#### HI38061

# Phosphate Test Kits

with Checker® Disc

The HI38061 is a chemical test kit that determines the phosphate concentration in three ranges: 0.00 to 1.00 mg/L, 0.0 to 5.0 mg/L, and 0 to 50 mg/L. The HI38061 is supplied with all of the necessary reagents and equipment to perform the analysis. The test kit contains enough reagents for perform approximately 100 tests.

#### Complete setup

 All required materials are included with the test kit, such as the qlass vials, plastic pipette, reagent packets, and Checker® disc.

#### High resolution

- Readings from 0.00 to 1.00 mg/L are determined to 0.02 mg/L resolution.
- Readings from 0.0 to 5.0 mg/L are determined to 0.1 mg/L resolution.
- Readings from 0 to 50 mg/L are determined to 1 mg/L resolution.

### • Replacement reagents available

 There is no need to buy a new kit when reagents are exhausted. The HI38061-100 can be ordered to replace the reagents supplied with the kit.

## Significance of Use

Phosphates are present in a number of products that are used by humans everyday. Some examples of the effects of phosphates are enhancing the flavor and tartness of cola drinks, as a buffering agent in controlling pH in antifreeze and delaying darkening of cut potatoes used in making french fries. Phosphates are also extensively used in detergents and cleaning fluids because of their ability to soften water and remove soil deposits.

Phosphates are particularly important for the growth and development of plant roots, and hence are one of the most common fertilizers used in agriculture. However, high concentrations of phosphates in agricultural runoff can cause environmental pollution, as they are a primary cause of eutrophication. Local laws govern the use of phosphates and the discharge levels into streams.

| Туре                    | checker disc   |
|-------------------------|--|
| Range                   | 0.00-1.00 mg/L (ppm)<br>0.0-5.0 mg/L (ppm)<br>0-50 mg/L (ppm)  |
| Smallest Increment      | 0.02 mg/L (ppm)<br>0.1 mg/L (ppm)<br>1 mg/L (ppm)  |
| Method                  | ascorbic acid  |
| Number of Tests         | 100 avg.   |
| Ordering<br>Information | 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. |
| Reagent                 | <b>HI38061-100</b> phosphate, 100 tests avg.   |

HI38061 Phosphate (as PO<sub>4</sub><sup>3</sup>-)

#### HI3835

# Salinity Test Kit

The HI3835 is a titration-based chemical test kit that measures salinity within the 0.0 to 40.0 g/kg range. The HI3835 is supplied with all of the necessary reagents and equipment to perform the analysis. The test kit contains enough reagents for perform approximately 110 tests.

#### Complete setup

 All required materials are included with the test kit, such as the sample vial, indicator and reagent bottles, and calibrated syringe.

### • High resolution

 Readings from 0.0 to 40.0 g/kg are determined to 0.4 g/kg resolution.

### • Replacement reagents available

 There is no need to buy a new kit when reagents are exhausted. The HI3835-100 can be ordered to replace the reagents supplied with the kit.

# Significance of Use

Salinity is defined as the total solids in water after all carbonates have been converted to oxides, all bromide and iodide have been replaced by chloride, and all organic matter has been oxidized. The salinity value is in g/kg or ppt (parts per thousand). The monitoring of salinity is essential for industrial waste and seawater, as different species of plants and animals thrive varying salinity levels.



| Туре                    | titration  |
|-------------------------|--|
| Range                   | 0 to 40 g/kg (ppt)   |
| Smallest Increment      | 4 g/kg for each 0.1 ml of titrant  |
| Method                  | mercuric nitrate   |
| Number of Tests         | 110 avg.   |
| Ordering<br>Information | HI3835 test kit comes with 15 mL diphenylcarbazone indicator, 30 mL nitric acid solution, 120 mL titrant solution, plastic vial with cap and 1 mL calibrated syringe with tip. |
| Reagent                 | HI3835-100 salinity, 100 tests avg.  |

Specifications