

# TM 2281 – PHOSPHATE BUFFERED SALINE (FOR LISTERIA) (ISO 11290-2-2017)

#### **INTENDED USE**

Recommended for the preparation of dilutions for Listeria species for further testing form food sample.

## PRODUCT SUMMARY AND EXPLANATION

Phosphate Buffered Saline is used for preparing dilutions, blanks for the examination of food. This solution gives a pH of 7.2 and also provides sodium and phosphate ions. The composition is as per ISO.

## COMPOSITION

Ingredients	Gms / Ltr		
Sodium chloride	8.500		
Disodium hydrogen phosphate	8.980		
Sodium dihydrogen phosphate	2.710		

#### PRINCIPLE

The medium consists of sodium chloride which maintains the osmotic balance of the medium. Phosphates present in the helps in buffering action in the medium.

#### **INSTRUCTION FOR USE**

- Dissolve 18.37 grams in 1000 ml purified / distilled water.
- Dispense into tubes or flasks as desired. Heat if necessary to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C)) for 15 minutes.

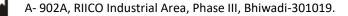
# QUALITY CONTROL SPECIFICATIONS

Appearance of Powder	: White to cream homogeneous free flowing powder.
Appearance of prepared medium	: Colourless clear solution without any precipitate.
pH (at 25°C)	: 7.2±0.2

## **INTERPRETATION**

Cultural characteristics observe after incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Incubation Temperature	Incubation Period
Listeria monocytogenes	35152	50-100	Good-luxuriant	>=50%	35-37°C	18-20 Hours
Listeria monocytogenes	19112	50-100	Good-luxuriant	>=50%	35-37°C	18-20 Hours



**f 🞯 in 💓** 1

## **PRODUCT DATA SHEET**



Listeria monocytogenes	13932	50-100	Good-luxuriant	>=50%	35-37°C	18-20 Hours
Listeria monocytogenes	19111	50-100	Good-luxuriant	>=50%	35-37°C	18-20 Hours
Listeria ivanovii	19119	50-100	Good-luxuriant	>=50%	35-37°C	18-20 Hours
Listeria innocua	33090	50-100	Good-luxuriant	>=50%	35-37°C	18-20 Hours
Listeria seeligeri	35967	50-100	Good-luxuriant	>=50%	35-37°C	18-20 Hours
Listeria welshimeri	43549	50-100	Good-luxuriant	>=50%	35-37°C	18-20 Hours
Listeria grayi	19120	50-100	Good-luxuriant	>=50%	35-37°C	18-20 Hours

#### PACKAGING:

In pack size of 500 gm bottles.

#### STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 25-30°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

**Product Deterioration:** Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

#### DISPOSAL

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

#### REFERENCES

- 1. Isenberg, H.D. Clinical Microbiology Procedures Handbook. 2nd Edition.
- 2. Jorgensen, J.H., Pfaller , M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual of Clinical Microbiology, 11th Edition. Vol. 1.
- 3. Microbiology of Food chain-Horizontal method for the detection and enumeration of Listeria monocytogenes and of Listeria spp. Detection method .ISO 11290-1:2017



## **PRODUCT DATA SHEET**



4. Microbiology of Food chain-Horizontal method for the detection and enumeration of Listeria monocytogenes and of Listeria spp. Enumeration method ISO 11290-2:2017.



NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices. \*For Lab Use Only Revision: 08 Nov., 2019

