

TM 029 – AZIDE DEXTROSE BROTH W/ BCP

INTENDED USE

For cultivation of faecal Streptococci in water.

PRODUCT SUMMARY AND EXPLANATION

Enterococci are more resistant to chlorine in water, hence are better indicators of sewage pollution than *Escherichia coli*. Until 1984, members of the genus *Enterococcus* were classified as Group D Streptococci. Upon genomic DNA analysis, a separate genus status was provided to them. Azide Dextrose Broth was initially formulated by Rothe, Mullmann and Seligmann for quantitative determination of Enterococci in water, foods, sewage and other materials suspected of contamination with sewage. Azide Dextrose Broth w/ BCP is similar in composition to Azide Dextrose Broth with the addition of bromocresol purple. This medium is recommended by the ISO Committee for the detection and enumeration of faecal Streptococci in water as per ISO 7899-1:1984.

COMPOSITION

Ingredients	Gms / Ltr
Tryptone	15.000
Meat extract	4.500
Dextrose (Glucose)	7.500
Sodium chloride	7.500
Sodium azide	0.200
Bromo cresol purple	0.015

PRINCIPLE

It is a highly nutritious medium due to the presence of nutrient rich tryptone, meat extract and glucose. Sodium azide inhibits growth of gram-negative bacteria, allowing Enterococci to grow. Sodium chloride maintains the osmotic equilibrium of the medium. Bromo cresol purple is the pH indicator dye that changes to yellow colour under acidic conditions. Turbidity in tubes along with colour change to yellow indicate presence of Enterococci.

INSTRUCTION FOR USE

- Suspend 34.7 grams in 1000 ml purified / distilled water.
- Heat if necessary to ensure complete solution.
- Dispense in test tubes and sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: Cream to yellow coloured, may have slight green tinge homogeneous free flowing powder.
Appearance of prepared medium	: Purple coloured clear solution without any precipitate..
pH (at 25°C)	: 7.2±0.2

INTERPRETATION

Cultural characteristics observed after incubation.



Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Colour of medium	Incubation Temperature	Incubation Period
<i>Escherichia coli</i>	25922	$\geq 10^3$	Inhibited	Purple	35-37°C	18-48 Hours
<i>Enterococcus faecalis</i>	29212	50-100	Good-luxuriant	Yellow	35-37°C	18-48 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. Edwards S.J., 1933, J. Comp. Path. Therap., 46:2111.
2. Hartman G., 1937, Milchw. Forsch, 18:166.
3. International Organization For Standardization (ISO), 1984, Draft ISO/DIS 7899.
4. Mallmann and Seligmann, 1950, Am. J. Publ. Health, 40:286.2.
5. Rothe, 1948, Illinois State Health Department.3.
6. Schleider K.H., Kilpper Bolz R., 1984, Int.J.Sys.Bacteriol., 34:31

 GMP Good Manufacturing Practices Certified	 IVD For In Vitro Diagnostic Use	 QTY. Quantity	 LOT/ B. NO. Lot / Batch Number	 REF Catalogue Number	 Manufacturer
 Temperature Unit	 EC REP Authorized Representative <small>MedNet GmbH Buckstrasse 10, 48163 Muenster, Germany</small>	 European Conformity	 QR Code	 Consults Instructions for Use	 Best Before

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

***For Lab Use Only**
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