

CM 21403 – PHOSPHATE BUFFER, APHA, pH 7.2

INTENDED USE

For preparation of dilution and blanks for testing of water, foods and dairy products.

PRODUCT SUMMARY AND EXPLANATION

Phosphate Buffer, APHA, pH 7.2 is prepared as recommended by APHA. It is used as a diluent in the examination of water, dairy products, foods and other specimens. Phosphate Buffer, APHA, pH 7.2 is also recommended for use with the addition of magnesium chloride. As per APHA and FDA, this medium is also referred to as Butterfields Buffered Phosphate Diluent and is mentioned without Magnesium chloride. Phosphate buffer is preferred over unbuffered water in order to standardize the wide variation in the pH of distilled water from various sources.

COMPOSITION

Ingredients	Gms / Ltr
Monopotassium phosphate	26.220
Sodium carbonate	7.780

PRINCIPLE

This medium consists of Monopotassium phosphate which act as a buffering agent and sodium carbonate in this medium act as a pH regulator.

INSTRUCTION FOR USE

Dissolve 34.0 grams in 1000 ml purified/distilled water.

Dispense and 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

Results were found satisfactory when dilution and/or blanks were prepared for testing of water, foods and dairy products, using Phosphate Buffer, APHA, pH 7.2.

PACKAGING:

In pack size of 100 gm and 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. Eaton A. D., Clesceri L. S. and Greenberg A. W., (Eds.), 2005, Standard Methods for the Examination of Water and Wastewater, 21st Ed., APHA, Washington, D.C.
2. Wehr H. M. and Frank J. H., 2004, Standard Methods for the Microbiological Examination of Dairy Products, 17th Ed., APHA Inc., Washington, D.C.
3. Downes F. P. and Ito K., (Ed.). 2001, Compendium of Methods for the Microbiological Examination of Foods, 4th Ed., American Public Health Association, Washington, D.C.
4. FDA Bacteriological Analytical Manual, 2005, 18th Ed., AOAC, Washington, DC.

 Good Manufacturing Practices Certified	 Best Before	 Quantity	 Catalogue Number	 Manufacturer
 Temperature Unit	 Lot / Batch Number	 Consults Instructions for Use	 QR Code	

NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

*For LabUse Only