

# **Technical Data**

## Pantothenate Inoculum HiVeg<sup>TM</sup> Broth

**MV542** 

Recommended for preparation of inoculum used in microbiological assays of Pantothenic acid or its salts.

#### Composition\*\*

Ingredients	<b>Gms / Litre</b>
HiVeg <sup>™</sup> hydrolysate No. 3	15.000
Yeast extract	5.000
Dextrose (Glucose)	10.000
Potassium dihydrogen phosphate	2.000
Tomato juice (100 ml)	5.000
Polysorbate 80 (Tween 80)	1.000
Final pH ( at 25°C)	6.8±0.2

<sup>\*\*</sup>Formula adjusted, standardized to suit performance parameters

#### **Directions**

Suspend 38 grams in 1000 ml distilled water. Heat, if necessary to dissolve the medium completely. Dispense in tubes or flasks as desired. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

### **Principle And Interpretation**

Pantothenate Inoculum HiVeg Broth medium is prepared by using HiVeg hydrolysate No. 3 in place of Peptonized milk which is free from BSE/TSE risks associated with animal based peptones. This can be used for the same purpose of Pantothenate Inoculum Broth is prepared based on the formula originally designed by Kulp and White (1) and later on modified and recommended by AOAC (2) for cultivating Lactobacilli used in microbiological assays. This medium can also be used for plating *Lactobacillus acidophilus* and obtained high recovery of Lactobacilli.

HiVeg<sup>TM</sup> hydrolysate No. 3 serves as the energy source for Lactobacilli species. Dextrose serves as the fermentable carbohydrate and/or energy source. Yeast extract and HiVeg hydrolysate No.3 provides vitamin B complex, nitrogenous compounds and trace ingredients for the growth. Polysorbate 80 supplies fatty acids required for the metabolism of Lactobacilli. Tomato juice provides an acid environment in the medium resulting in inhibition of microorganisms other than acidophilic bacteria. Polysorbate 80 supplies fatty acids required for the metabolism of Lactobacilli.

#### **Quality Control**

#### **Appearance**

Cream to yellow may have green tinge homogeneous free flowing powder

#### Colour and Clarity of prepared medium

Medium amber coloured clear solution.

#### Reaction

Reaction of 3.8% w/v aqueous solution at 25°C. pH: 6.8±0.2

#### рH

6.60-7.00

#### **Cultural Response**

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

Organism	Inoculum (CFU)	Growth
Lactobacillus casei ATCC 9595	50-100	luxuriant
Lactobacillus leichmannii ATCC 4797	50-100	luxuriant

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Lactobacillus plantarum 50-100 luxuriant ATCC 8014

#### **Storage and Shelf Life**

Store below 30°C in tightly closed container and the prepared medium at 2 - 8°C. Use before expiry date on the label.

#### Reference

1. Kulp, J.W.L. and White, V. 1932. Science, 76.

2.Official Medhods of Analysis of AOAC, International. 2005 Williams Ed., vol. 18. Washington, D.C: AOAC.

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