

TECHNICAL DATA SHEET

Article No. 9264

Brain Heart Infusion Broth (BHI Broth)

SYNONYMS

-

SPECIFICATION

Nutrient rich medium suitable for the isolation of pathogenic microorganisms from clinical specimens.

FORMULA* IN G/L

Brain extract	12.5
Heart extract	5.0
Peptone	10.0
Dextrose	2.0
Sodium chloride	5.0
Disodium phosphate	2.5

Final pH 7.4 ±0.2 at 25 °C

*Adjusted and/or supplemented as required to meet performance criteria.

DIRECTIONS

Dissolve 37 g of powder in 1 l of distilled water, heating up if necessary. Distribute into suitable containers and sterilize by autoclaving at 121 °C for 15 minutes.

DESCRIPTION

Brain Heart Infusion Broth is used for the cultivation of fastidious bacteria (streptococci, pneumococci, meningococci, etc.) and is also recommended for the cultivation of pathogenic fungi. Growth of the accompanying bacterial microbiota can be almost completely suppressed by adding 20 IU penicillin and 40 µg streptomycin per ml of culture medium.

If this medium is to be used for the selective isolation of fastidious fungi (especially of *Histoplasma capsulatum* and *Blastomyces*) from mixed infected samples add 10 % sterile defibrinated blood and also add 0.05 µg/ml of cycloheximide and 0.5 µg/ml of chloramphenicol.

Th. Geyer GmbH & Co. KG

Dornierstr. 4 – 6
D-71272 Renningen
Tel.: +49 7159 1637-0
Fax: +49 7159 1637-710
renningen@thgeyer.de
www.thgeyer.de

BW-Bank (Swift/BIC SOLADEST600)
IBAN DE85600501010002036302
Postbank Stuttgart (Swift/BIC PBNKDEFFXXX)
IBAN DE3260010070000020708
Deutsche Bank (Swift/BIC DEUTDESSXXX)
IBAN DE06600700700125518100

St.-Nr. 70093/40018 / USt-IdNr. DE147510304
Amtsgericht Stuttgart / HRA-Nr. 254140
Persönlich haftende Gesellschafterin:
Geyer Beteiligungsgesellschaft mbH
Amtsgericht Stuttgart / HRB-Nr. 252035
Geschäftsführer: Lutz-Alexander Geyer / Thomas Roth

This medium is not suitable for obtaining characteristic haemolytic reactions even after addition of blood because of its glucose content.

QUALITY CONTROL

- Incubation temperature: 37 °C ±1.0
- Incubation time: 20-24 h
- Inoculum: ≤100 CFU. Min. 50 CFU (productivity), according to ISO 11133:2014.

Microorganism	Growth	Remarks
<i>Staphylococcus aureus</i> ATCC® 25923	Good	None
<i>Staphylococcus aureus</i> ATCC® 6538	Good	None
<i>Escherichia coli</i> ATCC® 8739	Good	None
<i>Streptococcus pyogenes</i> ATCC® 19615	Good	None
<i>Streptococcus pneumoniae</i> ATCC® 49619	Good	None

REFERENCES

- AJELLO, L., L.K. GEORG, W. KAPLAN & L. KAUFMAN (1966) Laboratory Manual for Medical Mycology. (CDC) US DHEW, Centre for Disease Control. Atlanta.
- APHA-AWWA-AWPC (1998) Standard methods for the examination of water and wastewater. 20th ed. Washington. DC. USA.
- ATLAS, R.M. & L.C. PARKS (1993) Handbook of Microbiological Culture Media. CRC Press. London.
- CONANT (1950) Diagnostic Procedures and Reagents 3rd ed. APHA. Inc. New York.
- DIN 10163 Norme. Mikrobiologische Untersuchung von Fleisch und Fleischerzeugnissen. Bestimmung Koagulase-positiver Staphylokokken. Referenzverfahren.
- DOWNES, F.P. & K. ITO (2001) Compendium of methods for the microbiological examination of foods. 4th ed. APHA. Washington. DC. USA.
- FDA (Food and Drug Administrations) (1998) Bacteriological Analytical Manual. 8th ed. Revision A. AOAC International. Gaithersburg. VA. USA.
- HAYDEN, R.L. (1923) Elective localization in the eye of bacteria from infected teeth. Arch. Int. Med. 32:828 - 849.
- HOWELL, A. (1948) The efficiency of methods for the isolation of Histoplasma capsulatum. Public Health Reports. 63:173-178.
- ISO Standard 5944 (2001) Milk and milk based products - Detection of coagulase positive staphylococci - MPN Technique.
- ISO 11133:2014. Microbiology of food, animal feed and water. Preparation, production, storage and performance testing of culture media.
- ROSENOW, E.C. (1919) Studies on elective localization. Focal infection with special reference to oral sepsis. J. Dental Res. 1:205-249.
- UNE-EN ISO 11133 (2014). Microbiología de los alimentos para consumo humano, alimentación animal y agua-Preparación, producción, conservación y ensayos de rendimiento de los medios de cultivo.

Th. Geyer GmbH & Co. KG

Dornierstr. 4 – 6
D-71272 Renningen
Tel.: +49 7159 1637-0
Fax: +49 7159 1637-710
renningen@thgeyer.de
www.thgeyer.de

BW-Bank (Swift/BIC SOLADEST600)
IBAN DE85600501010002036302
Postbank Stuttgart (Swift/BIC PBNKDEFFXXX)
IBAN DE32600100700000020708
Deutsche Bank (Swift/BIC DEUTDESSXXX)
IBAN DE06600700700125518100

St.-Nr. 70093/40018 / USt-IdNr. DE147510304
Amtsgericht Stuttgart / HRA-Nr. 254140
Persönlich haftende Gesellschafterin:
Geyer Beteiligungsgesellschaft mbH
Amtsgericht Stuttgart / HRB-Nr. 252035
Geschäftsführer: Lutz-Alexander Geyer / Thomas Roth

STORAGE

Keep tightly closed, away from light, in a dry place (4-30 °C).

SHELF LIFE

4 years from date of production.

Th. Geyer GmbH & Co. KG

Dornierstr. 4 – 6
D-71272 Renningen
Tel.: +49 7159 1637-0
Fax: +49 7159 1637-710
renningen@thgeyer.de
www.thgeyer.de

BW-Bank (Swift/BIC SOLADEST600)
IBAN DE85600501010002036302
Postbank Stuttgart (Swift/BIC PBNKDEFFXXX)
IBAN DE32600100700000020708
Deutsche Bank (Swift/BIC DEUTDESSXXX)
IBAN DE06600700700125518100

St.-Nr. 70093/40018 / USt-IdNr. DE147510304
Amtsgericht Stuttgart / HRA-Nr. 254140
Persönlich haftende Gesellschafterin:
Geyer Beteiligungsgesellschaft mbH
Amtsgericht Stuttgart / HRB-Nr. 252035
Geschäftsführer: Lutz-Alexander Geyer / Thomas Roth