

150–900 mg/L SO_4^{2-} High Range

TNTplus®—Method 10227

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



Test preparation

Reagent 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

Attention:

The reaction times must be strictly observed.

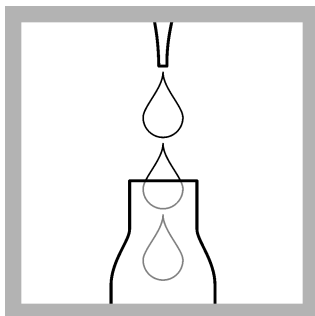
If the test is not performed at the correct recommended temperature an incorrect result may be obtained.

Review safety information and expiration date on the package.

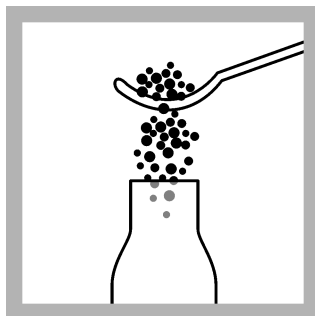
Review the Safety Data Sheets (MSDS/SDS) for the chemicals that are used. Use the recommended personal protective equipment.

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.

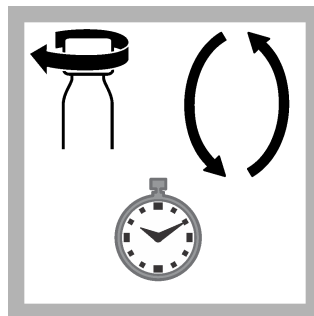
Procedure



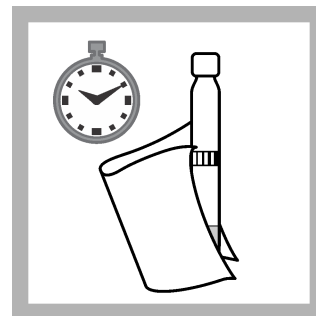
1. Carefully pipet 2.0 mL of sample.



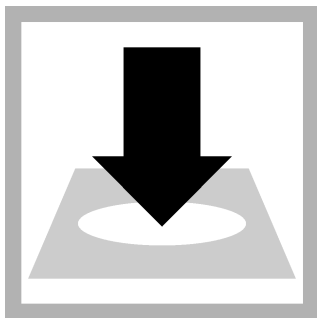
2. Add 1 dosing spoon of reagent A.



3. Close the vial and invert repeatedly for 1 minute immediately.



4. Wait 30 seconds. Thoroughly clean the vial and evaluate.



5. Insert the vial into the cell holder.

DR 1900: 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

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

TNT^{plus}



FOR TECHNICAL ASSISTANCE, PRICE INFORMATION AND ORDERING:

In the U.S.A. – Call toll-free 800-227-4224

Outside the U.S.A. – Contact the HACH office or distributor serving you.

On the Worldwide Web – www.hach.com; E-mail – techhelp@hach.com

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