LCK360 Zinc

DOC312.53.94055

0.2–6.0 mg/L Zn or
0.24–7.20 mg/L Zn (Crack-Set LCW902)

LCK360

Scope and application: For wastewater, drinking water, surface water, raw water and process analysis.

Test preparation

Test storage

Storage temperature: 15–25 °C (59–77 °F)

pH/Temperature

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

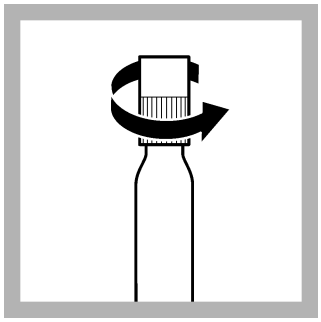
The temperature of the water sample and reagents must be between 15–25 °C (59–77 °F).

Before starting

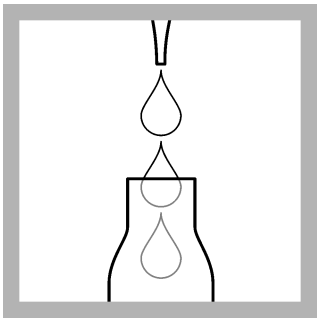
Time dependency
If the reaction time is exceeded, unreliable results may be obtained.
Zn = Zinc Zn 902 = Zinc after the Crack-Set LCW902 has been used.
Review safety information and expiration date on the package.
Review the Safety Data Sheets (MSDS/SDS) for the chemicals that are used. Use the recommended 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

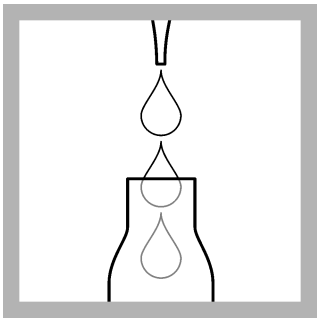
1. Sample cuvette: Carefully remove the foil from the screwed-on **DosiCap Zip**.



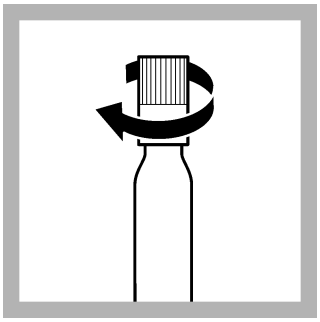
2. Sample cuvette: Unscrew the **DosiCap Zip**.



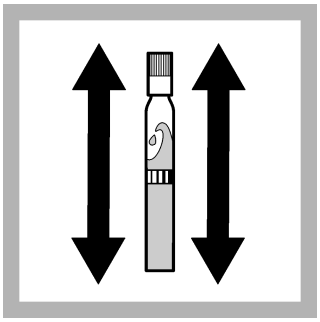
3. Pipet **0.2 mL sample** into the **sample cuvette**.



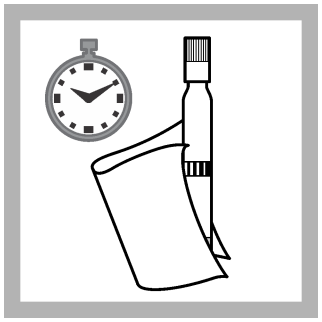
4. Pipet **0.2 mL solution A** into the **sample cuvette**.



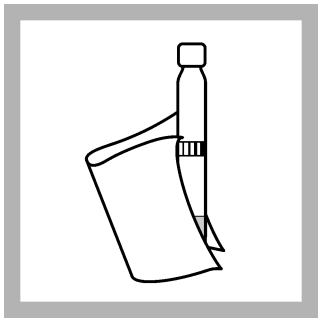
5. Immediately screw the DosiCap Zip back on the **sample cuvette**; **fluting at the top**.



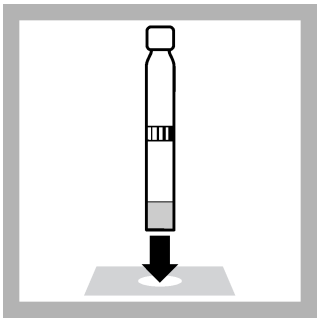
6. Shake the **sample cuvette vigorously**.



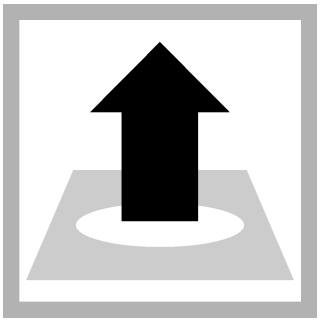
7. After **3 minutes**, thoroughly clean the outside of the **sample cuvette**.



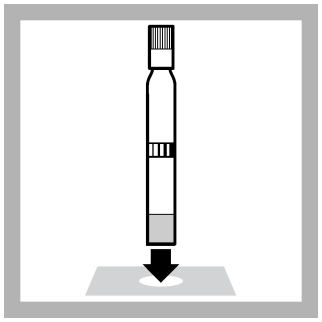
8. Thoroughly clean the outside of the **zero cuvette**.



9. Insert the **zero cuvette** into the cell holder.
DR1900: Go to **LCK/TNTplus methods**.
Select the test: push **ZERO**.



10. Remove the zero cuvette.



11. Insert the **sample cuvette** into the cell holder.
DR1900: Push **READ**.

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.

Undissolved zinc or zinc contained in complexes can only be determined after digestion with Crack-Set LCW902.

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

Interference level	Interfering substance
2000 mg/L	SO_4^{2-}
1000 mg/L	Cl^-, Na^+, K^+, Ca^{2+}
500 mg/L	NO_3^- , Mg^{2+}
50 mg/L	Fe^{2+}, Fe^{3+}, Sn^{2+}, Ni^{2+}, Cu^{2+}, Cr^{3+}, Cr^{6+}, CO_3^{2-}
20 mg/L	Co^{2+}
5 mg/L	Pb^{2+}

Summary of method

Zinc ions form a water-soluble orange-red complex with 4-(2-pyridylazo)-resorcin (PAR) at pH 6–11.

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