



Cyanide Test Kit

CYN-3 (201002)

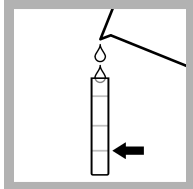
DOC326.97.00057

Test preparation

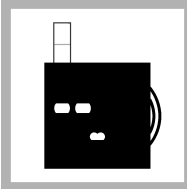
CAUTION: ⚠ *Review the Safety Data Sheets (MSDS/SDS) for the chemicals that are used. Use the recommended personal protective equipment.*

- Put the color disc on the center pin in the color comparator box (numbers to the front).
- Use sunlight or a lamp as a light source to find the color match with the color comparator box.
- Rinse the tubes with sample before the test. Rinse the tubes with deionized water after the test.
- 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.
- The 20-minute reaction time in the test procedure is applicable to samples at 25 °C (77 °F). For colder samples, wait more than 20 minutes. For warmer samples, wait less than 20 minutes. Make the color match when the prepared sample is blue. If the sample is red or purple, wait until the sample is blue. If the reaction time is too long, the sample becomes blue-green and a color match is not possible.
- This test kit measures only free cyanide. To measure total cyanide, which includes cyanide complexes (copper, cobalt, iron and nickel cyanides), distill the sample. Refer to the *Water Analysis Handbook* or *Standard Methods for the Examination of Water and Wastewater*. Use the distilled sample in the test procedure.

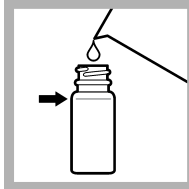
Test procedure—Cyanide (0–0.3 mg/L CN⁻)



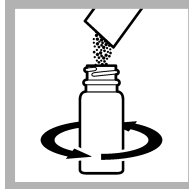
1. Fill a tube to the first line (5 mL) with sample.



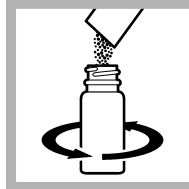
2. Put the tube into the left opening of the color comparator box.



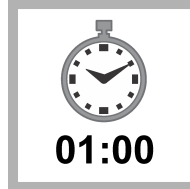
3. Fill a bottle to the shoulder with sample.



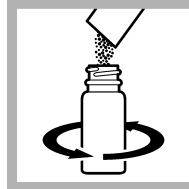
4. Add one HexaVer CDTA Reagent Powder Pillow. Swirl to mix.



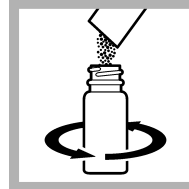
5. Add one CyaniVer 3 Cyanide Reagent Powder Pillow. Swirl to mix.



6. Wait 1 minute.



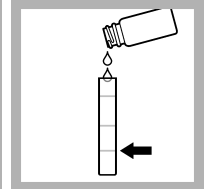
7. Add one CyaniVer 4 Cyanide Reagent Powder Pillow. Swirl to mix. Go immediately to the next step.



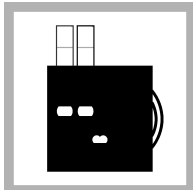
8. Add one CyaniVer 5 Cyanide Reagent Powder Pillow. Swirl to mix.



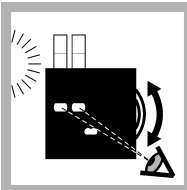
9. Wait 20 minutes. A blue color develops if cyanide is in the sample. Read the result within 26 minutes.



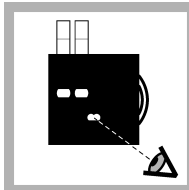
10. Fill a second tube to the first line (5 mL) with the prepared sample.



11. Put the second tube into the color comparator box.



12. Hold the color comparator box in front of a light source. Turn the color disc to find the color match.



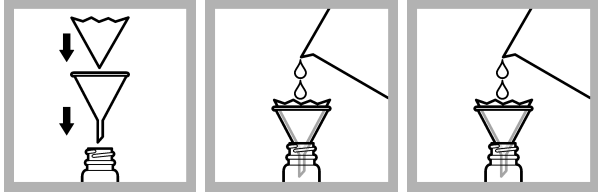
13. Read the result in mg/L in the scale window.

Replacement items

Description	Unit	Item no.
CyaniVer® 3 Cyanide Reagent Powder Pillows, 25-mL	100/pkg	1403969
CyaniVer® 4 Cyanide Reagent Powder Pillows, 25-mL	100/pkg	1404099
CyaniVer® 5 Cyanide Reagent Powder Pillows, 25-mL	100/pkg	1404169
HexaVer™ CDTA Powder Pillows	100/pkg	24399
Bottle, square, 29 mL	6/pkg	43906
Color disc, cyanide, 0–0.3 mg/L	each	9267100
Color comparator box	each	173200
Clippers	each	96800
Filter paper, 2–3 micron, pleated, 12.5 cm	100/pkg	189457
Funnel, poly, 65 mm	each	108367
Glass viewing tubes, glass, 18 mm	6/pkg	173006
Stoppers for 18-mm glass tubes and AccuVac Ampuls	6/pkg	173106

Filtration procedure for turbid samples

If the sample is turbid, filter the sample through filter paper. Use the filtered sample in the test procedure. Record the test result as soluble cyanide.



1. Put the filter paper in the funnel. Put the funnel on a bottle.

2. Pour enough sample into the funnel to fill the bottle to the shoulder.

3. Put the funnel on a second bottle. Pour a minimum of 5 mL of sample into the funnel.

