

Tryptone Soya HiVeg™ Agar w/Lecithin and Polysorbate 80**MV449**

Tryptone Soya HiVeg Agar with Lecithin and Polysorbate 80 is used for determining the efficiency of sanitization of containers, equipment surfaces, water miscible cosmetics etc.

Composition ** :

Ingredients	Grams/Litre
HiVeg hydrolysate	15.00
Papaic digest of soyabean meal	5.00
Sodium chloride	5.00
Lecithin	0.70
Polysorbate 80 (Tween 80)	5.00
Agar	15.00

Final pH (at 25°C) 7.3 ± 0.2

** Formula adjusted, standardized to suit performance parameters.

Directions :

Suspend 45.7 grams in 1000 ml distilled water. Heat to boiling to dissolve the medium completely. Sterilize by autoclaving at 12 to 15 lbs pressure (118 - 121°C) for 15 minutes.

Principle and Interpretation :

Tryptone Soya HiVeg Agar with Lecithin and polysorbate 80 is prepared by replacing animal based peptones with vegetable peptones which makes the medium free of BSE/TSE risks. This medium is the modification of Tryptone Soya Agar with Lecithin and polysorbate 80 which is used in RODAC (Replicate Organism Detection and Counting) plates (1) for the detection and enumeration of microorganisms present on surfaces of sanitary importances (2, 3).

HiVeg hydrolysate and Papaic digest of soyabean meal provide nitrogenous compounds and other nutrients essential for microbial replication. Lecithin and polysorbate 80 are neutralizers reported to inactivate residual disinfectants from where the sample is collected (4). Lecithin neutralizes quaternary ammonium compounds and polysorbate 80 neutralizes phenolic disinfectants, hexachlorophene, formalin and with lecithin ethanol (5).

Collection of samples from areas before and after the treatment with disinfectant evaluates cleaning procedures in environmental sanitation. The presence and number of microorganisms is determined by the appearance of colonies on the agar surface (6). After counting the colonies, carry out biochemical testing for identification.

Quality Control:**Appearance of Powder**

Light yellow coloured, homogeneous, free flowing powder.

Gelling

Firm, comparable with 1.5% Agar gel.

Colour and Clarity

Light to medium amber coloured, slightly opalescent gel forms in petri plates.

Reaction

Reaction of 4.57% w/v aqueous solution is pH 7.3 ± 0.2 at 25°C.

Product Profile :

Vegetable based (Code MV)©	Animal based (Code M)
MV449 HiVeg hydrolysate	M449 Casein enzymic hydrolysate
Recommended for	: Determining efficiency of sanitization of containers, equipment surfaces, water miscible cosmetics etc.
Reconstitution	: 45.7 g/l
Quantity on preparation (500g)	: 10.94 L
(100g)	: 2.18 L
pH (25°C)	: 7.3 ± 0.2
Supplement	: None
Sterilization	: 118°C-121°C / 15 minutes.
Storage	: Dry Medium and Prepared Medium 2 - 8°C.

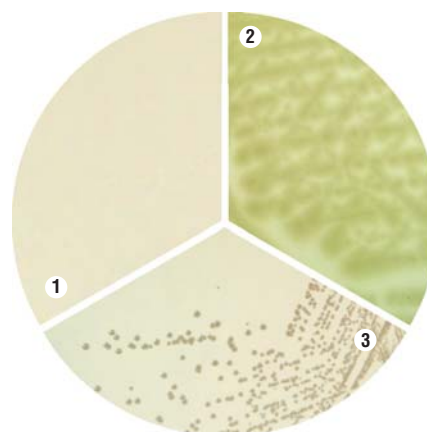
Cultural Response

Cultural characteristics observed after an incubation at 35-37°C for 18 - 24 hours.

Organisms (ATCC)	Inoculum (CFU)	Growth	Recovery	Colour of colony
<i>Staphylococcus aureus</i> (25923)	10 ² -10 ³	luxuriant	>70%	yellow to gold
<i>Pseudomonas aeruginosa</i> (27853)	10 ² -10 ³	luxuriant	>70%	yellow green

References :

- Hall and Hartnett, 1964, Public Hlth. Rep., 79:1021.
- Standard Methods for the Examination of Dairy Products. 17th Edition, 2004 Edited by H. Michael Wehr and Joseph H.Frank.
- MacFaddin J.F., 1985, Media for Isolation-Cultivation-Identification Maintenance of Medical Bacteria, Vol. I, Williams and Wilkins, Baltimore.
- Brummer, 1976, Appl. Environ. Microbiol., 32:80.
- Favero (Chairman), 1967, Biological Contamination Control Committee, a state of the art report., Am. Assoc. for contamination control.
- Lenette, Spaulding and Truant (Eds.), 1974, Manual of Clinical Microbiology, 2nd ed., ASM, Washington, D.C.



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- Control
- Pseudomonas aeruginosa*
- Staphylococcus aureus*