

Product Data Sheet

ETHYL VIOLET AZIDE BROTH (E.V.A BROTH) Product No. GB-DCM-00206-1A

INTENDED USE

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

PRODUCT SUMMARY

Ethyl Violet Azide Broth is based on the formulation of Litsky et al and the present medium is a modification of medium developed by Litsky et al with reduced amount of dextrose and increased dye concentration, making the medium highly specific for Enterococci. The presence of Enterococci acts as a valuable index of faecal or sewage pollution in water. E.V.A. Broth is used in conjunction with Azide Dextrose Broth. Larkin et al used Azide Dextrose Broth as a presumptive medium and E.V.A. Broth for the confirmation of the presence of Streptococci in frozen foods. They found that generally faecal Streptococci were recovered more consistently and in greater number than the coliforms and could be used in preference to coliforms as an indicator bacterium in frozen foods. Litsky et al studied a variety of dyes and selective agents for Streptococci and developed a confirmatory medium using ethyl violet and sodium azide as selective agents. Combination of 0.0083gm% of ethyl violet dye and 0.04gm% of azide provided the best selective action favoring growth of Streptococci.

Product Specifications

Ingredients	Gms / Ltr
Casein enzymic hydrolysate	20.000
Dextrose	5.000
Dipotassium phosphate	2.700
Monopotassium phosphate	2.700
Sodium chloride	5.000
Sodium azide	0.400
Ethyl violet	0.00083



PRINCIPLE

The medium consists of casein enzymic hydrolysate as source of carbon, nitrogen, vitamins and minerals. Dextrose is the fermentable carbohydrate. Sodium azide and ethyl violet inhibit grampositive bacilli and gram-positive cocci other than Enterococci. Monopotassium and dipotassium phosphates buffer the medium. Sodium chloride provides osmotic balance.

INSTRUCTION FOR USE

- Dissolve 35.80 grams in 1000 ml purified / distilled water.
- Heat, if necessary to dissolve the medium completely.
- Dispense in tubes in 10 ml amounts and 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.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Incubation Temperature	Incubation Period
Escherichia coli	25922	>=103	Inhibited	35-37°C	24-48 Hours
Streptococcus pyogenes	19615	50-100	Good-luxuriant with purple button at the bottom of tube	35-37°C	24-48 Hours
Enterococcus faecalis	29212	>=103	Inhibited	35-37°C	24-48 Hours

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder: Cream to yellow homogeneous free flowing powder.

Appearance of prepared medium: Light amber coloured, clear solution in tubes.

pH (at 25°C): 7.0±0.2

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.

This product is for research use only.