

# Brain-Heart/Agar

356-4174

## DEFINITION

Brain-heart agar is recommended for the culture of streptococci, *Neisseria* and other fastidious bacteria.

*N.B.:* This medium was used by Seth in 1970 to isolate *N. gonorrhoeae*.

## PRINCIPLE

A highly nutrient, solid medium recommended for the culture of particularly fastidious bacteria. This medium can be made more selective (inhibiting the growth of *Proteus* without affecting *N. gonorrhoeae*) by the addition of sterile horse blood (10%), vancomycin, colistin and fungizone.

## PRESENTATION

### Dehydrated

500 g

code 356-4174

## STORAGE

- + 15°C to 25°C, in carefully-sealed bottles in a cool, dry place.
- Expiration date and batch number are shown on the package.

## THEORETICAL FORMULA

Peptone	10 g
Veal Brain extract	12.5 g
Beef heart extract	5 g
Sodium chloride	5 g
Disodium phosphate	2.5 g
Glucose	2 g
Agar	10 g
Distilled water	1,000 ml

Final pH (25°C) = 7.4 ± 0.2

## OTHER PRODUCTS REQUIRED (NOT SUPPLIED)

- Distilled water

## EQUIPMENT REQUIRED (NOT SUPPLIED) (non-exhaustive)

- Scales
- Sterile weighing bags
- Grinder
- Hotplate
- Mixer-homogenizer
- 125 ml Pyrex bottles with autoclave-proof stopper
- Sterile Petri dishes (Ø = 90 mm)
- Pasteur pipettes (code 355-0751) or inoculating loop

- Thermostatically-controlled incubator or incubation room, precise to ± 1°C
- Autoclave
- All usual laboratory equipment.

## PREPARATION OF DEHYDRATED MEDIUM

### Always shake before use.

Dissolve 47 g of powder in 1 liter of distilled water. Wait for 5 minutes, then mix until a homogenous suspension is obtained. Heat gently, swirling frequently, then bring to the boil until completely dissolved.

Dispense, then sterilize in autoclave at 121°C ± 1°C for 15 minutes.

**Reconstitution ratio: 47 g/l**

**500 g of powder makes 10,6 liters of medium.**

## PRECAUTIONS

Comply with Good Laboratory Practice.

## QUALITY CONTROL OF MANUFACTURER

Every product manufactured and marketed by Bio-Rad is subject to a quality-assurance procedure at all stages, from the reception of raw materials to the marketing of the end-product.

Each batch of finished product undergoes quality control and is marketed only if it satisfies the acceptability criteria.

Documentation relative to the production and control of each batch is kept on file.

## PERFORMANCES / QUALITY CONTROL OF THE TEST

The growth performances of the media are verified with the following strains:

STRAINS	Results after 24-48 h culture at 37°C
<i>Staphylococcus aureus</i> ATCC 25923	Good growth
<i>Streptococcus pyogenes</i> ATCC 19615	Good growth

(See the table next page...)

# Brain-Heart/Agar

STRAINS	Results after 24 -48 h culture at 37°C
<i>Brucella melitensis</i> + CO <sub>2</sub> CIP A128	Good growth
<i>Streptococcus pneumoniae</i> ATCC 6303	Good growth
<i>Clostridium sporogenes</i> * ATCC 11437	Good growth
<i>Clostridium perfringens</i> * ATCC 13124	Good growth
<i>Peptostreptococcus anaerobius</i> * CIP 60.2	Good growth
<i>Bacteroides vulgatus</i> * ATCC 8482	Good growth
<i>Bifidobacterium bifidum</i> * CIP 56.7	Good growth

\* : anaerobic conditions

## KEY WORDS

Brain-heart / *Streptococci* / *Neisseria* / Medium.

## BIBLIOGRAPHY

- **SETH A. (1970)**: Brit. J. Vener Dis. 46 : 201-202.
- **CREITZ J.R. and PUCKETT T.F. (1954)**: Am. J. Clin. Path 24 : 1318-1323.