

## Phosphate Buffer Solution pH 7.2

General purpose diluent for the microbiological examination of food, water and pharmaceutical products.

TYPICAL FORMULA	(g/l)
Potassium Dihydrogen Phosphate	0.0425
Final pH 7.2 $\pm$ 0.2	

### DESCRIPTION

Phosphate Buffer Solution pH 7.2, also known as Butterfield's Phosphate Buffer, is a general diluent used in microbial limit testing of pharmaceutical products and in food testing.

This liquid medium is recommended by the American Public Health Association (APHA), the Association of Official Analytical Chemist (AOAC) and the United States Pharmacopoeia (USP), European Pharmacopoeia (EP) and Japanese Pharmacopoeia (JP) harmonized method.

### PRINCIPLE

Potassium dihydrogen phosphate provides buffering action.

### TECHNIQUE

Consult appropriate references for detailed information and recommended procedures.

### INTERPRETATION OF RESULTS

Refer to the procedure used.

### STORAGE

10-25°C away from light, until the expiry date on the label or until signs of deterioration or contamination are evident.

### 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 designed 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

1. EN ISO 11133:2014. Microbiology of food, animal feed and water – Preparation, production, storage and performance testing of culture media.
2. European Pharmacopoeia 6.5 (2009) 2.6.13. Microbiological examination of non-sterile products: Test for specified microorganisms.
3. United States Pharmacopoeia 32 NF 27 (2009) <62> Microbiological examination of non-sterile products: Test for specified microorganisms.
4. Japanese Pharmacopoeia 4.05 (2008) Microbiological examination of non-sterile products: Test for specified microorganisms.
5. Davidson, Roth, and Gambrel-Lenarz (2004) In Wehr and Frank (ed.) Standard methods for the microbiological examination of dairy products, 17<sup>th</sup> ed. American Public Health Association, Washington, D.C.
6. Horwitz, W. (2002) Official Methods of Analysis of AOAC International. 17<sup>th</sup> ed., 1st rev. AOAC International, Washington, D.C.
7. Kornacki and Johnson (2001) In Downes and Ito (ed.) Compendium of methods for the microbiological examination of foods, 4<sup>th</sup> ed. American Public Health Association, Washington D.C.
8. Food and Drug Administration (1995) Bacteriological Analytical Manual. 8<sup>th</sup> ed. AOAC International, Gaithersburg, MD.



**LIOFILCHEM® S.r.l.**

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## PRODUCT SPECIFICATIONS

### NAME

Phosphate Buffer Solution pH 7.2

### PRESENTATION

Glass bottles containing liquid medium

### STORAGE

10-25°C

### PACKAGING

Ref.	Content	Packaging
463190	6 x 1000 ml bottles	6 bottles in cardboard box

### pH OF THE MEDIUM

7.2 ± 0.2

### USE

Phosphate Buffer Solution pH 7.2 is a general diluent used in microbial limit testing of pharmaceutical products and in food testing

### TECHNIQUE

Refer to technical sheet of the product

### APPEARANCE OF THE MEDIUM

Appearance: clear  
Colour: transparent

### SHELF LIFE

2 years

### QUALITY CONTROL










- Control of general characteristics, label and print
- Sterility control  
7 days at 22.5 ± 2.5°C, in aerobiosis  
7 days at 32.5 ± 2.5°C, in aerobiosis
- Microbiological control  
Inoculum for diluent: 10<sup>3</sup>-10<sup>4</sup> CFU  
Incubation Conditions: 22.5 ± 2.5°C for 45-60 min

#### Microorganism

<i>Escherichia coli</i>	WDCM 00012	± 30% of original count
<i>Staphylococcus aureus</i>	WDCM 00034	± 30% of original count

#### Specification

### TABLE OF SYMBOLS

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



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