

Yeast Extract HiVeg™ Agar

MV456

Yeast Extract HiVeg Agar is a highly nutritive medium recommended for plate count of microorganisms in water.

Composition ** :

Ingredients	Grams/Litre
HiVeg peptone	5.0
Yeast extract	3.0
Agar	15.0

Final pH (at 25°C) 7.2 ± 0.2

** Formula adjusted, standardized to suit performance parameters.

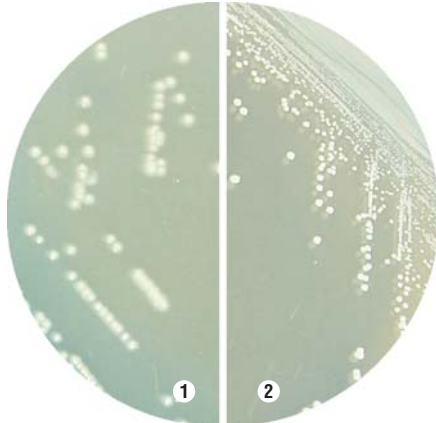
Directions :

Suspend 23 grams in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

Principle and Interpretation :

This medium is prepared by using HiVeg peptone in place of Peptic digest of animal tissue which makes the medium BSE/TSE free. Yeast Extract HiVeg Agar is the modification of Yeast Extract Agar which is formulated according to the formula described by Windle Taylor (1) for the plate count of microorganisms in water.

Yeast extract and HiVeg peptone provide nitrogenous compounds, vitamin B complex and other growth nutrients. Organisms forming visible colonies after 24 hrs at 35°C are enumerated separately from those forming visible colonies after 3 days at 20-22°C. (2)



MV456 Yeast Extract HiVeg Agar
(Against dark background)

1. *Escherichia coli*
2. *Staphylococcus aureus*

Product Profile :

Vegetable based (Code MV)©	Animal based (Code M)
MV456 HiVeg peptone	M456 Peptic digest of animal tissue

Recommended for	:	Plate count of microorganisms in water.
Reconstitution	:	23.0 g/l
Quantity on preparation (500g):		21.73 L
(100g):		4.34 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.

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

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

Reaction

Reaction of 2.3% 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 - 24 hours.

Organisms (ATCC)	Inoculum (CFU)	Growth	Recovery
<i>Enterobacter aerogenes</i> (13048)	10 ² -10 ³	luxuriant	>70%
<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%

References :

1. Taylor W. E., 1958, The Examination of Waters and Water Supplies, 7th ed., Churchill Ltd, London, pg. 394, 778.
2. Dept. of Health and Social Security, 1982, report No.71 : HMSO, London, 54.