LCK315 Cyanide

0.01-0.60 mg/L CN⁻

LCK315

Scope and application: For wastewater and process analysis.



Test preparation

Test storage

Storage temperature: 2-8 °C (35-46 °F)

pH/Temperature

The pH of the water sample must be between pH 2–10.

The temperature of the water sample and reagents must be between 15–25 $^{\circ}$ C (59–77 $^{\circ}$ F).

Before starting

The analysis must be carried out immediately after the sample has been taken.

Review safety information and expiration date on the package.

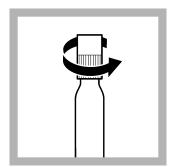
Review the Safety Data Sheets (MSDS/SDS) for the chemicals that are used. Use the recommended personal protective equipment.

Dispose of reacted solutions according to local, state and federal regulations. Refer to the Safety Data Sheets for disposal information for unused reagents. Refer to the environmental, health and safety staff for your facility and/or local regulatory agencies for further disposal information.

Procedure



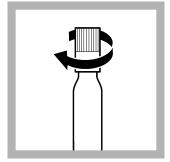
1. Carefully remove the foil from the screwed-on DosiCap Zip.



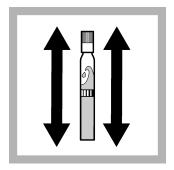
2. Unscrew the DosiCap Zip.



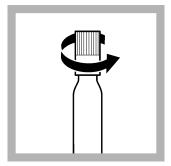
Carefully pipet1.0 mL of sample.



4. Immediately screw the DosiCap Zip back on; **fluting at the top**.



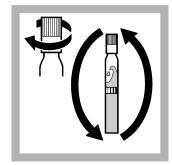
5. Shake vigorously.



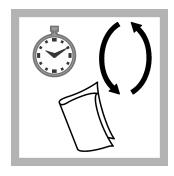
6. Open the cuvette.



Carefully pipet
mL of solution A.



8. Close the cuvette and invert a few times.



9. After **3 minutes**, invert a few more times, thoroughly clean the outside of the cuvette and evaluate.



10. Insert the cuvette into the cell holder. DR1900: Go to LCK/TNTplus methods. Select the test, push **READ**.

Interferences

Interferences cause the formation of formaldehyde, sulphite and other compounds that interfere with the action of chlorine. Thiocyanate reacts like cyanide with chlorine to form cyanogen chloride, and is therefore included in the result. To eliminate thiocyanate interference refer to application A56.

The measurement results must be subjected to plausibility checks (dilute and/or spike the sample).

Summary of method

Cyanides react with chlorine to form cyanogen chloride, which in turn reacts with pyridine in the presence of barbituric acid, condensing to form a violet colorant.