Glucose Salt Teepol Broth (Part A & B)

M621S

Glucose Salt Teepol Broth is used for enrichment of *Vibrio parahaemolyticus* (marine isolates). It is recommended by BIS under the specifications IS : 5887 (Part V) 1976, reaffirmed 1986.

Composition**

Ingredients	Gms / Litre
Part A	-
Peptic digest of animal tissue	10.000
Meat extract	3.000
Sodium chloride	30.000
Glucose	5.000
Methyl violet	0.002
Part B	-
Teepol	4.000
Final pH (at 25°C)	7.4±0.2

**Formula adjusted, standardized to suit performance parameters

Directions

Suspend 48 grams of Part A in 1000 ml distilled water containing 4 ml of Part B. Heat gently to dissolve the medium completely. When double strength broth is required the ingredients in double amount are dissolved in 1000 ml water. Dispense in tubes as desired and sterilize by autoclaving at 15 lbs pressure (121°C) for 15 minutes.

Principle And Interpretation

Glucose Salt Teepol Broth is used to enrich *Vibrio parahaemolyticus* from sea foods and also used to enumerate the bacteria by MPN technique (1). Present formulation is recommended by BIS (2) for enrichment of *Vibrio cholerae* and other *Vibrios* responsible for food poisoning.

Peptic digest of animal tissue and meat extract provide essential nitrogenous nutrients and high percentage of sodium chloride (3%) helps for the better enrichment of halophilic *Vibrio parahaemolyticus* . Glucose is utilized by the organism while teepol inhibits the migration of halophilic organisms and the growth of the gram-positive organisms. After overnight incubation at 35 ± 2°C, a loopful of culture from top 1 cm of the broth showing growth is streaked onto TCBS Agar (M870S). *Vibrio parahaemolyticus* colonies on TCBS Agar appear as round, green or bluish measuring 2-3 mm in diameter, while *Vibrio alginolyticus* colonies are larger and yellow coloured. These colonies are further identified by biochemical characterization.

Quality Control

Appearance

Part A : Cream to yellow homogeneous free flowing powder Part B : Colourless viscous liquid

Colour & Clarity of Medium

Purple coloured clear solution with avery slight precipitate

Reaction

Reaction of 4.8% w/v aqueous solution with 0.4% Teepol at 25°C. pH : 7.4±0.2

pH

7.20-7.60

Cultural response

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

Organism	Inoculum (CFU)	Growth
Vibrio alginolyticus ATCC 17749	50-100	good-luxuriant
Vibrio parahaemolyticus ATCC 17802	50-100	good-luxuriant

Storage and Shelf Life

Store below 30°C in tightly closed container and the prepared medium at 2 - 8°C. Use before expiry date on the label.

Reference

1.Speck M.L. (Ed.), 1984, Compendium of Methods for the Microbiological Examination of Foods, 2nd ed., APHA. Washington D.C.
2.Bureau of Indian Standards, IS : 5887 (Part V) 1976, reaffirmed 1986.

Revision : 2 / 2015