

## Total Hardness Test Kits

The hardness level as mg/L (ppm) calcium carbonate is determined by an EDTA (ethylene-diamine-tetraacetic acid) titration.

### HI3812

HI3840  
Low Range

HI3841  
Medium Range

HI3842  
High Range

HI38033  
0-30 gpg range

### HI3844

## Hydrogen Peroxide Test Kit

The Hanna test kit can quickly and easily determine concentration in water up to 10 ppm of hydrogen peroxide. This method is not affected by stabilizers that can be added to commercial hydrogen peroxide solutions. Hydrogen peroxide concentration is determined by a titrimetric method. It reacts with iodide in acid solution, the amount of iodine generated is equivalent to the hydrogen peroxide in the sample. The liberated iodine is then titrated with standard sodium thiosulfate solution.



HI3812 Hardness

Method	Range	Smallest Increment	Chemical Method	# Tests
<b>HI3812 Hardness (as CaCO<sub>3</sub>*) Total</b>				
titration	0.0-30.0 mg/L (ppm) 0-300 mg/L (ppm)	0.3 mg/L (ppm) 3 mg/L (ppm)	EDTA	100
<b>HI3840 Hardness (as CaCO<sub>3</sub>*) Total</b>				
titration	0-150 mg/L (ppm)	5 mg/L (ppm)	EDTA	50 avg.
<b>HI3841 Hardness (as CaCO<sub>3</sub>*) Total</b>				
titration	40-500 mg/L (ppm)	20 mg/L (ppm)	EDTA	50 avg.
<b>HI3842 Hardness (as CaCO<sub>3</sub>*) Total</b>				
titration	400-3000 mg/L (ppm)	100 mg/L (ppm)	EDTA	50 avg.
<b>HI38033 Hardness (as CaCO<sub>3</sub>*) Total</b>				
titration	0-30 gpg	1 gpg	EDTA	100
<b>HI3844 Hydrogen Peroxide (as H<sub>2</sub>O<sub>2</sub>)</b>				
titration	0.00-2.00 mg/L (ppm) 0.0-10.0 mg/L (ppm)	0.25 mg/L (ppm) 1.0 mg/L (ppm)	iodometric	100 avg.

### Ordering Information

**HI3812** test kit comes with 30 mL hardness buffer, 10 mL calmagite indicator, 120 mL EDTA solution, 20 mL plastic beaker with cap, 50 mL plastic beaker with cap and 1 mL syringe with tip.

**HI3840** test kit comes with 30 mL hardness LR reagent and 50 mL calibrated vessel.

**HI3841** test kit comes with 30 mL hardness MR reagent and 50 mL calibrated vessel.

**HI3842** test kit comes with 30 mL hardness HR reagent and 50 mL calibrated vessel.

**HI38033** test kit comes with 30 mL buffer solution, 10 mL calmagite indicator, 75 mL EDTA solution (2), 20 mL plastic beaker with cap and 1 mL plastic pipette.

**HI3844** test kit comes with 100 mL hydrogen peroxide reagent A, 17 g hydrogen peroxide reagent B, 30 mL hydrogen peroxide reagent C, 25 mL hydrogen peroxide reagent D, graduated plastic test tube with cap, 50 mL calibrated plastic vessel, 3 mL plastic pipette, 1 mL plastic pipette and plastic spoon.

\* 1 gpg = 17 ppm CaCO<sub>3</sub>

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