

Azide Dextrose Broth

Use and description:

Azide Dextrose Broth is used in the detection of fecal streptococci in water, sewage, and milk.

Principles of the Procedure Enzymatic Digest of Casein, Enzymatic Digest of Animal Tissue, and Beef Extract are the carbon, nitrogen, and vitamin sources used for general growth requirements in Azide Dextrose Broth. Dextrose is a fermentable carbohydrate. Sodium Chloride maintains the osmotic balance of the medium. Sodium Azide inhibits cytochrome oxidase in Gram-negative bacteria.

Composition per liter:

Peptones 15.0 g
Dextrose7.5 g
Meat Extract4.5 g
Sodium Chloride7.5g
Sodium Azide0.2g

Final pH of the ready to use medium: 7.2±0.2 at 25.0 °C

Medium preparation:

Add 34,7 grams of dehydrated culture medium to 1 liter of distilled water. Mix Thoroughly to completely dissolve the medium .
Autoclave it for 15 min at 121C.

Quality specifications:

1. The powder is homogeneous, free flowing cream to light beige
2. Ready to use medium: brilliant to clear , yellow to gold

Microbiological response at 37 °C after 18-48 hours incubation:

Organism	Result
<i>Escherichia coli</i> ATCC 25922	inhibited
<i>Enterococcus faecalis</i> ATCC 29212	growth
<i>Staphylococcus aureus</i> ATCC 25923	inhibited

Storage:

Store the sealed bottle containing the dehydrated medium at 2 to 30.0 °C. Once opened and recapped, place the container in a low humidity environment at the same storage temperature. Protect it from moisture and light. The dehydrated medium should be discarded if it is not free flowing or if the color has changed from the original light beige color.