PE-2 HiVeg™ Medium MV611

PE-2 HiVeg Medium is used for detection and cultivation of mesophilic anaerobic sporeformers in specimens collected from food processing plants.

Composition ** :

Ingredients	Grams/Litre
HiVeg peptone	20.0
Yeast extract	3.0
Bromo cresol purple	0.04

** Formula adjusted, standardized to suit performance parameters.

Directions :

Suspend 23 grams in 1000 ml distilled water. Heat if necessary to dissolve the medium completely. Dispense 18-20 ml aliquots into 18-150 mm screw cap test tubes. Add 8-10 untreated Alaska seed peas and let the tubes stand for 1 hour to effect hydration. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

Principle and Interpretation :

PE-2 HiVeg Medium is prepared by using HiVeg peptone which is free from BSE/TSE risks associated with animal based peptones. PE-2 HiVeg Medium is the modification of PE-2 Medium which is prepared as per the formulation described by Folinazzo and Troy (1) and recommended by APHA (2) for detection and cultivation of mesophilic anaerobic spore-formers in specimens from food processing plants. These organisms mainly include the genus *Clostridium*. *Clostridial* growth range covers the temperature of the normal storage of canned and other processed foods including refrigerated storage of cured meats and hence these anaerobes are important in the spoilage of low-acid foods packed in the hermetically sealed containers.

HiVeg peptone and yeast extract provide nitrogenous compounds, vitamin B complex and trace ingredients etc. for the growth of *Clostridia*. Addition of untreated alaska seed peas creates anaerobic conditions in the medium.

Prepared samples of heated sugar, dehydrated vegetables and spices are cultured by taking 20 ml portions of these heated substances and dividing equally among 6 tubes of freshly heated culture medium. Incubate the cultures at 30-35°C for 72 hours or up to 7 days if desired as some spores germinate slowly.

Product Profile :

Vegetable based (Code MV)◉	Animal based (Code M)
MV611 HiVeg peptone	**M611** Peptic digest of animal tissue

Recommended for	:	Cultivation of mesophilic anaerobic spore-formers in specimens collected from food processing plants.
Reconstitution	:	23.0 g/l
Quantity on preparation (500g)	:	21.73 L
pH (25°C)	:	-
Supplement	:	Alaska seed peas
Sterilization	:	121°C / 15 minutes.

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

Quality Control :

Appearance of powder

Yellow coloured, may have slight greenish tinge, homogeneous, free flowing powder.

Colour and Clarity

Purple coloured, clear to slightly opalescent solution over alaska seeds.

Cultural Response

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

Organisms (ATCC)	Inoculum(CFU)	Growth
Clostridium botulinum (25763)	10^2-10^3	good-luxuriant
Clostridium sporogenes (11437)	10^2-10^3	good-luxuriant
Clostridium thermosaccharolyticum (7956)	10^2-10^3	good-luxuriant

References :

1. Folinazzo J.F. and Troy V.S., 1954, Food Technol., 8:280.
2. Frances Pouch Downes and Keith Ito (Eds.), 2001, Compendium of Methods For The Microbiological Examination of Foods, 4th ed., APHA, Washington, D.C.

◉ Prepared from GMO free Vegetable proteins replacing Animal based peptones. Freedom from BSE/TSE worries.

HIMEDIA®