

Differential Reinforced Clostridial HiVeg™ Broth

MV549

Differential Reinforced Clostridial HiVeg Broth is used for the cultivation of *Clostridia* from water.

Composition ** :

Ingredients	Grams/Litre
HiVeg peptone	10.0
HiVeg extract	10.0
Yeast extract	1.5
Starch	1.0
Sodium acetate, hydrated	5.0
Glucose	1.0
L-Cysteine hydrochloride	0.5

Final pH (at 25°C) 7.2 ± 0.2

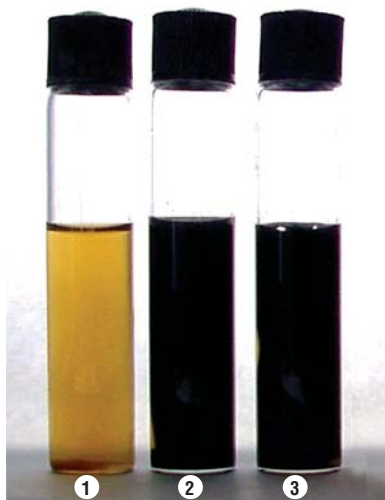
** Formula adjusted, standardized to suit performance parameters.

Directions :

Suspend 29 grams in 1000 ml distilled water. Heat if necessary to dissolve the medium completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. Just before use add 0.5 ml filter sterilized solution prepared by mixing equal volumes of 4% w/v solution of Sodium sulphite and 7% w/v Ferric citrate to 25 ml of single strength medium or 0.4 ml and 2 ml to 10 ml and 50 ml of double strength medium respectively. Mix well.

Principle and Interpretation :

This medium is prepared by using HiVeg peptone and HiVeg extract which is free from BSE/TSE risks. Differential Reinforced Clostridial HiVeg Broth is the modification of Differential Reinforced Clostridial Medium which is based on the formulation described by Barnes and Ingram (1) and



MV549 Differential Reinforced Clostridial HiVeg Broth

1. Control
2. *Clostridium perfringens*
3. *Clostridium sporogenes*

Product Profile :

Vegetable based (Code MV)®	Animal based (Code M)
MV549 HiVeg peptone HiVeg extract	M549 Peptic digest of animal tissue Beef extract

Recommended for : Cultivation of *Clostridia* from water

Reconstitution : 29.0 g/l

Quantity on preparation (500g) : 17.24 L

(100g) : 34.48 L

pH (25°C) : 7.2 ± 0.2

Supplement : Sodium sulphite, Ferric citrate

Sterilization : 121°C / 15 minutes.

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

Gibbs and Freame (2) for the sulphite reducing *Clostridia* from food and for enumeration in water by multiple tube method. Differentiation is based on the ability to reduce sulphite to sulphide to form iron sulphide resulting in black colour. HiVeg peptone, HiVeg extract, yeast extract, starch, sodium acetate provide essential nutrients for bacterial metabolism. Glucose is the source of energy. L-Cysteine hydrochloride acts as reducing agent.

Quality Control :**Appearance of powder**

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

Colour and Clarity

Light yellow coloured, clear solution without any precipitate.

Reaction

Reaction of 2.9% w/v aqueous solution is pH 7.2 ± 0.2 at 25°C.

Cultural Response

Cultural characteristics observed after an incubation at 30°C for 1 week with added 4% w/v solution of Sodium sulphite and 7% w/v Ferric citrate.

Organisms (ATCC)	Growth	H ₂ S production
<i>Clostridium perfringens</i> (13124)	good - luxuriant	+
<i>Clostridium sporogenes</i> (11437)	good - luxuriant	+

Key : + = blackening of medium

References :

1. Barnes E.M. and Ingram M., 1956, J. Appl. Bacteriol., 19(1):117.
2. Gibbs B.M. and Freame B., 1965, J. Appl. Bacteriol., 28(1):95.