch Downes and Keith Ito (Eds.), 2001, Compendium of Methods For The Microbiological Examination of Foods, 4th ed., APHA, Washington, D.C.
- Eaton A.D., Clesceri L.S. and Greenberg A.E., (Eds.), 2005, Standard Methods for the Examination of Water and Wastewater, 21st ed, APHA, Washington DC.



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(Against dark background)

- Control
- Bacillus subtilis*
- Escherichia coli*