

TRYPTIC SOY BROTH (100 ML)

INTENDED USE:

Tryptic Soy Broth (Soybean-Casein Digest Medium) is a general purpose liquid enrichment medium used in qualitative procedures for the sterility test and for the enrichment and cultivation of aerobic microorganisms that are not excessively fastidious.

PRINCIPLE AND INTERPRETATION:

Because of its capacity for growth promotion, this formulation was adopted by The United States Pharmacopeia (USP) and the European Pharmacopeia (EP) as a sterility test medium. In clinical microbiology, the medium is used in a variety of procedures, e.g., for the preparation of the inoculum and for suspending strains for Kirby-Bauer disc diffusion susceptibility testing, and for the microbiological test procedure of culture media according to the CLSI standards. However, unsupplemented Tryptic Soy Broth is not recommended as a primary enrichment medium directly inoculated with the clinical specimen but can be used for pure cultures previously isolated from clinical specimens. In Tryptic Soy Broth, enzymatic digests of casein and soybean provide amino acids and other complex nitrogenous substances. Glucose (=dextrose) is an energy source. Sodium chloride maintains the osmotic equilibrium. Dibasic potassium phosphate acts as a buffer to control pH.

COMPOSITION:

| Ingredients | Gr/Liter |
|--|----------|
| Tryptone (Pancreatic Digest of Casein) | 17 gr |
| Soytone (Peptic Digest of Soybean) | 3 gr |
| Glucose (= Dextrose) | 2,5 gr |
| Sodium Chloride | 5 gr |
| Dipotassium Phosphate | 2,5 gr |

***Formula adjusted, standardized to suit performance parameters

pH: 7,3 ± 0,2

PRECAUTIONS:

For professional use only. Do not use tubes if they show evidence of microbial contamination, discoloration or other signs of deterioration.

TEST PROCEDURE:

For application in clinical microbiology, inoculate the medium with the strain and incubate as required. Usually, an incubation temperature of 35 ± 2° C is adequate. Incubate for 18 to 24 h or longer if required. For use as a suspension medium, inoculate the tube with a small amount of growth from an overnight culture on a solid medium.

For use in industrial microbiology, inoculate the sample or material to be tested into the medium. See the references for details. 3,4 According to the European Pharmacopeia, incubate aerobically at 35 ± 0,2°C for a maximum of 3 days (for the bacteria) and at 25 ± 0,2° C for a maximum of 5 days (for the fungi). For use in sterility testing, consult the USP or EP for procedural details and specifications for volume of medium relative to container size.

QUALITY CONTROL:

1.Sterility Control:

Incubation 48 hours at 30-35°C and 72 hours at 20-25°C: NO GROWTH

2.Physical/Chemical Control

pH: 7,3 ± 0,2

Apperance: Yellow

3.Microbiological Control: Incubation at a temperature of 35±2°C: 24-48 h, 25±2 °C:6 d

| Microorganism | Inoculum (CFU) | Results | |
|--|----------------|---|--------|
| | | Incubation | Growth |
| <i>Staphylococcus aureus</i> ATCC 6538 | 10-100 | 30-35° C, 18-24 hours | Good |
| <i>Pseudomonas aeruginosa</i> ATCC 9027 | 10-100 | 30-35° C, 18-24 hours | Good |
| <i>Bacillus subtilis</i> ATCC 6633 | 10-100 | 20-25° C, </= 3 days and 30-35° C, </= 3 days | Good |
| <i>Aspergillus brasiliensis</i> ATCC 16404 | 10-100 | 20-25° C, </= 6 days | Good |
| <i>Candida albicans</i> ATCC 10231 | 10-100 | 20-25° C, </= 3 days | Good |

LIMITATIONS OF THE PROCEDURE:

Tryptic Soy Broth is a universal enrichment and isolation medium for many nonclinical procedures. In clinical microbiology, it is mainly used for suspending cultures for susceptibility tests and for the preparation of inocula in quality control test procedures. Growth obtained in this medium must be subcultured onto appropriate solid media to obtain pure cultures which afterwards can be identified with methods appropriate for the isolates. Tryptic Soy Broth is not the appropriate medium for the cultivation of fastidious microorganisms (e.g., Haemophilus or Neisseria spp.) and for the detection and recovery of strict anaerobes. Fluid Thioglycollate Media should be used for the cultivation of strict anaerobes.

STORAGE CONDITIONS AND SHELF LIFE:

Store the prepared medium at 2 - 12°C or 2-25°C. Use before expiry date on the label. Do not use beyond stated expiry date.

DISPOSAL:

Incubated medium may contain active bacteria and micro-organisms. Do not open infected medium. Infected tube should be autoclaved, incinerated or opened and soaked in a chlorine-based disinfectant (liquid bleach) for 20 minutes prior to disposal.







PACKAGING:

Katalog Number: 01107

Content/Packaging: Screw cap x 20 piece /box

REFERENCES:

1. Marshall, R.T. (ed.). 1993. Standard methods for the examination of dairy products, 16th ed. American Public Health Association, Washington, D.C.
2. MacFaddin, J.F. 1985. Media for the isolation - cultivation - maintenance of medical bacteria. Volume 1. Williams and Wilkins, Baltimore, London
3. U.S. Pharmacopeial Convention, Inc. The U.S. Pharmacopeia /The national formulary Current edition. U.S. Pharmacopeial Convention, Inc., Rockville, Md
4. Council of Europe. European Pharmacopoeia, current edition. European Pharmacopoeia Secretariat. Strasbourg/France.
5. Clinical and Laboratory Standards Institute (CLSI, formerly NCCLS). Approved standard: M2. Performance standards for antimicrobial disk susceptibility tests. CLSI, Wayne, PA, USA. Search for latest version at www.clsi.org
6. Clinical and Laboratory Standards Institute (CLSI, formerly NCCLS). Approved standard: M22. Performance standards for antimicrobial disk susceptibility tests. CLSI, Wayne, PA, USA. Search for latest version at www.clsi.org

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|------------------|-------------------|---|-----------------------------------|---|---------------------|
| STERILE A | Aseptic Sterile |  | Use by |  | Look at user manual |
| LOT | Batch Code |  | Temperature Limitation |  | Manufacturer |
| REF | Catalogue Number |  | Do not reuse | | |
| CONTROL - | Negative Controls |  | Contains sufficient for <n> tests | | |
| CONTROL + | Positive Controls | | | | |