

AZIDE DEXTROSE BROTH (ROTHER)

Selective medium for the detection of enterococci in water and sewage

Typical formula (g/l)

Peptone	20.0
Glucose	5.0
Sodium Chloride	5.0
Dipotassium Hydrogen Phosphate	2.7
Potassium Dihydrogen Phosphate	2.7
Sodium Azide	0.2

Directions

Suspend 35.6 of Azide Dextrose Broth Rothe in 1000 ml of cold distilled water. Heat gently to dissolve, distribute into 10ml tubes and sterilise by autoclaving at 121°C for 15 minutes. For inocula of more than 1ml per 10ml medium prepare the liquid media at double or multiple concentration. AzFinal pH 6.8 ± 0.2

Description

Azide Dextrose Broth (Rothe) is a selective medium for the detection of enterococci in water and sewage; its composition is in accordance with Rothe formulation.

The presence of enterococci is an indicator of faecal contamination mainly in chlorinated water because they have a greater resistance to chlorine than *E.coli*.

Technique

The enumeration of enterococci is carried out in tubes, according to the method of the most probable number (MPN); vary the amount of inoculum (in multiples or fractions of 1ml) depending on the type of specimen preparing at least five tubes of each dilution. As a liquid dilution, use a phosphate buffer or else a 0.5% aqueous peptone solution (w/v). Incubate at 35°C for 24 hours, and observe if growth has occurred; if not, continue incubation for a further 24 hours. Calculate the result using the appropriate tables, and express it as the most probable presumptive number. Confirm the presumptive result with a subculture in Ethyl Violet Azide Broth.

User quality assurance (37°C-24 h)

Productivity control

E.faecalis ATCC 19433: good growth

Selectivity control

E.coli ATCC 25922: inhibited

Storage

Dehydrated media: 10-30°C

User prepared tubes: 1 month at 2-8°C

References

- APHA (1985) - Standard Methods for the Examination of Water and Wastewater, 16th edition.
- OMS (1965) - Normes Internationales pour l'Eau de Boisson, deuxième edition.

Packaging

4011061	Azide Dextrose Broth (Rothe),	100 g (2.8 l)
4011062	Azide Dextrose Broth (Rothe),	500 g (14 l)
4011064	Azide Dextrose Broth (Rothe),	5 kg (145 l)