

Also known as

Tryptone Buffered Peptone

Specification

Dilution and non-selective pre-enrichment liquid medium according to ISO standards 6579, 6785, 6887 and 8261.

Formula * in g/L

Casein peptone..... 10,0
Sodium chloride.....5,0
Disodium phosphate (anhydrous) 3,5^(*)
Potassium phosphate..... 1,5

Final pH 7,0 ±0,2 at 25 °C

(*) Equivalent to 9,0 g of disodium hydrogen phosphate dodecahydrate.

* Adjusted and /or supplemented as required to meet performance criteria

Directions

Dissolve 20 g of powder in 1 L of distilled water. Distribute into suitable containers and sterilize in the autoclave at 121°C for 15 minutes.

Description

This formulation of Buffered Peptone Water has the advantages of the two classical diluents used for food samples: it has the property of revitalization of the peptone water and the pH change absorbing capacity of the phosphate buffer.

The composition of this diluent is made according to the specification of the ISO Standard 6579 for the detection of *Salmonella* in foods and other ISO Standards (6785, 6887 and 8261).

Quality control
Incubation temperature: 37°C ±1,0

Incubation time: Recovery 18h±2

Inoculum: 100 ± 20 CFU. Min. 50 CFU (productivity). *E. coli* / *Stph. aureus*, keep at 20-25°C for 45 minutes to 1 h. For *Listeria spp.* keep at 18-22°C for 1 h ± 5 minutes. according to ISO 11133:2014.

Microorganism	Growth	Remarks
<i>Staphylococcus aureus</i> ATCC® 25923	Good	Recovery ±30% T0 in TSA
<i>Escherichia coli</i> ATCC® 25922	Good	Recovery ±30% T0 in TSA
<i>Listeria monocytogenes</i> ATCC® 35152	Good	Recovery ±30% T0 in TSA
<i>Listeria monocytogenes</i> ATCC® 13932	Good	Recovery ±30% T0 in TSA
<i>Escherichia coli</i> ATCC® 8739	Good	Pre-enrichment 36 °C±2 (18±2h)
<i>Salmonella typhimurium</i> ATCC® 14028	Good	Pre-enrichment 36 °C±2 (18±2h)
<i>Salmonella enterica</i> ATCC® 13076	Good	Pre-enrichment 36 °C±2 (18±2h)

References

- ATLAS, R.M. & L.C. PARKS (1993) Handbook of Microbiological Media. CRC Press, Inc. London.
- ISO 11133:2014. Microbiology of food, animal feed and water. Preparation, production, storage and performance testing of culture media.
- ISO Standard 6579-1 (2017) Microbiology of food chain - Horizontal method for the detection, enumeration and serotyping of Salmonella - Part 1 : Detection of Salmonella spp.
- ISO 6785 (2001) Milk and milk products. Detection of Salmonella spp.
- ISO 6887-1 (1999) Microbiology of food and animal feeding stuffs - Preparation of test samples, initial suspension and decimal dilutions for microbiological examination. Part 1: General rules for the preparation of the initial suspension and decimal dilutions.
- ISO 6887-2 (2003) Microbiology of food and animal feeding stuffs - Preparation of test samples, initial suspension and decimal dilutions for microbiological examination. Part 2: Specific rules for the preparation of meat and meat products.
- ISO 6887-3 (2003) Microbiology of food and animal feeding stuffs - Preparation of test samples, initial suspension and decimal dilutions for microbiological examination. Part 3: Specific rules for the preparation of fish and fishery products.
- ISO 6887-4 (2003) Microbiology of food and animal feeding stuffs - Preparation of test samples, initial suspension and decimal dilutions for microbiological examination. Part 4: Specific rules for the preparation of products other than milk and milk products, meat and meat products and fish and fishery products.
- ISO/DIS 6887-5 (2009) Microbiology of food and animal feeding stuffs - Preparation of test samples, initial suspension and decimal dilutions for microbiological examination. Part 5: Specific rules for the preparation of milk and milk products.
- ISO 8261 (2001) Milk and milk products. General guidance for the preparation of test samples for microbiological examination.
- ISO 21528-1:2017 Standard. Microbiology of food chain - Horizontal methods for the detection and enumeration of Enterobacteriaceae - Part 1: Detection of Enterobacteriaceae.
- ISO. Norma 21528-2 (2017) Microbiology of the food chain – Horizontal methods for the detection and enumeration of Enterobacteriaceae. – Part 2: Colony-count method.
- ISO 22964 (2017) Microbiology of the food chain.- Horizontal method for the detection of Cronobacter spp
- PASCUAL ANDERSON, M^a R. (1992) Microbiología Alimentaria. Díaz de Santos, S.A. Madrid.
- UNE-EN ISO 11133 (2014). Microbiología de los alimentos para consumo humano, alimentación animal y agua.- Preparación, producción, conservación y ensayos de rendimiento de los medios de cultivo.

Storage

For laboratory use only. Keep tightly closed, away from bright light, in a cool dry place (+4 °C to 30 °C).