

## PRODUCT INFORMATION

Azide Blood Agar Base

Cat. No. A01-113

### DESCRIPTION

Azide Blood Agar Base contains Sodium azide which has been proved to have a bacteriostatic effect on Gram-negative bacteria, thus, this medium is used for the isolation of streptococci and staphylococci in clinical specimens, water, foods, etc.

Peptone mixture and Beef extract provide nitrogen, vitamins, minerals and amino acids essential for growth. Bacteriological agar is the solidifying agent. Sodium chloride supplies essential electrolytes for transport and osmotic balance. 0.02% Sodium Azide in blood agar was reported to prevent the swarming of *Proteus* and allows the selective isolation from mixed bacterial populations. Gram-negative organisms are inhibited by Sodium azide.

The medium can be supplemented with 5% sheep blood that allows for the investigation of hemolytic reactions of fastidious pathogens. Hemolytic patterns may vary with the type of blood or base medium used. For instance, defibrinated sheep blood gives best results for Group A streptococci.

### FORMULA (g/L)

Bacteriological agar	11.0 g	Casein peptone	7.7 g
Peptic digest of animal tissue	5.7 g	Sodium chloride	5.0 g
Beef extract	2.5 g	Sodium azide	0.2 g

Final pH: 7.2 ± 0.2 at 25 °C

\*Grams per liter may be adjusted or formula supplemented to obtain desired performance.

### PREPARATION

Suspend 33,2 grams of the medium in one liter of distilled water. Mix well and dissolve by heating with frequent agitation. Boil for one minute until complete dissolution. Sterilize in autoclave at 121 °C for 15 minutes. To prepare blood agar, cool to 45-50 °C and aseptically add 5% sterile defibrinated blood. Homogenize gently and pour into Petri dishes. Be careful to avoid bubble formation when adding the blood to the cooled medium and rotate the flask or bottle slowly to create a homogeneous solution.

## QUALITY CONTROL SPECIFICATIONS

1. The powder is homogenous, free flowing and beige.
2. Visually the prepared medium is amber, opalescent and without rests.
3. When prepared with blood, the prepared medium is cherry red without rests.
4. Expected cultural response after 18-24 hours at 35 °C ± 2°C.

ORGANISM	RESULT	RESULT
<i>Staphylococcus epidermidis</i> ATCC 12228	Good Growth	Hemolysis gamma
<i>Enterococcus faecalis</i> ATCC 19433	Good Growth	Hemolysis alpha/gamma
<i>Streptococcus pyogenes</i> ATCC 19615	Good Growth	Hemolysis beta
<i>Escherichia coli</i> ATCC 25922	Inhibited Growth	-
<i>Streptococcus pneumoniae</i> ATCC 6305	Good Growth	Hemolysis alpha

## STORAGE

Store the sealed bottle containing the dehydrated medium at 2 to 30°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 color.