TRYPTIC SOY BROTH W/ BETALACTAMASE+ TWEEN80 (9 ML)

INTENDED USE:

Tryptic Soy Broth with Betalactamase +Tween 80 is a universal complex medium for the isolation and cultivation of fastidious aerobic bacteria, yeasts and molds in the presence of disinfectant residues.

PRINCIPLE AND INTERPRETATION:

Tryptic Soy Broth is a highly nutritious media and hence supports the growth of a wide variety of aerobic and facultative anaerobic microorganisms including fungi.
The neutralizing additives Polysorbate (Tween) 80 reverse the growth inhibitory effect of most disinfectants and antiseptics. Polysorbate 80 is effective against quaternary ammonium compounds, amphoteric surfactants, benzamidines, chlorhexidines and dequadin. Polysorbate 80 inactivates benzyl alcohol, carbanilides, dichlorbenzyl alcohols, benzoic acid, p-hydroxybenzoic acid and its esters, phenols, phenylethyl alcohols and Solbrols.
Beta-lactamase added in the medium will inactivate the beta-lactam antibiotics thus enabling the growth of resistant strains present in the environment of clean rooms where production of antibiotics is carried out.

COMPOSITION:

Ingredients	Gr/Liter
Casein Peptone	17 gr
Soytone (Peptic Digest of Soybean)	3 gr
NaCl	5 gr
Phosphate Buffer	2,5 gr
Glucose Monohydrate	2,5 gr
Tween 80	5 gr
Betalactamase	0,2 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 30-35ºC and 72 hours at 20-25ºC: NO GROWTH

2.Phsical/Chemical Control

pH: 7,3 ± 0,2
Apperance: Yellow, clear

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
Bacillus subtilis ATCC 6633	10-100	20-25° C, </= 3 days and 30-35° C, </= 3 days	Good
Staphlococcus aureus ATCC 6538	10-100	30-35° C, 18-24 hours	Good
Candida albicans ATCC 10231	10-100	20-25° C, </= 3 days	Good
Pseudomonas aeruginosa ATCC 9027	10-100	30-35° C, 18-24 hours	Good
Aspergillus brasiliensis ATCC 16404	10-100	20-25° C, </= 6 days	Good

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: 01072
Content/Packaging:50 Tubes/Box

REFERENCES:

1. Brown, M.R.W. (1966): Turbidimetric method for the rapid evaluation of antimicrobial agents. Inactivation of preservatives by nonionic agent. – J. Soc. Cosm. Chem., 17; 185-195.
2.European Pharmacopoeia 8.0 (2014): 2.6.1. Sterility; 2.6.12. Microbial examination of non-sterile products (total viable aerobic count);
3.Holdeman, L. V., Cato, E.P., Moore, W.E.C (1977): Anaerobe Laboratory Manual. Virginia Polytechnic Institute and State University. Clacksburg, VA.
4.HUGO, W.B., a. FRIER, M.: Mode of action on the antibacterial compound desqualinium acetate. – Appl. Microbiol., 17; 118-127 (1969).
5.Japanese Pharmacopoeia 16th edition (2011): 4.05 Microbial Limit Test; 4.06 Sterility Test. MacFaddin, J.F. 1985. Media for isolation-cultivation- identification-maintenance of medical bacteria, vol. I. Williams & Wilkins, Baltimore.