

Chemical Test Kits

Iron**HI 3834 Iron Test Kit**

The HANNA test kit determines the iron concentration in water by conversion of the ferrous (Fe^{2+}) state. The test is fast, easy and safe. The color cube makes it simple to obtain the iron level in water.

Iron can exist as ferrous (Fe^{2+}) or ferric (Fe^{3+}) ions. The HANNA test kit determines total iron levels in water via a colorimetric method. First all ferric ions are reduced by sodium sulfite to ferrous ions. Phenanthroline complexes with ferrous ion to form an orange colored solution. The color intensity of the solution determines the iron concentration.

HI 38039 Iron Test Kit

Low Range with Checker Disc

HI 38040 Iron Test Kit

Medium Range with Checker Disc

HI 38041 Iron Test Kit

High Range with Checker Disc

HI 3889 Iron & Total Hardness Test Kit
with Checker Disc

HI 38040 Iron

ORDERING INFORMATION

HI 3834 test kit comes with 50 packets iron reagent, color comparison cube and 20 mL plastic vessel

HI 38039 and **HI 38040** test kits come with 100 packets iron reagent, checker disc, glass vials with caps (2) and 3 mL plastic pipette.

HI 38041 test kit comes with 100 packets iron reagent, 500 mL deionized water, checker disc, glass vials with caps (2), 3 mL plastic pipettes and long plastic pipette.

HI 3889 test kit comes with 50 packets iron reagent, color comparison cube, 20 mL plastic vessel, 30 mL hardness MR reagent and 50 mL calibrated plastic vessel.

ACCESSORIES**HI 3834**

HI 3834-050 Spare reagent for 050 tests

HI 38039

HI 38039-100 Spare reagent for 100 tests

HI 38040

HI 38040-100 Spare reagent for 100 tests

HI 38041

HI 38041-100 Spare reagent for 100 tests

HI 3889

HI 3834-050 Spare reagent for 50 tests



HI 3834 Iron

Iron is naturally present in water in low concentrations, but it reaches high concentrations in wastewater effluents. The iron concentration in water needs to be monitored because it becomes harmful above certain levels.

In domestic water, for instance, iron can unpleasantly alter the taste, stain laundry, damage kitchenware and favor the growth of certain bacteria. Iron is also an indicator of ongoing corrosion in industrial plants or in water cooling and heating systems. Moreover, iron is normally monitored in mining wastewater to avoid contamination.

Generally, ground and surface water contains no more than 1 mg/L (ppm) iron; but due to mining and industrial drainage, higher levels of iron have been observed. Iron in water appears to be more of a nuisance than a hazard.

METHOD	RANGE	SMALLEST INCREMENT	CHEMICAL METHOD	# TESTS	WEIGHT
HI 3834 Iron (Fe^{+2} & Fe^{+3})					
colorimetric	0-5 mg/L (ppm)	1 mg/L (ppm)	phenanthroline	50	142.5 g
HI 38039 Iron (Fe^{+2} & Fe^{+3})					
checker disc	0.00-1.00 mg/L (ppm)	0.02 mg/L (ppm)	phenanthroline	100	436 g
HI 38040 Iron (Fe^{+2} & Fe^{+3})					
checker disc	0.0-5.0 mg/L (ppm)	0.1 mg/L (ppm)	phenanthroline	100	427 g
HI 38041 Iron (Fe^{+2} & Fe^{+3})					
checker disc	0.0-10.0 mg/L (ppm)	0.2 mg/L (ppm)	phenanthroline	100	980 g
HI 3889 Iron and Total Hardness					
colorimetric	Fe: 0-5 mg/L (ppm)	Fe: 1 mg/L (ppm)	phenanthroline	50 avg.	260 g
titration	40-500 mg/L (ppm)	20 mg/L (ppm)	EDTA		