HI3810 Dissolved Oxygen

HI3833 Phosphate

Method	Range	Smallest Increment	Chemical Method	# Tests
HI3810	**Oxygen, Dissolved**			
titration	0.0-10.0 mg/L (ppm)	0.1 mg/L (ppm)	modified Winkler	110 avg.
HI38054	**Ozone**			
checker disc	0.0-2.3 mg/L (ppm)	0.1 mg/L (ppm)	DPD	100
HI3833	**Phosphate (as PO_4^{3-})**			
colorimetric	0-5 mg/L (ppm)	1 mg/L (ppm)	ascorbic acid	50
HI38061	**Phosphate (as PO_4^{3-})**			
checker disc	0.00-1.00 mg/L (ppm) 0.0-5.0 mg/L (ppm) 0-50 mg/L (ppm)	0.02 mg/L (ppm) 0.1 mg/L (ppm) 1 mg/L (ppm)	ascorbic acid	100

Ordering Information

HI3810 test kit comes with 30 mL manganous sulfate solution, 30 mL alkali-azide reagent, 60 mL sulfuric acid solution (2), 10 mL starch indicator, 120 mL titrant solution, glass bottle with stopper, 10 mL calibrated vessel and calibrated syringe with tip.

HI38054 test kit comes with 100 packets ozone reagent, 500 mL deionized water, checker disc, glass vials with caps (2) and 3 mL plastic pipette.

HI3833 test kit comes with 20 mL plastic beaker, color comparison cube and 50 packets phosphate reagent.

HI38061 test kit comes with 100 packets phosphate reagent, 500 mL deionized water, checker disc, glass vials with caps (2), 3 mL plastic pipette and long plastic pipette.

See a list of chemical test kit reagents beginning on page 1.52

HI3810

Dissolved Oxygen Test Kit

The Hanna dissolved oxygen portable test kit can determine the oxygen concentration in water quickly and easily. A modified Winkler method is used. Manganous ions react with oxygen in the presence of potassium hydroxide to form a manganese oxide precipitate. When acid is added, manganese oxide oxidizes the iodide to iodine. The amount of iodine generated is equivalent to the oxygen in the sample, the concentration of iodine is calculated by titration of thiosulfate ions that reduce the iodine back to iodide ions.

HI38054

Ozone Test Kit

The Hanna test kit for ozone determines the ozone concentration in water via Checker® disc. The reaction between ozone and the reagent causes a pink tint in the sample which is proportional to the ozone concentration.

Phosphate Test Kits

The orthosphosphate level in mg/L (or ppm) is determined by a colorimetric method. Ammonium molybdate and potassium antimonyl tartrate react in an acidic medium with orthophosphate to form a phosphomolybdate complex; this complex is reduced to intensely colored molybdenum blue by ascorbic acid. The color intensity of the solution determines the phosphate concentration. The Hanna Phosphate Test Kit will only determine orthophosphate levels.

HI3833
with Color Cube

HI38061
with Checker® Disc