



Reference : 02-191

Scharlau Microbiology - Technical data sheet

Product :
TODD HEWITT BROTH

Specification

Liquid culture medium for the propagation of β -haemolytic streptococci and for serological typing studies.

Formula * in g/L

Heart extract.....	10,0
Casein peptone.....	20,0
Dextrose.....	2,0
Sodium carbonate.....	2,5
Sodium chloride.....	2,0
Disodium phosphate.....	0,4

Final pH 7,8 \pm 0,2 at 25 °C

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

Directions

Dissolve 36,4 g of powder in 1 L of distilled water, heating if necessary. Distribute into suitable containers and sterilize in the autoclave at 121 °C for 15 minutes.

Description

This classical formulation has been modified to achieve optimal results in the growth and production of haemolysins, which are not inhibited due to the high buffer composition of the medium. Many official organisations, such as APHA, have recommended this medium for use in the epidemiologic studies of group A streptococci as well as other pathogenic microorganisms. Some authors recommend this broth supplemented with antibiotics (Nalidixic acid and Gentamicin or Colistin) as a selective enrichment broth for *Streptococcus agalactiae* in female genital specimens.

With the addition of 15 g/L of agar, the solid form of this medium becomes an excellent substrate for the production of capsules in streptococci.

Quality control

Incubation temperature: 36 °C \pm 2 **Incubation time:** 24-48 h

Inoculum: Practical range 10-100 CFU. Min. 50 CFU (productivity)

Microorganism	Growth	Remarks
<i>Staphylococcus aureus</i> ATCC® 25923	Good	-
<i>Streptococcus pyogenes</i> ATCC® 19615	Good	-
<i>Streptococcus pneumoniae</i> ATCC® 49619	Good	-
<i>Streptococcus agalactiae</i> ATCC® 12386	Good	-

References

- ATLAS, R.M. and L.C. PARKS (1993) Handbook of Microbiological Media. CRC Press Inc. London.
- FORBES, B.A., D.F. SAHM & A.S. WEISSFELD (1998) Bailey & Scott's Diagnostic Microbiology. 10th Ed. Mosby Inc., St Louis, Missouri. USA.
- MacFADDIN, J. (1985) Media for isolation-cultivation-identification-maintenance of medical bacteria. Vol. 1. Williams & Wilkins. Baltimore. USA.
- ISO 11133:2014/ Adm 1:2018. Microbiology of food, animal feed and water. Preparation, production, storage and performance testing of culture media.
- TODD, E.W. and HEWITT, L.F. (1932) A new culture medium for the production of antigenic streptococcal haemolysin. J. Path. Bact. 35:973-974.
- WINN, W.C., S.D. ALLEN, W.M. JANDA, E.W. KONEMAN, G.W. PROCOP, P.C. SCHRECKENBERGER & G.L. WOODS (2006) Koneman's Color Atlas and Textbook of Diagnostic Microbiology. Lippincott, William & Wilkins, Baltimore, MD, USA.

Storage

For laboratory use only. Keep tightly closed, away from bright light, in a cool dry place (+4 °C to 30 °C).