

Technical Data Sheet

BUFFERED PEPTONE WATER (Non animal) DEHYDRATED MEDIUM

Art. 84600.25000

Intended use

Liquid medium for the dilution and non-selective pre-enrichment from food samples.

Formula * - Composition in g/L

Bacteriological peptone	10.00
Sodium chloride	5.00
Disodium hydrogen phosphate (anhydrous)	3.5(*1)
Potassium dihydrogen phosphate	1.50

Final pH 7.0 ±0.2 at 25 °C

(*1) Equivalent to 9.0 g of disodium
hydrogen phosphate dodecahydrate

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

Instructions for preparation

Dissolve 20 g of powder in 1 l of purified water. Distribute into suitable containers and sterilise in the autoclave at 121°C for 15 minutes.

Principle of the method and general information

This formulation of Buffered peptone water has the advantages of the two classical diluents used for food samples: it has the property of revitalisation 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).

Instruction for use

There are a lot of standardized methods using buffered Peptone Water (ISO). The technician must follow the protocol validated in his laboratory.

Quality control

Incubation temperature: 35 °C ± 2.0

Incubation time: Rec. 24 h/ ≤ 5 d (fungi)

Inoculum: 10-100 CFU/ tube (productivity) at T0, 45 minutes and 1 h (20-25 °C), according ISO 11133:2014/Amd 1:2018.

Microorganism	Growth	Remarks
<i>Staphylococcus aureus</i> ATCC® 25923	Good	Recovery ±30% T0 (original enumeration)
<i>Bacillus subtilis</i> ATCC® 6633	Good	Recovery ±30% T0 (original enumeration)
<i>Pseudomonas aeruginosa</i> ATCC® 27853	Good	Recovery ±30% T0 (original enumeration)
<i>Salmonella typhimurium</i> ATCC® 14028	Good	Recovery ±30% T0 (original enumeration)
<i>Escherichia coli</i> ATCC® 25922	Good	Recovery ±30% T0 (original enumeration)
<i>Candida albicans</i> ATCC® 10231	Good	Recovery ±30% T0 (original enumeration)
<i>Listeria monocytogenes</i> ATCC® 13932	Good	Recovery ±30% T0 (original enumeration)

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References

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- ATLAS, R.M. & L.C. PARKS (1993) Handbook of Microbiological Media. CRC Press, Inc. London.
- ISO 11133:2014/ Adm 1:2018. 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.

Storage conditions

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

Ordering information

84600.25000 BUFFERED PEPTONE WATER (Non animal) Bulk of 25 Kg.

Note: For supplements see the section - Instructions for preparation.