

## **CM 20676 - ETHYL VIOLET AZIDE BROTH (E.V.A. BROTH) (IS : 5887 (Part II) 1976, reaffirmed 2005)**

### INTENDED USE

For selective and confirmatory detection of Enterococci as an indicator of faecal pollution in water.

### PRODUCT SUMMARY AND EXPLANATION

EthylViolet AzideBroth was formulated according to the recommendations of Litsky, Malmann and Fifield, who investigated the action of a number of dyes and selective agents for the formulation of a confirmation medium for fecal streptococci. BIS has recommended E.V.A Broth for enumeration of Enterococci using MPN technique. The selectivity of the medium for enterococci is due to the presence of ethyl violet and sodium azide, which inhibit the growth of Gram-negative bacilli and sporulated Gram-positive species.

### COMPOSITION

Ingredients	Gms / Ltr
Casein enzymatic hydrolysate	20.000
Dextrose	5.000
Sodium chloride	5.000
Dipotassium phosphate	2.700
Monopotassium phosphate	2.700
Sodium azide	0.250
Ethyl violet	0.00083

### PRINCIPLE

Medium composed of Casein enzymatic hydrolysate that acts as a source of minerals, nitrogen. Dipotassium phosphate and Monopotassium phosphate buffer the medium well. Sodium chloride maintains the osmotic balance of the medium. Dextrose acts as a source of fermentable carbon. Sodium azide and ethyl violet inhibit gram-positive bacilli and gram-positive cocci other than Enterococci.

### INSTRUCTION FOR USE

Dissolve 35.80 grams in 1000ml distilled water.

Gently heat to boiling with gentle swirling and dissolve the medium completely.

Dispense in tubes in 10 ml amount.

Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.

Warning: Sodium azide has a tendency to form explosive metal azides with plumbing materials. It is advisable to use enough water to flush off the disposables.

### QUALITY CONTROL SPECIFICATIONS

Appearance of Dehydrated powder	: Cream to yellow, homogeneous free flowing powder
Appearance of Prepared medium	: Light amber colored, Clear solution
pH (at 25°C)	: 7.0± 0.2

### INTERPRETATION

Culture Characteristics observed after incubation.



Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation temperature	Incubation period
Escherichia coli	25922	≥1000	Inhibited	35-37°C	24-48 Hours
Enterococcus faecalis	29212	50-100	Good-Luxuriant	35-37°C	24-48 Hours
Streptococcus pyogenes	19615	≥1000	Inhibited	35-37°C	24-48 Hours

#### PACKAGING

In100&500gm packaging size.

#### STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers below 25°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.

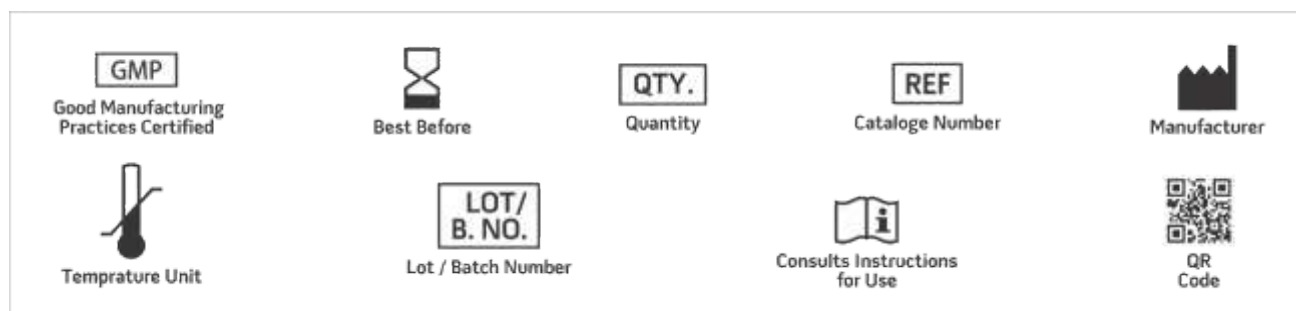
Product Deterioration: Do not use powder if they show evidence of microbial contamination, discoloration, drying, or other signs of deterioration.

#### DISPOSAL

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

#### REFERENCES

1. Litsky W., Mallmann W.L. and Fifiel C.W., 1953, Am. J. Publ. Health, 43:873.
2. Litsky W., Mallmann W.L. and Fifiel C.W., 1955, Am. J. Publ. Health, 45:104.



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

\*For Lab Use Only

