LCK353 Sulphate

DOC312.53.94023

Method

150–900 mg/L SO_4 **LCK353**

Scope and application: For wastewater, soil, raw water, structural concrete and process analysis.

Test preparation

Test storage

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

pH/Temperature

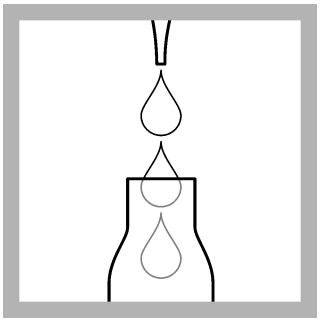
The pH of the water sample must be between pH 2–10.

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

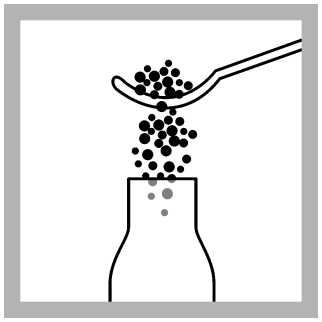
Before starting

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.

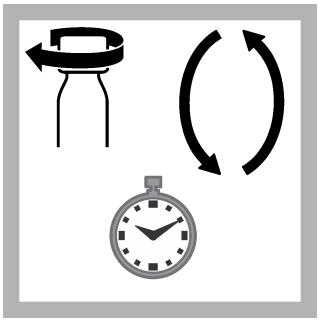
Procedure



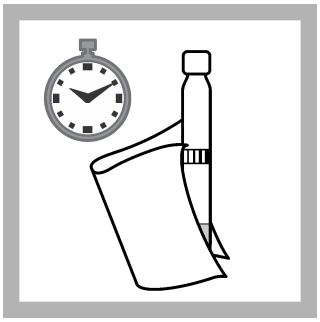
1. Carefully pipet **2.0 mL sample**.



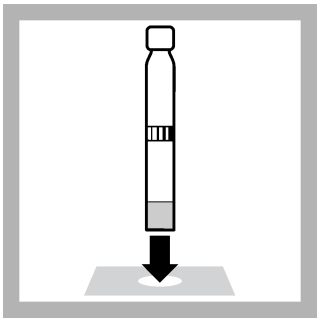
2. Add **1 level spoonful reagent A**.



3. Close cuvette and invert repeatedly for **1 minute** immediately.
Note: *The reaction time must be* ***strictly*** *observed.*



4. Wait **30 seconds**. During this time thoroughly clean the outside of the cuvette and then evaluate.
Note: *The reaction time must be* ***strictly*** *observed.*



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

The measurement results must be subjected to plausibility checks (dilute and/or spike the sample). Use only carbon-free water to dilute the sample.

Interference level	Interfering substance
2000 mg/L	Na^+, K^+
1000 mg/L	Ca^{2+}, NO_3^-, Cl^-
500 mg/L	Cd^{2+}, Cr^{3+}, Cu^{2+}, Fe^{2+}, Fe^{3+}, Mg^{2+}, Mn^{2+}, NH_4^+, Ni^{2+}, Si^{2+}, Sn^{2+}, Zn^{2+}
50 mg/L	Al^{3+}, Pb^{2+}, Hg^{2+}, PO_4^{3-}, CO_3^{2-}, I^-, CN^-, NO_2^-
20 mg/L	Cr^{6+}
2.5 mg/L	Ag^+

Summary of method

Sulphate ions react with barium chloride in aqueous solution to form barium sulphate, which is only sparingly soluble. The resulting turbidity is measured photometrically.

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06/2025, Edition 2