

Product Data Sheet

ETHYL VIOLET AZIDE DEXTROSE AGAR

Product No. GB-DCM-00207-1A

INTENDED USE

For detecting & confirming Streptococci and faecal pollution indication in water.

PRODUCT SUMMARY

Ethyl Violet Azide Broth is based on the formulation of Litsky et al and 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. Ethyl Violet Azide Dextrose Agar is a modification of Ethyl Violet Azide Broth where 1.5% agar is added as a solidifying agent. It is used for detection and confirmation of Streptococci. It is based on original formulation of Litsky et al. Ethyl Violet Azide Dextrose Agar medium has 0.5% dextrose and was found equally productive as the medium described originally containing 1.5% dextrose. It was found that the medium with the lesser amount of carbohydrate was less adversely affected by heat during sterilization. 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
Agar	15.000

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 gram-positive bacilli and gram-positive cocci other than Enterococci. Monopotassium and dipotassium phosphates buffer the medium. Sodium chloride provides osmotic balance. Agar act as a solidifying agent in the medium.



GOSLAR BIOTECH
Your Partner in Sera

INSTRUCTION FOR USE

- Dissolve 50.8 grams in 1000 ml purified / distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Mix well and pour into sterile petri plates. 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	Recovery	Incubation Temperature	Incubation Period
Escherichia coli	25922	$\geq 10^3$	Inhibited	0%	35-37°C	24-48 Hours
Enterococcus faecalis	29212	50-100	Good-luxuriant	$\geq 50\%$	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 to slightly opalescent gel forms in Petri plates.

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.