

# BGY Broth

Medium used for cultivation of *Clostridium butyricum*.

## • CONTENTS (Liter)

Glucose	10.0 g
Beef Extract	5.0 g
Yeast Extract	5.0 g
Monopotassium Phosphate	0.2 g
Dipotassium Phosphate	0.2 g
Magnesium Sulfate	0.1 g
Manganese Sulfate	0.01 g
Ferrous Sulfate	0.01 g
Final pH = 7.0 ± 0.2 at 25°C.	

## • PROCEDURE

Suspend 20.5 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. Dispense in tubes. If necessary, dispense the medium before autoclave.

## • INTERPRETATION

BGY Broth is a medium used for cultivation of *Clostridium butyricum*. Beef extract is the carbon and nitrogen sources. Yeast extract provides vitamin B complex that stimulate bacterial growth. Glucose is the fermentable carbohydrate. Phosphates are buffering agents. Magnesium sulfate and manganese sulfate provide cations. Ferrous sulfate is present as oxygen scavengers.

## • TECHNIC

Inoculate the specimen with stab using a sterile needle to the medium. Shake gently for spreading microorganism. Incubate at 37°C for 24 hours under anaerobic condition. Refer appropriate references for recommended test procedure.

## • QUALITY CONTROL FOR USE

### Dehydrated medium

Appearance: free-flowing, homogeneous.

Color: light beige.

### Prepared medium

Appearance: clear with no precipitate.

Color: yellowish amber.

Incubation conditions: 37 °C / 24 hours under anaerobic condition

Microorganism	ATCC	Inoculum CFU	Growth
<i>Clostridium butyricum</i>	19398	50-100	good

**• 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 or until signs of deterioration or contamination are evident. Store prepared medium at 2-8°C.

**• REFERENCES**

1. Qing kong, Guoqing HE, Qihe Chen (2004) Optimization of Medium Composition for Cultivating *Clostridium butyricum* with Response Surface Methodology. Journal of Food Science. 69(7):163 - 168

**• PACKAGE**

Cat. No : MB-B0891 BGY Broth	500 G
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