17202 Phosphate buffer, APHA, pH 7.2
NutriSelect® Plus

For the preparation of dilutions, blanks for the examination of waters, dairy products, foods, eating utensils and other specimens.

Composition:

Ingredients	Grams/Litre
Monopotassium phosphate	26.22
Sodium carbonate	7.78

Final pH 7.2 +/- 0.2 at 25°C

Store granulated media below 30°C in tightly closed container and the prepared medium at 2- 8°C. Use before expiry date on the label.

Appearance(color):	White to Off White, free flowing powder
Color and Clarity:	Colourless clear solution without any precipitate
Reaction:	Reaction of 3.4% w/v aqueous solution at 25°C. pH : 7.2±0.2

Directions:
Dissolve 34 g in 1 litre distilled water. Dispense and sterilize by autoclaving at 121°C for 15 minutes. The pH, after autoclaving and cooling to room temperature should be 7.2 +/- 0.2.

Principle and Interpretation:
Phosphate Buffer, APHA, pH 7.2 is prepared as recommended by APHA. It is used for diluting test samples. Phosphate Buffer, pH 7.2 is specified for use in diluting water, dairy products, and food for microbiological methods. Phosphate Buffer, APHA, pH 7.2 is also recommended for use with the addition of magnesium chloride (1, 2). As per APHA and FDA (3, 4), this medium is also referred to as Butterfields Buffered Phosphate Diluent and is mentioned without Magnesium chloride. Phosphate buffer is preferred over unbuffered water to standardize the wide variation in the pH of distilled water from various sources.

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.

Precautions and Disclaimer
This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.