

Dextrose HiVeg™ Peptone Agar

MV649

Dextrose HiVeg Peptone Agar is recommended for the general cultivation of organisms.

Composition ** :

Ingredients	Grams/Litre
HiVeg peptone	20.0
Dextrose	10.0
Sodium chloride	5.0
Agar	15.0

Final pH (at 25°C) 7.2 ± 0.2

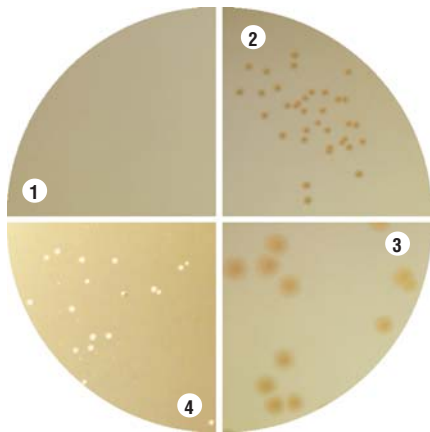
** Formula adjusted, standardized to suit performance parameters.

Directions :

Suspend 50 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 :

This medium is prepared by completely replacing animal based peptones with vegetable peptones which is free from BSE/TSE risks. Dextrose HiVeg Peptone Agar is the modification of Dextrose Peptone Media formulated as per suggestion by Williams (1) for the cultivation of microorganisms, which are fastidious, or present in small numbers, and also for the enumeration of the thermophilic bacteria responsible for flat sour spoilage of canned food. The conventional medium is also recommended by AOAC for the routine cultivation purpose (2).



MV649 Dextrose HiVeg Peptone Agar

1. Control
2. *Escherichia coli*
3. *Pseudomonas aeruginosa*
4. *Staphylococcus aureus*

Product Profile :

Vegetable based (Code MV)Ⓞ	Animal based (Code M)
MV649 HiVeg peptone	M649 Peptic digest of animal tissue
Recommended for	: General cultivation of organisms.
Reconstitution	: 50.0 g/l
Quantity on preparation (500g)	: 10.0 L
pH (25°C)	: 7.2 ± 0.2
Supplement	: None
Sterilization	: 121°C / 15 minutes.
Storage	: Dry Medium - Below 30°C, Prepared Medium 2 - 8°C.

HiVeg peptone supplies amino acids, peptides etc. for the growth of the organisms. Dextrose is the readily available energy source for the most of the organisms. The agar medium is also used as an excellent basal agar for the Blood Agar preparation. In the special petri plates it can support good growth of the anaerobic microorganisms.

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 5.0% w/v aqueous solution is pH 7.2 ± 0.2 at 25°C.

Cultural Response

Cultural characteristics observed after an incubation at 35 - 37°C for 18 - 48 hours.

Organisms (ATCC)	Inoculum (CFU)	Growth	Recovery
<i>Escherichia coli</i> (25922)	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 :

1. Williams O.B., 1936, Food Res., 1(3):217.
2. Association of Official Analytical Chemists, 1978, Bacteriological Analytical Manual, 5th ed. AOAC, Washington, D.C.