

HI38054

## Ozone Test Kit

The HI38054 is a chemical test kit that determines the ozone concentration in samples within the 0.0 to 2.3 mg/L range. The HI38054 is supplied with all of the necessary reagents and equipment to perform both analyses, including the Checker® disc for accurate determination. The test kit contains enough reagents to perform approximately 100 tests.

- **Complete setup**
  - All required materials are included with the test kit, such as the glass vials, plastic pipette, reagent packets, and Checker® disc.
- **High resolution**
  - Readings from 0.0 to 2.3 mg/L are determined to 0.1 mg/L resolution.
- **Replacement reagents available**
  - There is no need to buy a new kit when reagents are exhausted. The HI38054-100 can be ordered to replace the reagents supplied with the kit.

### Significance of Use

Ozone is an oxidizing agent used in many industrial and consumer applications. In drinking water, ozone is used for manganese removal, forming a precipitate that can be filtered out in the purification process. Additional organic matter present in drinking water that is responsible for producing odor and color can also be removed by ozone. Ozone also acts as a germicide and is used to manufacture pharmaceuticals, as a deodorizer, and bleaching agent.



| Specifications              | HI38054 Ozone                                                                                                                                           |
|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| Type                        | checker disc                                                                                                                                            |
| Range                       | 0.0-2.3 mg/L (ppm)                                                                                                                                      |
| Smallest Increment          | 0.1 mg/L (ppm)                                                                                                                                          |
| Method                      | DPD                                                                                                                                                     |
| Number of Tests             | 100 avg.                                                                                                                                                |
| <b>Ordering Information</b> | <b>HI38054</b> test kit comes with 100 packets ozone reagent, 500 mL deionized water, checker disc, glass vials with caps (2) and 3 mL plastic pipette. |
| <b>Reagent</b>              | <b>HI38054-100</b> ozone, 100 tests avg.                                                                                                                |

HI3833

## Phosphate Test Kits

with Color Cube

The HI3833 is a colorimetric chemical test kit that determines the phosphate concentration in samples within a 0 to 5 mg/L (ppm) range. The HI3833 is supplied with all of the necessary reagents and equipment to perform the analysis. The test kit contains enough reagents to perform approximately 50 tests.

- **Complete setup**
  - All required materials are included with the test kit, such as the sample beaker, color comparison cube, and reagent packets.
- **High resolution**
  - Readings from 0 to 5 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 HI3833-050 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.



| Specifications              | HI3833 Phosphate (as $\text{PO}_4^{3-}$ )                                                                       |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------|
| Type                        | colorimetric                                                                                                    |
| Range                       | 0-5 mg/L (ppm)                                                                                                  |
| Smallest Increment          | 1 mg/L (ppm)                                                                                                    |
| Method                      | ascorbic acid                                                                                                   |
| Number of Tests             | 50 avg.                                                                                                         |
| <b>Ordering Information</b> | <b>HI3833</b> test kit comes with 20 mL plastic beaker, color comparison cube and 50 packets phosphate reagent. |
| <b>Reagent</b>              | <b>HI3833-050</b> phosphate, 50 tests avg.                                                                      |