

Tryptose Phosphate Broth

Tryptose Phosphate Broth recommended for cultivation of fastidious bacteria from clinical and non-clinical samples.

REF: BS.1/NZ01.100.0100	100 Gram	REF: BS.1/NZ01.250.0250	250 Gram
REF: BS.1/NZ01.500.0500	500 Gram		



PRINCIPLE AND INTERPERTATION :

Tryptose Phosphate Broth is prepared as recommended by APHA (1) 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 (2). This medium with the addition of agar and sodium azide is used for the isolation of pathogenic Streptococci, Neisseria and other fastidious microorganisms from dairy products (3) and clinical specimens. Tryptose Phosphate Broth with added agar can also be used for emulsification of cheese before isolation of Brucella species (1) and is also recommended by Diagnostic Procedures and Reagents (4). 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 to M093 facilitates anaerobic growth and aids in dispersion of reducing substances and carbon dioxide formed in the environment (2). 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.

MEDIA COMPOSITION

Item	Formula per liter of medium
Tryptose	20.00 gm
Dextrose	2.00 gm
Sodium chloride	5.00 gm
Disodium phosphate	2.500 gm

Final pH (at 25°C) 7.3 ± 0.2 ** Formula adjusted, standardized to suit performance parameters.

PRECAUTIONS AND WARNINGS

Media to be handled by entitled and professionally educated person. Do not ingest or inhale.

Good Laboratories practices using appropriate precautions should be followed in:

- Wearing personnel protective equipment (overall, gloves, glasses,).
- Do not pipette by mouth.
- In case of contact with eyes or skin; rinse immediately with plenty of soap and water. In case of severe injuries; seek medical advice immediately.
- Respect country requirement for waste disposal.

S56: dispose of this material and its container at hazardous or special waste collection point.

S57: use appropriate container to avoid environmental contamination.

S61: avoid release in environment.

For further information, refer to the Tryptose Phosphate Broth material safety data sheet.

STORAGE AND STABILITY

BioScien Store between 10-30°C in a tightly closed container and the prepared medium at 15-30°C. Use before expiry date on the label. On opening, product should be properly stored dry, after tightly capping the bottle in order to prevent lump formation due to the hygroscopic nature of the product. Improper storage of the product may lead to lump formation. Store in dry ventilated area protected from extremes of temperature and sources of ignition Seal the container tightly after use. Product performance is best if used within stated expiry period.

PREPARATION

Suspend 29.5 grams in 1000 ml purified / distilled water. Add 0.1% agar, if desired. Heat if necessary to dissolve the medium completely. Dispense in tubes or flasks as desired. Sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minute.

Deterioration

The color of **BioScien** Yellow coloured clear solution without any precipitate.

EQUIPMENT REQUIRED NOT PROVIDED

- Sterile petri dishes
- Incubator
- Autoclave

PERFORMANCE CHARACTERISTICS

Cultural Cultural characteristics observed after an incubation at 35-37°C for 18-24 hours.

Organisms (ATCC)	Growth
Neisseria meningitidis ATCC 13090	good-luxuriant
Staphylococcus aureus subsp. aureus ATCC 25923	good-luxuriant
Streptococcus pneumoniae ATCC 6303	good-luxuriant
Streptococcus pyogenes ATCC 19615	good-luxuriant
Staphylococcus epidermidis ATCC 12228	good-luxuriant

QUALITY CONTROL

To ensure adequate quality control, it is recommended that positive and negative control included in each run. If control still out of range please contact **BioScien** technical support.

REFERENCE

1. American Public Health Association, Standard Methods for the Examination of Dairy Products, 1978, 14th Ed., Washington D.C.
2. American Public Health Association, 1953, Diagnostic Procedures and Reagents, 4th ed., APHA Inc., New York.
3. Isenberg, H.D. Clinical Microbiology Procedures Handbook. 2nd Edition.
4. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.
5. MacFaddin J., 1985, Media for Isolation-Cultivation-Identification-Maintenance of Medical Bacteria, Vol. I, Williams and Wilkins, Baltimore.
6. Newman R.W., 1950, J. Milk Food, Tech., 13 : 226

SYMBOLS IN PRODUCT LABELLING			
	For in-vitro diagnostic use		Number of <n> test in the pack
	Batch Code/Lot number		Caution
	Catalogue Number		Do not use if package is damaged
	Temperature Limitation		Consult Instruction for use
	Expiration Date		
	Manufactured by		