

Glucose Salt Teepol Broth

Liquid medium for detection of *Vibrio parahaemolyticus* in foodstuffs.

TYPICAL FORMULA	(g/l)
Peptone	10.0
Meat Extract	3.0
Glucose	5.0
Sodium Chloride	30.0
Methyl Violet	0.002
Final pH 7.5 ± 0.2 at 25°C	

DESCRIPTION

Glucose Salt Teepol Broth is a selective enrichment medium used for the enumeration of *V. parahaemolyticus* from seafoods by the most-probable-number (MPN) technique.

PRINCIPLE

Peptone and meat extract provide amino acids, nitrogen, carbon, minerals, vitamins and minerals which support the growth of microorganism. Glucose is the fermentable carbohydrate. The high concentration of sodium chloride helps for the better enrichment of halophilic *V. parahaemolyticus*. Methyl violet is the pH indicator.

Supplementation with Teepol serves to inhibit the growth of gram-positive organisms.

PREPARATION

Suspend 48.0 g of powder in 1 liter of deionized or distilled water. Add Teepol to obtain a concentration of 4 g/l in the complete medium. Mix well. Sterilize by autoclaving at 121°C for 15 minutes. Distribute into final containers.

TECHNIQUE

Prepare serial 10-dilutions of the initial homogenate in Glucose Salt Teepol Broth and incubate at 37 ± 1°C for 18-24 hours. From each tube displaying turbid growth subculture to a plate of TCBS Agar (ref. 11195) and incubate at 37 ± 1°C for 18-24 hours.

Note: To maximize the recovery of *Vibrio* spp and reduce the growth of contaminating microflora, the test sample should be kept under moderate refrigeration (about 7-10°C) and tested as soon as it is received in the laboratory.

INTERPRETATION OF RESULTS

On TCBS agar, examine for blue-green colonies. Perform biochemical tests for final identification. When those colonies are confirmed as *Vibrio parahaemolyticus*, refer to the original positive dilution in the enrichment broth and apply the 3 tube MPN tables for final enumeration of the organism.

STORAGE

The powder is very hygroscopic, store the powder at 10-30°C, in a dry environment, in its original container tightly closed and use it before the expiry date on the label or until signs of deterioration or contamination are evident. Store prepared tubes at 2-8°C away from light.

WARNING AND PRECAUTIONS

The product does not contain hazardous substances in concentrations exceeding the limits set by current legislation and therefore is not classified as dangerous. It is nevertheless recommended to consult the safety data sheet for its correct use. The product is intended for professional use only and must be used by properly trained operators.

DISPOSAL OF WASTE

Disposal of waste must be carried out according to the national and local regulations in force.

REFERENCES

- ISO 21872-1:2007. Microbiology of food and animal feeding stuffs – Horizontal method for the detection of potentially enteropathogenic *Vibrio* spp. – Part 1: Detection of *Vibrio parahaemolyticus* and *Vibrio cholerae*.
- ISO 21872-2:2007. Microbiology of food and animal feeding stuffs – Horizontal method for the detection of potentially enteropathogenic *Vibrio* spp. – Part 2: Detection of species other than *Vibrio parahaemolyticus* and *Vibrio cholerae*.
- American Public Health Association (1992): compendium of methods for the microbiological examination of foods, 3rd edition.
- Dewitt, W.E., E.J. Gangarosa, I. Huq, and A. Zarifi (1971) Holding media for the transport of *Vibrio cholerae* from field to laboratory. Am. J. Trop. Med. Hyg. 20:685-688.
- R. Sakazaki, et al. (1986) J. Food Prot. 49, 773
- Kobayashi, T., S. Enomoto, R. Sakazaki, and S. Kuwahara (1963) A new selective medium for pathogenic vibrios: T.C.B.S. Agar (Modified Nakanishi's Agar). Jap. J. Bacteriol. 18:387-391.



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PRODUCT SPECIFICATIONS

NAME

Glucose Salt Teepol Broth

PRESENTATION

Dehydrated medium

STORAGE

10-30°C

PACKAGING

Ref.	Content	Packaging
610359	500 g	500 g of powder in plastic bottle
620359	100 g	100 g of powder in plastic bottle

pH OF THE MEDIUM

7.5 ± 0.2

USE

Glucose Salt Teepol Broth is a selective enrichment medium used for the detection of *V. parahaemolyticus* in foods

TECHNIQUE

Refer to technical sheet of the product

APPEARANCE OF THE MEDIUM

Powder medium

Appearance: free-flowing, homogeneous

Colour: yellowish

Ready-to-use medium

Appearance: very slightly opalescent

Colour: yellow

SHELF LIFE

4 years

QUALITY CONTROL

- Control of general characteristics, label and print
- Microbiological control
Inoculum: ≤100 CFU
Incubation conditions: 18-24 h at 37 ± 1°C

Microorganism










Vibrio parahaemolyticus

WDCM 00185

Growth

Good

TABLE OF SYMBOLS

 LOT	Batch code	 Do not reuse	 Manufacturer	 Use by	 Fragile, handle with care
 REF	Catalogue number	 Temperature limitation	 Contains sufficient for <n> tests	 Caution, consult instructions for use	



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