

HI38001

Sulfate Test Kits

Low and High Range

The HI38001 is a chemical test kit that determines the sulfate concentration in two ranges: 100 to 1000 mg/L and 1000 to 10000 mg/L. The HI38001 is supplied with all of the necessary reagents and equipment to perform the analysis. The test kit contains enough reagents for perform approximately 200 tests.

- **Complete setup**
 - All required materials are included with the test kit, such as the sample beakers, syringes, and reagent bottles and packets.
- **High resolution**
 - Readings from 100 to 1000 mg/L are determined to 10 mg/L resolution.
 - Readings from 1000 to 10000 mg/L are determined to 100 mg/L resolution.
- **Replacement reagents available**
 - There is no need to buy a new kit when reagents are exhausted. The HI38000-10 can be ordered to replace the reagents supplied with the kit.

Significance of Use

Sulfate is widely present within natural waters in different concentrations. Sulfate concentration is to be kept within a strict range for drinking water, especially since this value can be high near mine drainage points. Sulfate is also rigorously tested in the production of beverages such as beer, due to its significant effect upon odor and taste.



Specifications	HI38001 Sulfate (as SO_4^{2-})
Type	titration
Range	100-1000 mg/L (ppm) 1000-10000 mg/L (ppm)
Smallest Increment	10 mg/L (ppm) 100 mg/L (ppm)
Method	barium chloride
Number of Tests	200 avg.
Ordering Information	HI38001 test kit comes with 100 packets sulfate reagent A (2 sets), 100 mL LR sulfate reagent B, 100 mL HR sulfate reagent B, 10 mL sulfate reagent C, 20 mL complexing agent, 30 mL sulfate solution, 50 mL plastic vessels (2) and 1 mL syringes (2).
Reagent	HI38001-10 sulfate LR/HR, 100 tests avg.

HI3822

Sulfite Test Kit

The HI3822 is a chemical test kit that determines the sulfite concentration in two ranges: 0 to 20 mg/L and 0 to 200 mg/L Na_2SO_3 . The HI3822 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 beakers, indicator and reagent bottles, and calibrated syringe.
- **High resolution**
 - Readings from 0 to 20 mg/L are determined to 0.2 mg/L resolution.
 - Readings from 0 to 200 mg/L are determined to 2 mg/L resolution.
- **Replacement reagents available**
 - There is no need to buy a new kit when reagents are exhausted. The HI3822-100 can be ordered to replace the reagents supplied with the kit.

Significance of Use

There are many reasons to monitor the concentration of sulfite in water. In boiler feed and effluent waters, a sulfite concentration of approximately 20 mg/L must be maintained to prevent pitting and oxidation of metal components. A high level of sulfite results in a lowered pH, thus promoting corrosion. The monitoring of sulfite is important in environmental control as well. Sulfite ions are toxic to aquatic lifeforms; the chemical demand that sulfide produces on oxygen in water can destroy the delicate ecological balance of lakes, rivers and ponds.



Specifications	HI3822 Sulfite (as Na_2SO_3)
Type	titration
Range	0.0-20.0 mg/L (ppm) 0-200 mg/L (ppm)
Smallest Increment	0.2 mg/L (ppm) 2 mg/L (ppm)
Method	iodometric
Number of Tests	110 avg.
Ordering Information	HI3822 test kit comes with 30 mL sulfamic acid solution, 30 mL EDTA reagent, 15 mL sulfuric acid solution, 10 mL starch indicator, 120 mL titrant solution, 20 mL calibrated vessel, 50 mL calibrated vessel and calibrated syringe with tip.
Reagent	HI3822-100 sulfite (as Na_2SO_3), 110 tests avg.