# Iron Test Kit

**IR-18A (146500)**

DOC326.97.00061

## Test preparation

***CAUTION: ⚠ Review the Safety Data Sheets (MSDS/SDS) for the chemicals that are used. Use the recommended personal protective equipment.***

- Put the color disc on the center pin in the color comparator box (numbers to the front).
- Use the indoor light color disc when the light source is fluorescent light. Use the outdoor light color disc when the light source is sunlight.
- Rinse the tubes with sample before the test. Rinse the tubes with deionized water after the test.
- The long-path adapter for the low range test shows the color in the tubes from top to bottom. Make sure the light source is above the tubes during the color match.
- If the color match is between two segments, use the value that is in the middle of the two segments.
- If the color disc becomes wet internally, pull apart the flat plastic sides to open the color disc. Remove the thin inner disc. Dry all parts with a soft cloth. Assemble when fully dry.
- Undissolved reagent does not have an effect on test accuracy.
- To verify the test accuracy, use a standard solution as the sample.
- If the sample contains rust or precipitated iron, fully mix the sample and then fill the tubes. Wait 2–5 minutes after the reagent is added. Dissolved iron develops a color immediately.
- Samples that contain high levels of iron can give low results. If high iron levels are possible, dilute the sample. Use the diluted sample in the test procedure, then multiply the result by the dilution factor.

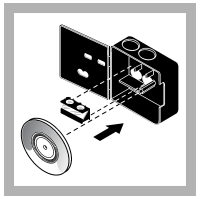
## Replacement items

| Description | Unit | Item no. |
|---|---|---|
| FerroVer® Iron Reagent Powder Pillows, 25 mL | 100/pkg | 85499 |
| Color disc, iron, indoor light, 0–1 mg/L | each | 9263600 |
| Color disc, iron, outdoor light, 0–1 mg/L | each | 9263900 |
| Color comparator box | each | 173200 |
| Long-path adapter | each | 2412200 |
| Plastic viewing tubes, 18 mm, with caps | 4/pkg | 4660004 |

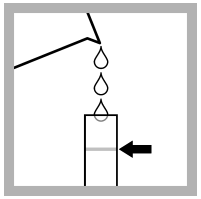
## Optional items

| Description | Unit | Item no. |
|---|---|---|
| Caps for plastic viewing tubes (4660004) | 4/pkg | 4660014 |
| Water, deionized | 500 mL | 27249 |
| Glass viewing tubes, 18 mm | 6/pkg | 173006 |
| Iron standard solution, 1 mg/L Fe | 500 mL | 13949 |
| Stoppers for 18-mm glass tubes and AccuVac Ampuls | 6/pkg | 173106 |
| Syringe, Luer-Lok® Tip, 3 mL | each | 4321300 |

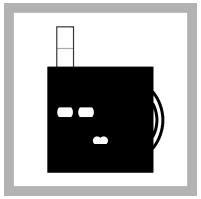
## Test procedure—Iron (0–1 mg/L Fe)



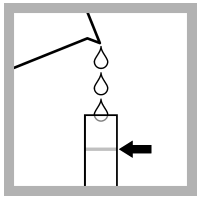
**1.** Install the long-path adapter in the color comparator box.



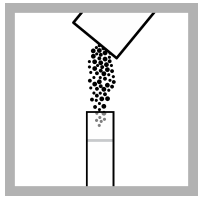
**2.** Fill a tube to the top line with sample.



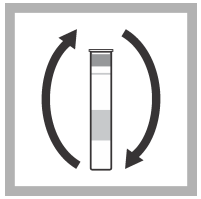
**3.** Put the tube into the left opening of the color comparator box.



**4.** Fill a second tube to the top line with sample.



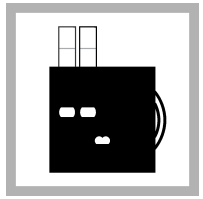
**5.** Add one FerroVer Iron Reagent Powder Pillow.



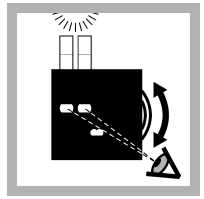
**6.** Put a cap on the tube and invert to mix. Remove the cap.



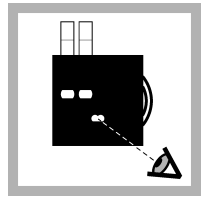

**7.** Wait 2 minutes. Read the result within 5 minutes. An orange color develops.



**8.** Put the second tube into the color comparator box.



**9.** Hold the color comparator box below a light source. Turn the color disc to find the color match.



**10.** Read the result in mg/L in the scale window.

© Hach Company/Hach Lange GmbH, 2016. All rights reserved. Printed in U.S.A. www.hach.com 800-227-4224 techhelp@hach.com 02/2016, Edition 1