

TMV 482 - VIOLET RED BILE BROTH (VEG.)

INTENDED USE

For detection and enumeration of coliform bacteria in water and food.

PRODUCT SUMMARY AND EXPLANATION

Violet Red Veg Broth is prepared by completely replacing animal based peptones by vegetable peptones which makes the medium free of BSE/TSE risks. Voilet Red Veg media like the conventional Violet Red Bile media is recommended by APHA for the detection and isolation of coliform organisms in water, milk, dairy and other food products.

COMPOSITION

Ingredients	Gms / Ltr		
Veg peptone	7. 0		
Yeast extract	3. 0		
Sodium chloride	5. 0		
Synthetic detergent No. I	1. 5		
Lactose	10.0		
Neutral red	0.03		
Crystal violet	0.002		

PRINCIPLE

The medium is selective due to the presence of the inhibitors - synthetic detergent No.1 and crystal violet. Crystal violet inhibits gram-positive microorganisms especially Staphylococci. Neutral red is the pH indicator. Organisms which rapidly ferment lactose will produce pink to red colour. Lactose non-fermenters and late lactose fermenters produce pale colour. Other related gram- negative bacteria can be suppressed by incubation at >42°C or by anaerobic incubation. Incubation may be carried out at > 42°C for 18 hours, 32°C for 24-48 hours or 4°C for 10 days depending on the temperature characteristics of the organisms to be recovered.

INSTRUCTION FOR USE

- Dissolve 26.53 grams in 1000 ml distilled water.
- Heat with stirring to boiling to dissolve the medium completely, do not autoclave.
- Cool to 45°C and dispense into sterile tubes containing the inoculum.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Pinkish beige coloured, homogeneous, free flowing powder.

Appearance of prepared medium : Reddish purple coloured clear solution in tubes.

pH (at 25°C) : 7.4±0.2

INTERPRETATION

Cultural characteristics observed after an incubation.











Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Color of the colony	Incubation Temperature	Incubation Period
Escherichia coli	25922	50-100	Luxuriant	Pink to pinkish Red	35-37°C	18-24 Hours
Enterobacter aerogenes	13048	50-100	Luxuriant	Pink to pinkish Red	35-37°C	18-24 Hours
Salmonella serotype Enteritidis	13076	50-100	Luxuriant	Colourless to orangish yellow	35-37°C	18-24 Hours
Staphylococcus aureus	25923	>=10³	Inhibited	-	35-37°C	18-24 Hours

PACKAGING:

In pack size of 500 gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES

- 1. Frances Pouch Downes and Keith Ito (Eds.), 2001, Compendium of Methods For The Microbiological Examination of Foods, 4th ed., APHA, Washington, D.C.
- 2. Standard Methods for the Examination of Dairy Products. 17th Edition, 2004 Edited by H. Michael Wehr and Joseph H.Frank.
- 3. Davis J.G., 1951, Milk Testing, Dairy Industries Limited, London; pg 131
- 4. Mossel D.A.A. and Vega C.L., 1973, Hlth. Lab. Sci., 11:303.

















NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices. *For Lab Use Only Revision: 08 Nov., 2019







