

Technical Information

Tryptose Broth

Product Code: DM 1177

Application: Tryptose Broth is recommended for the cultivation primarily of *Brucella*.

Composition**

Ingredients	Gms / Litre
Tryptose	20.000
Dextrose	1.000
Sodium chloride	5.000
Final pH (at 25°C)	7.3±0.2

Principle & Interpretation

**Formula adjusted, standardized to suit performance parameters

Huddleson used Tryptose media for the isolation of *Brucella* species from man $^{(1)}$. Tryptose containing media, rather than the conventionally used meat infusion media have been used for the enumeration and isolation of *Brucella* species $^{(2,3)}$.

Tryptose Broth is also recommended by APHA & FDA ^(4, 5) This medium can be used as general purpose media for cultivation of wide variety of organisms. It can also be supplemented with defibrinated blood (sheep, horse) to prepare blood containing medium for the isolation of fastidious organisms like *Brucella*. Tryptose Broth can be supplemented with 0.1% agar for the cultivation of anaerobes.

Dextrose is the source of energy. Tryptose serves as nitrogen source while sodium chloride maintains osmotic equilibrium.

Methodology

Suspend 26 grams of powder media in 1000 ml distilled water. If desired, add 0.5 - 1% agar to the medium. Shake well & heat to dissolve the media completely. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes. For blood media, aseptically add 5% v/v sterile defibrinated blood. Mix well and dispense as desired.

Quality Control

Physical Appearance

Cream to yellow homogeneous free flowing powder

Colour and Clarity of prepared medium

Basal Medium: Yellow coloured, clear solution. With addition of 5% v/v sterile defibrinated blood, cherry red coloured, opaque solution forms in tubes.

Reaction

Reaction of 2.6% w/v aqueous solution at 25°C. pH: 7.3±0.2

pH Range:- 7.10-7.50

Cultural Response/Characteristics

DM1177: Cultural characteristics observed after an incubation at 35-37°C for 48-72 hours with added 5% v/v sterile defibrinated blood in presence of 10% Carbon dioxide (CO_2).

Organism	Inoculum (CFU)	Growth
Brucella melitensis ATCC 4309	50-100	good-luxuriant
Brucella suis ATCC 4314	50-100	good-luxuriant
Streptococcus pneumonia ATCC 6303	50-100	good-luxuriant
Streptococcus pyogenes ATCC 19615	50-100	good-luxuriant





Storage and Shelf Life

Dried Media: Store below 30°C in tightly closed container and use before expiry date as mentioned on the label.

Prepared Media: 2-8° in sealable plastic bags for 2-5 days.

Further Reading

- 1. Huddleson I. F., 1943, Brucellosis in man and animals, rev., Ed., The Commonwealth Fund, New York, N.Y.
- 2. Ruiz Castañeda M., 1947, Proc. Soc. Exp. Biol. Med., 64:114.
- 3. Huddleson I. F., 1939, Brucellosis in Man and Animals, Oxford University Press, Oxford, England.
- 4. Downes F. P. and Ito K., (Ed.), 2001, Compendium of Methods for the Microbiological Examination of Foods. 4th Ed. American Public Health Association, Washington, D.C.
- 5. U.S. Food and Drug Administration, 1995, Bacteriological Analytical Manual, 8th Ed., AOAC International, Gaithersburg, Md.

Disclaimer:

- User must ensure suitability of the product(s) in their application prior to use.
- The product conform solely to the technical information provided in this booklet and to the best of knowledge research and development work carried at **CDH** is true and accurate
- Central Drug House Pvt. Ltd. reserves the right to make changes to specifications and information related to the products at any time.
- Products are not intended for human or animal diagnostic or therapeutic use but for laboratory, research or further manufacturing of diagnostic reagents extra.
- Statements contained herein should not be considered as a warranty of any kind, expressed or implied, and no liability is accepted for
 infringement of any patents. Do not use the products if it fails to meet specifications for identity and performens parameters.

