# **BHI (Brain Heart Infusion) Broth**



Medium used for the cultivation and enumeration of fastidious, aerobic and anaerobic microorganisms.

# CONTENTS (Liter)

| Beef Heart, Infusion                        | 9.8 g  |
|---|--------|
| Calf Brains, Infusion                       | 7.7 g  |
| Proteose Peptone                            | 10.0 g |
| Dextrose                                    | 2.0 g  |
| Sodium Chloride                             | 5.0 g  |
| Disodium Phosphate                          | 2.5 g  |
| Final pH = $7.4 \pm 0.2$ at $25^{\circ}$ C. |        |

## PROCEDURE

Suspend 37.0 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

BHI (Brain Heart Infusion) Broth is a medium used for the cultivation of a large variety of microorganisms, including fastidious organisms, yeasts and moulds. Brain heart infusion, proteose peptone, calf brains Infusion provide nitrogen, vitamin, and carbon source. Dextrose is the carbohydrate source. Sodium chloride maintains the osmotic balance. Disodium phosphate is the buffering agent.

#### TECHNIC

Inoculate the specimen using a sterile needle to the medium. Incubate at 33 - 37°C for 18 - 48 hours under appropriate condition. Refer appropriate references for recommended test procedure.

#### QUALITY CONTROL FOR USE

**Dehydrated medium** 

Appearance: free-flowing, homogeneous

Color: beige
Prepared medium
Appearance: clear
Color: light amber

Incubation conditions: 33 - 37°C / 18 - 48 hours under appropriate condition

| Microorganism            | ATCC  | Inoculum CFU | Growth |
|--------------------------|-------|--------------|--------|
| Staphylococcus aureus    | 25923 | 50-100       | good   |
| Streptococcus pneumoniae | 6305  | 50-100       | good   |
| Streptococcus pyogenes   | 19615 | 50-100       | good   |
| Yersinia enterocolitica  | 23715 | 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. Store prepared medium at 2 - 8°C.

## REFERENCES

- 1. Ajello, L., L.K. Georg, W. Kaplan, and L. Kaufman. 1966 "Laboratory manual for medical mycology" .
- 2. Onderdonk, A.B., and S.D. Allen.1995. "Clostridium", p.574-586. Manual of clinical microbiology, 6th ed. American Socety for Microbiology, Washington,.
- 3. NCCLS document M22-A2, 1996. Approved Standard.
- 4. Rosenow, E.C. 1919. Jour. Dent. Res., 1: 205-249.

#### PACKAGE

| Cat. No : MB-B1008<br>BHI (Brain Heart Infusion) Broth | 500 G |
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