Tryptose Phosphate Broth

Intended Use
Tryptose Phosphate Broth is used for cultivation of fastidious bacteria.

Summary
Tryptose Phosphate Broth is prepared as recommended by APHA for the cultivation of fastidious aerobic bacteria especially *Streptococcus* species, *Listeria* and pathogenic *Neisseria* species. It is also used for antibiotic sensitivity testing by tube method. This medium with the addition of agar and sodium azide is used for the isolation of pathogenic Streptococci, *Neisseria* and other fastidious microorganisms from blood, dairy products and clinical specimens. Tryptose Phosphate Broth with added agar can also be used for emulsification of cheese before isolation of *Brucella* species and is also recommended by Diagnostic Procedures and Reagents.

Principle
The inclusion of tryptose as nitrogen sources makes this medium highly nutritious. Dextrose serves as the source of fermentable carbohydrate. Sodium chloride maintains osmotic equilibrium. Phosphate salt helps in buffering the medium. The addition of 0.1-0.2 % agar facilitates anaerobic growth and aids in dispersion of reducing substances and carbon dioxide formed in the environment.
For blood culture work aseptically add 10 mL of sterile defibrinated blood to 150 mL of sterile medium in 300 mL Erlenmeyer flask. Incubate and subculture on other media.

Formula*

Ingredients	**g/L**
Tryptose	20.0
Dextrose	2.0
Sodium Chloride	5.0
Dipotassium Phosphate	2.5
Final pH (at 25°C)	7.3 ± 0.2

*Adjusted to suit performance parameters.

Type of Specimen
Clinical sample: Blood; Dairy sample

Storage and Stability
Store dehydrated medium below 30°C in tightly closed container and the prepared medium at 2°C-8°C. Avoid freezing and overheating. Use before expiry date on the label. Once opened keep powdered medium closed to avoid hydration.

Specimen Collection and Handling
Ensure that all samples are properly labelled.
Follow appropriate techniques for handling samples as per established guidelines.
Some samples may require special handling, such as immediate refrigeration or protection from light, follow the standard procedure.
The samples must be stored and tested within the permissible time duration.
After use, contaminated materials must be sterilized by autoclaving before discarding.

Directions
1. Suspended 29.50 g of the powder in 1000 mL purified / distilled water.
2. Add 0.1% Agar, if desired.
3. Mix thoroughly.
4. Heat if necessary, to dissolve the powder completely.
5. Dispense and sterilize by autoclaving at 121°C (15 psi) for 15 minutes as per validated cycle.

Quality Control

Dehydrated Appearance: Beige, free-flowing, homogeneous powder
Prepared Appearance: Light amber, clear to very slightly opalescent solution, may have a very slight precipitate.
Growth Promotion Test: Growth promotion is carried out in accordance with the harmonized method of USP/EP/JP/IP and growth is observed after an incubation at 30°C-35°C for 18-48 hours.
Growth Promoting Properties: The test results observed are within the specified temperature and shortest period of time specified in the test, inoculating ≤100 cfu of appropriate microorganism at 30°C-35°C for 18hrs.

Organism (ATCC)	**Growth**
Staphylococcus epidermidis strain PCI 1200 (12228)	Good
Streptococcus pneumoniae (6305)	Good
Streptococcus pyogenes Strain Bruno (19615)	Good
Neisseria meningitidis (13090)	Good

Performance and Evaluation

Performance of the product is dependent on following parameters as per product label claim:

1. Directions
2. Storage
3. Expiry

Warranty

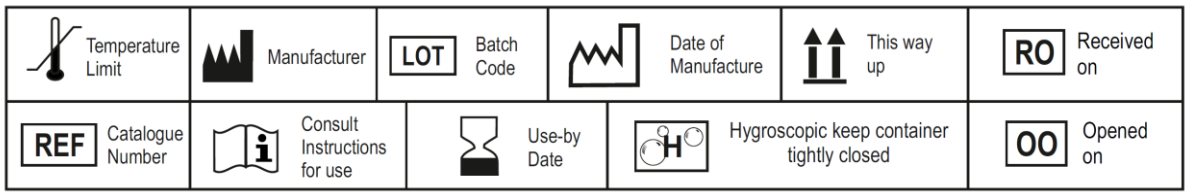
This product is designed to perform as described on the label and package insert. The manufacturer disclaims any implied warranty of use and sale for any other purpose.

References

1. American Public Health Association, 1976, Standard Methods for the Examination of Dairy Products, 14th ed., APHA Inc., New York.
2. MacFaddin J., 1985, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol. I, Williams and Wilkins, Baltimore.
3. American Public Health Association, 1953, Diagnostic Procedures and Reagents, 4th ed., APHA Inc., New York.
4. Newman R.W., 1950, J. Milk Food, Tech., 13: 226.
5. American Public Health Association, 1953, Standard Methods for the Examination of Dairy Products, 10th ed., APHA Inc., New York.
6. Data on file: Microxpress®, A Division of Tulip Diagnostics (P) Ltd.

Product Presentation:

Cat No.	**Product description**	**Pack Size**
201200230500	Dehydrated Culture Media	500 g



Revision: 0825/VER-03

Disclaimer

Information provided is based on our inhouse technical data on file, it is recommended that user should validate at his end for suitable use of the product.