LCK 362 Acid capacity $K_{S\ 4.3}$ / Calcium carbonate $CaCO_3$

DOC312.53.94056

0.5–8.0 mmol/L $K_{S\ 4.3}$ or 25–400 mg/L $CaCO_3$ **LCK 362**

Scope and application: For wastewater, drinking water and boiler water.

Test preparation

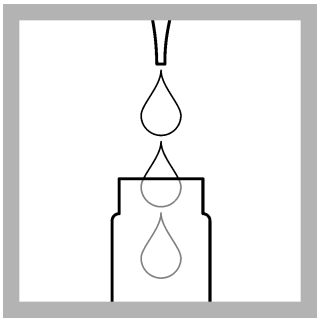
Test storage

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

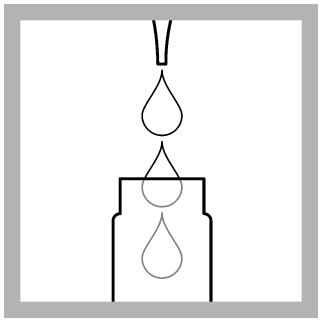
Before starting

Samples with an acid capacity above 8.0 mmol/L must be diluted with distilled water that contains no carbon dioxide (eliminate by, e.g., boiling).
The absence of carbon dioxide in the water used for dilution can be checked by carrying out a blank measurement.
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.

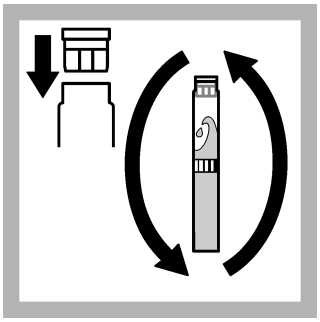
Procedure



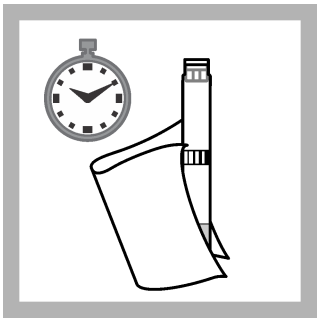
1. Carefully pipet **2.0 mL** of **solution A**.



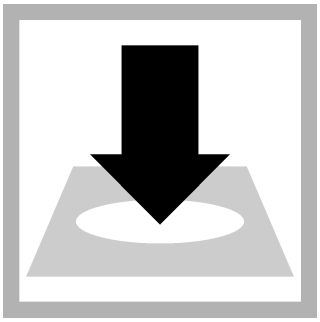
2. Carefully pipet **0.5 mL** of **sample**.



3. Close the cuvette and invert a few times until the freeze-dried contents are **completely dissolved**.



4. After **5 minutes**, thoroughly clean the outside of the cuvette and evaluate. **Any air bubbles sticking to the wall of the cuvette can be removed by giving the cuvette a short sharp shake or by tapping the cuvette gently against a surface.**



5. Insert the cuvette into the cell holder.
DR 1900: Go to LCK/TNTplus methods. Select the test, push **READ**.

Interferences

Samples containing particles must be filtered (Membrane Filtration Set LCW 904 or folded filter).

If measurements are carried out on a sample that has been allowed to settle, a large degree of scatter as well as high-bias results can be expected.

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

Summary of method

Carbonates and other buffers react with the reagent in the cuvette, causing a change of pH to occur. This change is shown by an indicator and is photometrically evaluated.

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