LCK308 Cadmium

DOC312.53.94039

0.02–0.30 mg/L Cd and 0.024–0.36 mg/L Cd (Crack-Set) LCK308

Scope and application: For wastewater and process analysis.

Test preparation

Test storage

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

pH/Temperature

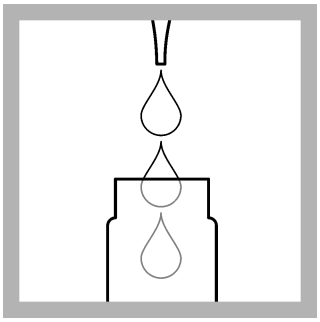
The pH of the water sample must be between pH 3–10.

The temperature of the water sample and reagents must be between 15–25 °C (59–77 °F).

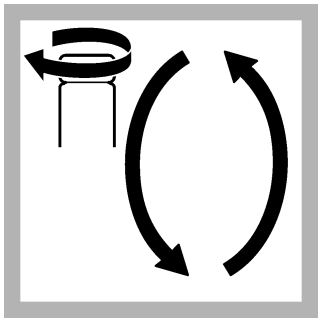
Before starting

Higher concentrations of calcium and magnesium can be separated off by a special method (Calcium Separation Set LCW903). Start after Procedure on page 1 step 2.
Undissolved cadmium or cadmium bound in complexes can only be determined after digestion with Crack-Set LCW902 has been carried out.
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.

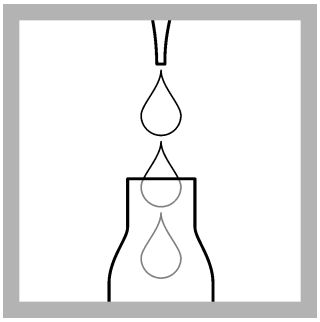
Procedure



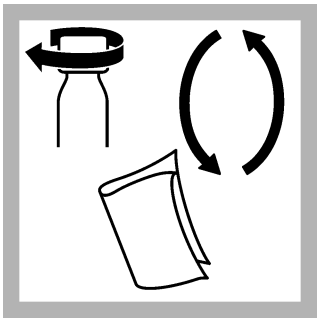
1. Add to a dry reaction tube: **10 mL** of **sample** and **1.0 mL** of **solution A**.



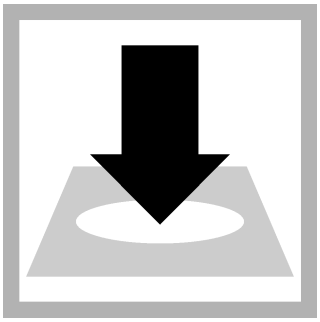
2. Close the reaction tube and invert a few times.



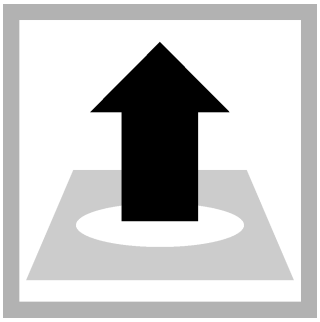
3. Carefully pipet into the Cuvette Test: **0.4 mL** of **solution B**.



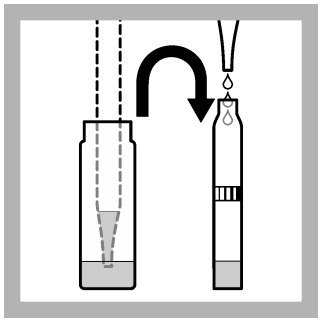
4. Close the cuvette and invert a few times, thoroughly clean the outside of the cuvette and evaluate.



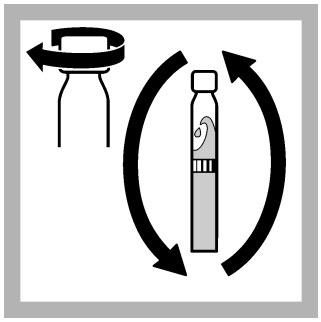
5. Insert the cuvette into the cell holder.
DR1900: Go to LCK/TNTplus methods. Select the test, push **READ 1**.



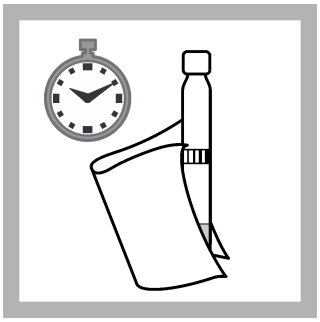
6. Remove the cuvette.



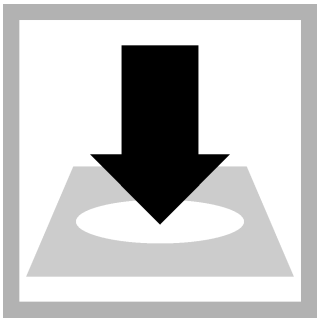
7. Carefully pipet into the **same** cuvette: **4.0 mL** of **pretreated sample.**



8. Close the cuvette and invert a few times.



9. After **30 seconds**, thoroughly clean the outside of the cuvette and evaluate.



10. Insert the cuvette into the cell holder.
DR1900: Push **READ 2**.

Interferences

The ions listed in the table have been individually checked against the given concentrations and do not cause interference. The cumulative effects and the influence of other ions have not been determined.

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

Interference level	Interfering substance
1000 mg/L	SO_4^{2-}
50 mg/L	Ca^{2+}, Mg^{2+}
25 mg/L	Fe^{2+}, Cu^{2+}, Ni^{2+}, Zn^{2+}, Pb^{2+}, Co^{2+}, Ag^{+}, Au^{+}, Cr^{6+}
2 mg/L	Mn^{2+}

Summary of method

Cadion forms a complex with cadmium. The reduction in the color intensity of cadion is used for the determination of cadmium.

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