Specification

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

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 if necessary. Distribute into containers and sterilize in the autoclave at 121ºC for 15 minutes.

Description

Brain Heart Infusion is used for the cultivation of fastidious bacteria (streptococci, pnemococci, 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.
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:** 24 ±2 h

Inoculum: Practical range 100 ±20 CFU. Min. 50 CFU (productivity), according to ISO 11133:2014.

Microorganism	Growth	Remarks
Staphylococcus aureus ATCC® 25923	Good	-
Staphylococcus aureus ATCC® 6538	Good	-
Clostridium perfringens ATCC® 13124	Good	-
Streptococcus pyogenes ATCC® 19615	Good	-
Streptococcus pneumoniae ATCC® 49619	Good	-
Candida albicans ATCC® 10231	Good	-

References

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· DIN 10163 Norme. Mikrobiologische Untersuchung von Fleisch und Fleischerzeugnissen. Bestimmung Koagulase-positiver Staphylokokken. Referenzverfahren.
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· 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.
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Storage

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