

Buffered Peptone Water Standard

Catalog #	Description
12013260	BPW Standard , 5 L x 2 bags
12013259	BPW Standard , dehydrated, 500 g
12013258	BPW Standard , dehydrated, 5 kg

For laboratory use only.

Intended Use

Buffered Peptone Water (BPW) Standard is used as diluent and nutritive enrichment broth for the resuscitation and growth of a wide variety of microorganisms including *Cronobacter*, *Enterobacteriaceae*, *Escherichia coli*, and *Salmonella* in all food products, animal feed products, and water samples.

Principle

The specific selection of peptone allows a high level of nutritivity. In combination with the phosphate buffer's maintenance of a steady pH and osmotic balance, thanks to the presence of chloride sodium, BPW Standard offers favorable conditions for the recovery and growth of a wide range of microorganisms from a variety of matrices.

Theoretical Composition

Enzymatic casein digest 10 g

Sodium chloride 5 g

Potassium dihydrogenphosphate 1.5 g

Disodium hydrogen phosphate 3.5 g

Final pH at 25°C = 7.0 ± 0.2

Shelf Life and Storage

Store dehydrated at 15–25°C in a carefully sealed package in a dry and dark place.

Store liquid at 15–25°C.

Required Materials Not Supplied

This is a non-exhaustive list.

Equipment

- All usual laboratory equipment
- Incubators or incubation room
- Scales
- Stirrer/homogenizer
- Vortexer

Precautions

- Respect Good Laboratory Practice (EN ISO 7218). Appropriate protection, such as gloves and lab coats, should be worn when working with potentially infectious live bacteria
- Media that have come in contact with food samples should be considered contaminated and should be disposed of in accordance with local rules and regulations
- For SDS product safety information and certificate of analysis, visit bio-rad.com

Quality Control

Every product manufactured and marketed by Bio-Rad is subject to a quality assurance procedure at all stages, from reception of raw materials through to marketing of the finished products. Each batch of finished product undergoes quality control according to EN ISO 11133 and is marketed only if it satisfies the acceptability criteria. Documentation relative to the production and quality control of each batch is kept on file.

Protocol

Dehydrated BPW Standard Preparation

- Dissolve 20 g of BPW Standard in 1,000 ml of sterile distilled water
- Mix, heating if necessary, until a homogeneous suspension is obtained
- Dispense in appropriate container
- Sterilize in autoclave at $121 \pm 1^\circ\text{C}$ for 15 min.

Sample Preparation and Enrichment Protocol

- Dilute sample according to the standard method applicable to the product concerned

References

ISO 11290-2:2017 – Microbiology of the food chain – Horizontal method for the detection and enumeration of *Listeria monocytogenes* and of *Listeria* spp. – Part 2: enumeration method

ISO 19250:2013 – Water quality – Detection of *Salmonella* spp.

ISO 21528-1:2017 – Microbiology of the food chain – Horizontal methods for the detection and enumeration of *Enterobacteriaceae* – Part 1: detection of *Enterobacteriaceae*

ISO 22964:2017 – Microbiology of the food chain – Horizontal method for the detection of *Cronobacter* spp.

ISO 6579-1:2017 – Microbiology of the food chain – Horizontal method for the detection, enumeration and serotyping of *Salmonella* – Part 1: Detection of *Salmonella* spp.

ISO 6887-1:2017 – Microbiology of the food chain – 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 6887-5:2010 – 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

Revision History

Release date	Document number	Change
06-12-2020	10000128738 Ver A	- New document

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