

Azide Dextrose Broth



Selective medium used for the detection and enumeration of faecal Streptococci from waters and foodstuffs.

* Equally use with NIER (MB-A1003N).

• CONTENTS (Liter)

Peptone	15.0 g
Beef Extract	4.5 g
Dextrose	7.5 g
Sodium Chloride	7.5 g
Sodium Azide	0.2 g
Final pH = 7.2 ± 0.2 at 25°C.	

• PROCEDURE

Suspend 34.7 G of powder in 1 L of distilled or deionized water or 69.4 G of powder in 1 L of distilled or deionized water for double strength medium. Heat to boiling until completely dissolved. Sterilize by autoclave at 121°C for 15 minutes. Cool to 45-50°C in water bath. Dispense in final containers. If necessary dispense the medium before autoclave. In the case of three times strength medium, dissolve 104.1 G of dehydrated medium in 1 L of distilled or deionized water and proceed as the single strength medium.

• INTERPRETATION

Azide Dextrose Broth is a selective medium used for the presumptive identification and enumeration of faecal Streptococci from waters and foodstuffs. Their presence is indicated by turbidity of the broth and valued according to the most probable number method (MPN). Peptone and beef extract are the carbon, nitrogen, and vitamin sources. Dextrose is a fermentable carbohydrate. Sodium chloride maintains the osmotic balance of the medium. Sodium azide inhibits cytochrome oxidase in gram-negative bacteria.

• TECHNIC

Inoculate the specimen with stab using a sterile needle to the medium. Shake gently for spreading microorganism. Incubate at 35 ± 2°C for 18 - 24 hours up to 48 hours. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous.

Color: beige.

Prepared medium

Appearance: clear with no precipitate.

Color: light to medium amber.

Incubation conditions: 35 ± 2 °C / 18 - 24 hours up to 48 hours

Microorganism	ATCC	Inoculum CFU	Growth
<i>Escherichia coli</i>	25922	≥10 ³	inhibited
<i>Enterococcus faecalis</i>	29212	50-100	good

• STORE

The powder is very hygroscopic. Store the powder at room temperature, in a dry environment, in its original container tightly closed and use it before the expiry date on the label or until signs of deterioration or contamination are evident. Store prepared medium at 2-8°C.

• REFERENCES

1. Larkin, E.P., W. Litsky, and J.E. Fuller. 1955 Appl. Microbiol. 3:98
2. Eaton, A.D., L.S. Clesceri, and A.E. Greenberg (eds). 1995. 19th ed. American Health Association.
3. Rothe. 1948. Illinois State Health Department.
4. Refer to the NIER.

• PACKAGE

Cat. No : MB-A1003 Azide Dextrose Broth	500 G
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