

Coliform HiVeg™ Broth

MV1211

Coliform HiVeg Broth is recommended for isolation and cultivation of coliform organisms from cream, yogurt and raw milk.

Composition ** :

Ingredients	Grams/Litre
HiVeg peptone No. 3	15.0
Yeast extract	6.0
Synthetic detergent	5.0
Synthetic detergent No. III	0.1
Lactose	20.0
Sodium lauryl sulphate	1.0
Bromo cresol purple	0.035
HiVeg peptone	10.0

Final pH (at 25°C) 7.0 ± 0.2

** Formula adjusted, standardized to suit performance parameters.

Directions :

Suspend 57.14 grams in 1000 ml distilled water. Heat if necessary to dissolve the medium completely. Dispense as desired and sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

Principle and Interpretation :

This medium is prepared by completely replacing animal based peptones with vegetable peptones which are free from BSE/TSE risks. Coliform HiVeg Broth is the modification of Coliform Broth which is recommended for isolation and cultivation of coliforms from cream, yogurt and raw milk (1) HiVeg peptone No. 3, HiVeg peptone and yeast extract provides nitrogenous carbonaceous compounds and vitamin B complex for the growth of



MV1211 Coliform HiVeg Broth

1. Control
2. *Escherichia coli*
3. *Enterobacter aerogenes*
4. *Staphylococcus aureus*

Product Profile :

Vegetable based (Code MV)®	Animal based (Code M)
MV1211 HiVeg peptone No. 3 Synthetic detergent Synthetic detergent No. III HiVeg peptone	M1211 Protease peptone Bile salts Sodium deoxycholate Peptic digest of animal tissue

Recommended for : Isolation and cultivation of coliforms from cream, yogurt and raw milk.

Reconstitution : 57.14 g/l

Quantity on preparation (500g) : 8.75 L

pH (25°C) : 7.0 ± 0.2

Supplement : None

Sterilization : 121°C / 15 minutes.

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

coliform. Lactose is the fermentable carbohydrate. Bromocresol purple is the pH indicator. Coliforms ferment lactose and produce acid and gas, which is indicated by change in colour of medium to yellow. Synthetic detergents inhibit gram positive bacteria. Sodium lauryl sulphate is inhibitory to many organisms but not to coliforms.

Quality Control :

Appearance of powder

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

Colour and Clarity

Purple coloured, clear solution without any precipitate.

Reaction

Reaction of 5.71% w/v aqueous solution is pH 7.0 ± 0.2 at 25°C.

Cultural Response

Cultural characteristics observed after an incubation at 35 - 37°C for 18 - 48 hours.

Organisms (ATCC)	Inoculum (CFU)	Growth	Acid	Gas
<i>Enterobacter aerogenes</i> (13048)	10 ² -10 ³	good-luxuriant	+	+
<i>Escherichia coli</i> (25922)	10 ² -10 ³	good-luxuriant	+	+
<i>Staphylococcus aureus</i> (25923)	10 ² -10 ³	inhibited	-	-

KEY : Acid

+ : Positive reaction, yellow colour

- : Negative reaction purple or no colour change

References :

1. Vanderzant C and Splittstoesser DF (Ed), 1992, Compendium of Methods for the Microbiological Examination of Foods 3rd ed, APHA Washington, DC.