

RTA.KK.311 Revision Date/Revision Number:-/0 Issue Date: 01.04.2015

# BHI AGAR / BHI BROTH (50CC)

# **INTENDED USE:**

A qualitative test for detection of microorganisms in blood. In a sterile glass bottle combination of broth and one agarcoated surface.

#### PRINCIPLE AND INTERPRETATION:

A versatile liquid infusion medium which is suitable for the cultivation of streptococci, Neisseria and other fastidious organisms, this medium is recommended for blood culture work and, for the isolation and cultivation of pathogenic fungi.

#### **COMPOSITION:**

BHI AGAR			
Ingredients	Gr/Liter		
Brain infusion solids	12,5 gr		
Beef heart infusion solid	5 gr		
Proteose peptone	10 gr		
Sodium chloride	5.0 gr		
Glucose	2.0 gr		
Disodium phosphate	2.5 gr		
Agar	10.0gr		

BHI BROTH			
Ingredients	Gr/Liter		
Brain infusion solids	12,5 gr		
Beef heart infusion solid	5 gr		
Proteose peptone	10 gr		
Glucose	2 gr		
Sodium chloride	5 gr		

**pH**:  $7.4 \pm 0.2$ 

#### PRECAUTIONS:

For professional use only. Do not use tubes if they show evidence of microbial contamination, discoloration, cracking or other signs of deterioration.

## **TEST PROCEDURE:**

Label the ready to use blood culture bottle. remove the top seal of the cap. Disinfect the part of the rubber stopper which is now exposed. Draw patient's blood with the sterile or disposable needle and syringe. Transfer the blood sample immediately into the culture bottle by puncturing the rubber stopper with the needle and injecting the blood. Keep the bottle in an upright position preferably in a biological safety cabinet, place an alcohol swab over the rubber stopper. Insertion and withdrawal of the needle should be done in a straight line. Discard the needle and mix the contents by gently inverting the bottle 2-3 times. Incubation at a temperature of 35±2°C and observed after 24-72 hours.

Biphasic bottles should be incubated either in an upright position or on their side with the agar surface up. In this way, colonies of bacteria may be observed on the surface of the agar after incubation. The purpose of the biphasic bottle is to shorten the time necessary to obtain isolated organisms for identification procedures.

## **QUALITY CONTROL:**

# 1.Sterility Control:

Incubation 48 hours at 30-35°C and 72 hours at 20-25°C: NO GROWTH

#### 2.Phsical/Chemical Control

**pH**:  $7.4 \pm 0.2 / 7.4 \pm 0.2$ 

Apperance: Straw coloured /Straw coloured solution.

<sup>\*\*\*</sup>Formula adjusted, standardized to suit performance parameters



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#### 3.Microbiological Control: Incubation at a temperature of 35±2°C and observed after 24-72 hours.

Microorganism	Inoculum	Results	
	(CFU)	Growth	Reaction
Escherichia coli ATCC 25922	10-100	Good	Good
Staphylococcus aureus ATCC 25923	10-100	Good	Good
Streptococcus pyogenes ATCC 19615	10-100	Good	Good
Enterococcus facecalis ATCC 29212	10-100	Good	Good
Candida albicans ATCC 10231	10-100	Good	Good

#### LIMITATIONS OF THE PROCEDURE:

This medium is less suited for identifying hemolytic forms when blood has been added due to its glucose content.

# STORAGE CONDITIONS AND SHELF LIFE:

Store the prepared medium at 2 - 12°C. Use before expiry date on the label..Do not use beyond stated expiry date.

#### **DISPOSAL:**

Incubated medium may contain active bacteria and micro-organisms. Do not open infected medium. Infected tube should be autoclaved, incinerated or opened and soaked in a chlorine-based disinfectant (liquid bleach) for 20 minutes prior to disposal.

#### **PACKAGING:**

Katalog Number: 01601

Content/Packaging: Flipp off cap x 20 piece /box

#### REFERENCES:

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- 4. Downes F. P. and Ito K., (Eds.), 2001, Compendium of Methods for the Microbiological Examination of Foods, 4th Ed., APHA, Washington, D.C.
- 5. Roseburg T. et al, 1944, J. Inf. Dis., 74:131
- 6. Conant N. F., 1950, Diagnostic Procedures and Reagents, 3rd Ed., APHA Inc., New York
- 7. Howard B., Keiser J. F., Weissfeld A. et al, 1994, Clinical and Pathogenic Microbiology, 2nd Ed., Mosby Co.
- 8. Murray P. R., Baron J. H., Pfaller M. A., Jorgensen J. H. and Yolken R. H., (Eds.), 2003, Manual of Clinical Microbiology, 8th Ed., American Society for Microbiology, Washington, D.C.

