TECHNICAL DATA SHEET

BRAIN-HEART AGAR

NUTRITIVE MEDIA

1 INTENDED USE

Brain Heart broth is suitable for the culture of a large variety of microorganisms including yeasts & molds. After addition of sheep's blood, the media is used for the culture of fastidious bacteria in a veterinary domain. After addition of gentamycin and chloramphenicol, a selective media is obtained that is suitable for the culture of pathogenic fungi in heavily contaminated bacterial samples and saprophytic molds. In light of its glucose content, the media is not suitable for the characterization of hemolysis.

2 PRINCIPLES

The extracts of heart and brain tissue, as well as the gelatin peptone are essential elements for the culture of fastidious germs.

Glucose is used through the fermentative pathway.

Disodium phosphate acts as a buffering agent.

3 TYPICAL COMPOSITION

The composition can be adjusted in order to obtain optimal performance.

For 1 liter of base media :

- Brain heart extract ..... 17,5 g
- Pancreatic digest of gelatin ..... 10,0 g
- Sodium chloride ..... 5,0 g
- Disodium phosphate ..... 2,5 g
- Glucose ..... 2,0 g
- Bacteriological agar ..... 15,0 g

pH of the ready-to-use media at 25°C : 7,4 ± 0,2.

4 PREPARATION

- Suspend 52,0 g of dehydrated media (BK029) in 1 liter of distilled or demineralized water.
- Slowly bring to a boil, stirring until complete dissolution.
- Divide into tubes or vials.
- Sterilize in an autoclave at 121 °C for 15 minutes.
- Cool and maintain at 44-47 °C.
- Add any additives that are necessary for the culture of targeted bacteria ; defibrinated sheep blood, gentamycin (BS009) or chloramphenicol (BS021)…
- Mix well.
- Pour into sterile Petri plates and let solidify on a cold surface.
- Dry the plates in an incubator with the covers partially removed.

✓ **Reconstitution :**
52,0 g/L

✓ **Sterilization :**
15 min at 121 °C

5 INSTRUCTIONS FOR USE

- Inoculate the sample by streaking on the surface.
- Incubate at 30 or at 37°C for 24 to 72 hours, in the optimal conditions for the culture of the targeted microorganism.

6 QUALITY CONTROL

Dehydrated media : cream powder, free-flowing and homogeneous.
Prepared media : amber agar.

Typical culture response after 48 hours of incubation at 37 °C, qualitative method of inoculation :

Microorganisms		Growth
Escherichia coli	WDCM 00013	Good, score 2
Staphylococcus aureus	WDCM 00033	Good, score 2
Staphylococcus aureus	WDCM 00034	Good, score 2
Candida albicans	WDCM 00054	Good, score 2

7 STORAGE / SHELF LIFE

Dehydrated base media : 2-30 °C.
The expiration date is indicated on the label.

Prepared base media in vials (*) : 180 days at 2-8 °C.
Prepared base media in plates (*) : 30 days at 2-8 °C.
(*) Benchmark value, determined in standard conditions of preparation, following manufacturer's instructions.

8 PACKAGING

Dehydrated culture media :
500 g bottle BK029HA

9 BIBLIOGRAPHY

Rosenow, E.C. 1919. Studies on elective localization, focal infection with special reference to oral sepsis. Jour. Dent. Res., 1: 205-249.

Forney, J.E., and Miller, J.M. 1985. In Lennette, Balows, Hausler and Shadomy (Ed). Manual of Clinical Microbiology, 4 th Ed., A.S.M. Washington, D.C.

10 ADDITIONAL INFORMATION

The information provided on the labels take precedence over the formulations or instructions described in this document and are susceptible to modification at any time, without warning.

Document code : BRAIN HEART AGAR_ENv7
Creation date : 01-2003.
Updated : 04-2016.
Origin of revision : General update.