Blue Broth

Medium used for the identification and determination of microorganisms on the basis of lactose fermentation.

• CONTENTS (Liter)

Peptone	10.0 g
Lactose	10.0 g
Sodium Chloride	5.0 g
Bromothymol Blue	0.045 g

Final pH = 7.2 ± 0.2 at 25°C

• PROCEDURE

Suspend 25.05 G of powder in 1 L of distilled or deionized water. Heat to boiling until completely dissolved. Sterilize by autoclave at 121°C for 15 minutes. Cool to 45 - 50°C in water bath. Mix well. Pour into tubes.

• INTERPRETATION

Blue Broth is a medium used for the identification and determination of microorganisms on the basis of lactose fermentation. Peptone provides nitrogen, carbon, vitamins and nutrients. Lactose is the fermentable carbohydrate. Sodium chloride maintains the osmotic balance. Bromothymol blue is a pH indicator.

• TECHNIC

Inoculate the specimen using a sterile needle to the medium. Incubate at 35 ± 2˚C for 18 - 24 hours. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium
Appearance: free-flowing, homogeneous
Color: beige
Prepared medium
Appearance: slightly opalescent
Color: green
Incubation conditions: 35 ± 2˚C / 18 - 24 hours

Microorganism	ATCC	Growth	Lactose Fermentation
Escherichia coli	25922	good	+ (yellow)
Enterobacter aerogenes	13048	good	+ (yellow)
Klebsiella pneumoniae	27736	good	+ (yellow)
Proteus mirabilis	25933	good	- (green)
Salmonella typhimurium	14028	good	- (green)

• WARNING AND PRECAUTIONS

Check the label before opening the container and follow appropriate microbiological laboratory procedures. Wear protective gloves, protective clothing, safety glasses, and face protection. Safety instructions can be found in Material Safety Data Sheet (MSDS).

• PERFORMANCE AND EVALUATION

Performance of the medium can be expected when used according to the directions on the label within the recommended temperature.

• STORAGE AND SHELF LIFE

The powder is very hygroscopic. Store in the provided container according to the temperature indicated on the container surface, and store the prepared medium at a temperature of 2 to 8°C. Use within the expiration date indicated on the label and store in a dry and well-ventilated place. The product can be used until the stated expiration date.

• REFERENCES

1. Atlas R. M., 2004, Handbook of Microbiological Media, 3rd Edition,CRC Press.

• PACKAGE

Cat. No : MB-B2128 Blue Broth	500 G