Iron, 10 mg/L Fe Test Kit

For Test Kit IR-10, 146403

DOC326.98.00050

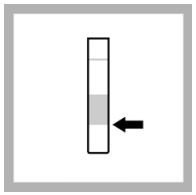
Additional copies available on www.hach.com

Test preparation

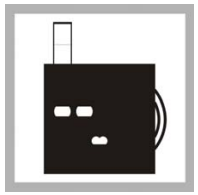
- Assemble the color comparator by placing the color disc on the center pin with the lettering facing out.
- This test kit uses an optical viewing tube insert to decrease the color intensity for measurements more than 7.0 mg/L. Use the optical viewing tube insert for measurements from 7.5 to 10 mg/L. Concentration marks on the color disc are printed in white text on a black background for concentrations from 7.5 to 10 mg/L.
- Rinse the vials, the tubes and the optical viewing tube inserts with the sample water before testing. Rinse with deionized water after testing.
- A small quantity of undissolved powder has no effect on accuracy.
- Dilute samples with higher concentration than the test range for accurate results. Correct the test results for the dilution ratio.
- Read the mg/L iron at the matching disc segment or as the value halfway between the two segments closest in color. Use daylight illumination to compare the solution color to the comparator.
- When water contains rust or or precipitated iron, shake the sample container before step 1 to get a representative sample.
- If the disc becomes wet, carefully separate the two halves of the plastic case and dry them and the colored plastic insert with a soft cloth. Reassemble when the parts are completely dry.

CAUTION: Handle chemical standards and reagents carefully. Review Material Safety Data Sheets before handling chemicals.

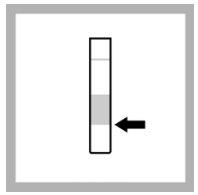
Iron test procedure



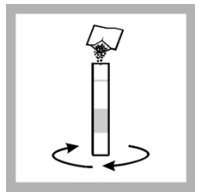
1. Fill a tube to the first (5-mL) line with sample.



2. Insert the tube into the left opening of the comparator.

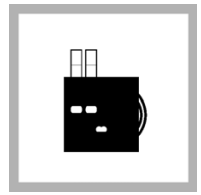


3. Fill another tube to the first (5-mL) line with sample.

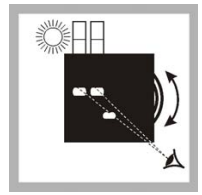


4. Add one FerroVer Iron Reagent Powder Pillow to the second tube. Swirl to mix.
An orange color shows if iron is in the sample.

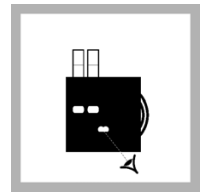
5. Wait 3 minutes for the color development. Let samples that contain rust react for 5 minutes or more.



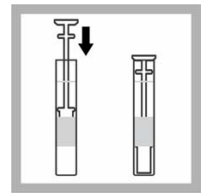
6. Insert the second tube into the right opening of the comparator.



7. Hold the comparator so that daylight is directly behind the tubes. Turn the color disc from 0 to 7.0 mg/L until the colors in the front windows match.



8. Read the result in mg/L in the scale window. If the best match occurs between two color segments, determine the value halfway between the two printed numbers. If the color is too intense to align with the color disc (the concentration is more than 7 mg/L), continue to Step 9.



9. For concentrations more than 7 mg/L, put an optical viewing tube insert into each tube.

10. Do steps 7 and 8 again with the color disc concentration steps from 7.5 to 10 mg/L Fe.
If the concentration is above 10 mg/L, dilute the sample.

Replacement items

Description	Unit	Item no.
Color Comparator Box	each	173200
Color Disc, FerroVer Iron, 0–10 OL (outdoor light)	each	9270000
Color Viewing Tube, plastic	4/pkg	4660004
FerroVer Iron Reagent Powder Pillows for 5-mL samples	100/pkg	92799
Viewing tube insert, optical	each	2128800

Optional items

Description	Unit	Item no.
Caps, for plastic viewing tubes 4660004	4/pkg	4660014
Detergent, Liquinox	946 mL	2088153
Test tube brush	each	69000
Deionized Water	500 mL	27249

For technical assistance or ordering information: visit www.hach.com, call 800-227-4224 or email techhelp@hach.com.

01/2014, Edition 1