

Potato Malt HiVeg™ Agar

MV404

Potato Malt HiVeg Agar is used for cultivation and maintenance of smut fungi and other phytopathogenic fungi.

Composition ** :

Ingredients	Grams/Litre
Potatoes, infusion from	200.0
Malt extract	20.0
HiVeg peptone	1.0
Sucrose	60.0
Agar	20.0

Final pH (at 25°C) 7.4 ± 0.2

** Formula adjusted, standardized to suit performance parameters.

Directions :

Suspend 10.5 grams in 100 ml distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Mix well before pouring into sterile petri plates.

Principle and Interpretation :

Potato Malt HiVeg Agar is prepared by using HiVeg peptone in place of Peptic digest of animal tissue which makes the medium free of BSE/TSE risks. Potato Malt HiVeg Agar is the modification of Potato Malt Agar. Potato Malt HiVeg Agar is used for cultivating and maintaining smut fungi and other phytopathogenic fungi. In addition to smut fungi, this medium is also used for cultivation of other organisms causing plant disease and aciduric microorganisms which needs high carbohydrate content and neutral to slight alkaline pH for optimal growth.

Malt extract which contains dextrin, maltose, a little glucose, along with the potato infusion in the medium promotes luxuriant growth of fungi (1). HiVeg peptone provides the nitrogenous compounds and trace minerals to the organisms. Sucrose supports the growth of microorganisms such as yeasts.

Quality Control :

Appearance of powder

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

Gelling

Firm, comparable with 2.0% Agar gel.

Colour and Clarity

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

Reaction

Reaction of 10.5% w/v aqueous solution is pH 7.4 ± 0.2 at 25°C.

Product Profile :

Vegetable based (Code MV)Ⓞ		Animal based (Code M)
MV404	HiVeg peptone	M404 Peptic digest of animal tissue
Recommended for	:	Cultivation and maintenance of smut fungi and other phytopathogenic fungi
Reconstitution	:	105.0 g/l
Quantity on preparation (500g)	:	4.76 L
pH (25°C)	:	7.4 ± 0.2
Supplement	:	None
Sterilization	:	121°C / 15 minutes.
Storage	:	Dry Medium - Below 30°C, Prepared Medium 2 - 8°C.

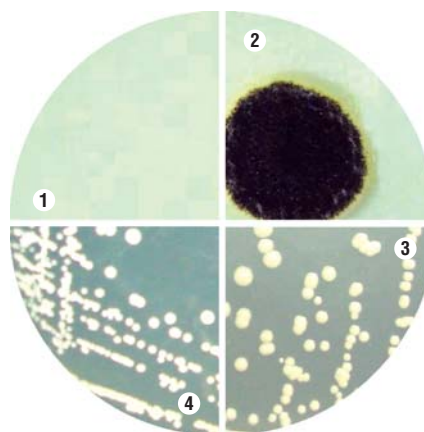
Cultural Response

Cultural characteristics observed after an incubation at 25-30°C for 40-48 hours.

Organisms (ATCC)	Growth
<i>Aspergillus niger</i> (16404)	luxuriant
<i>Candida albicans</i> (10231)	luxuriant
<i>Saccharomyces cerevisiae</i> (9763)	luxuriant

References :

- Vanderzant C. and Splittstoesser (Eds) 1992. Compendium of Methods for the Microbiological Examination of foods, 3rd ed., APHA, Wahington D.C.



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- Control
- Aspergillus niger*
- Candida albicans* (against dark background)
- Saccharomyces cerevisiae* (against dark background)