

# Phosphate Analytical Method

Typical analytical methods for phosphate, specifically orthophosphate, include orthophosphate by spectrophotometer and ion chromatography.

### ORTHO / POLY PHOSPHATE BLENDS

Polyphosphate requires a digestion step to convert polyphosphate to orthophosphate, and the analytical method becomes the same orthophosphate method. Please refer to Standard Methods, 4500-P for digestion step details.

### METHOD CHEMISTRY

This method uses orthophosphate and either vanadium or ascorbic acid to reduce molybdenum, which is distinctly blue in color. The amount of orthophosphate is proportional to the reduced molybdenum, and therefore, the blue color. This method is similar to free chlorine, however, the color is blue instead of pink.

#### **TEST KITS**

For quick, reasonable results, use a field test kit. These are available from Hach and other test kit supply companies.

## LABORATORY METHODS

For spectrophotometric and chromatographic methods, please refer to Standard Methods, 4500-P.

For technical questions regarding methods or products, please call Carus Chemical Company (800) 435-6856.



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