

DOC326 97 00061

## **Test preparation**

CAUTION: A 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

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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	

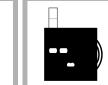
## Test procedure—Iron (0–1 mg/L Fe)



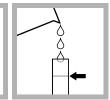
1. Install the long- 2. Fill a tube to path adapter in the the top line with color comparator box.



sample.



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



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



5. Add one Reagent Powder Pillow.



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



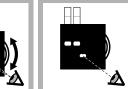
within 5 minutes. An orange color develops.



7. Wait 2 minutes. 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.

