

Bryant and Burkey Broth



Medium used for the isolation and identification of lactate fermenting *Clostridium* spp. in milk and dairy products.

• CONTENTS (Liter)

Tryptone	15.0 g
Yeast Extract	5.0 g
Beef Extract	7.5 g
Sodium Acetate	5.0 g
L-Cysteine	0.5 g
Resazurin	0.002 g
Final pH = 5.9 ± 0.2 at 25°C	

• PROCEDURE

Suspend 33.0 G of powder in 1 L of distilled or deionized water. Add 8.3 mL of Sodium Lactate Solution (MB-S0742). 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. Pour 2 mL of sterile paraffin into each tube.

• INTERPRETATION

Bryant and Burkey Broth is a medium used for the isolation and identification of lactate fermenting *Clostridium* spp. in milk and dairy products. Tryptone and beef extract provide nitrogen, carbon, amino acids and minerals. Yeast extract provides vitamins. Sodium acetate is the selective agents. L-Cysteine is the reducing agents. Resazurin is an oxidation-reduction indicator which becomes pink when oxidized and colorless when reduced. Sodium lactate solution is fermented under anaerobic conditions and provides carbon, energy, producing hydrogen and CO₂. A gas is promoted by paraffin oil.

• TECHNIC

Inoculate the specimen using a sterile needle to the medium. Incubate at 37 ± 2°C up to 7 days. Refer appropriate references for recommended test procedure.

• QUALITY CONTROL FOR USE

Dehydrated medium

Appearance: free-flowing, homogeneous

Color: light beige

Prepared medium

Appearance: clear

Color: light amber

Incubation conditions: 37 ± 2°C / up to 7 days

Microorganism	ATCC	Growth
<i>Clostridium perfringens</i>	13124	good
<i>Pseudomonas aeruginosa</i>	27853	inhibited

• 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. Store prepared medium at 2 - 8°C.

• REFERENCES

1. Rosenberger, K.F. 1951. The development of methods for the study of obligate anaerobes in silage. Proc. Soc. Appl. Bacteriol. 14: 161-164.
2. Bryant, M.P., and L.A. Burkey. 1956. The characteristics of lactate-fermenting spore-forming anaerobes from silage. J. Bacteriol. 71: 43-46.

• PACKAGE

Cat. No : MB-B1142 Bryant and Burkey Broth	500 G
---	-------