

Measuring range I: 0.5–10.0 mg/L Mg,
measuring range II: 10–50 mg/L Mg

TNTplus®849—Method 10292

Scope and application: For raw (untreated) water, drinking water, surface water, boiler 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 4–9.

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

Before starting

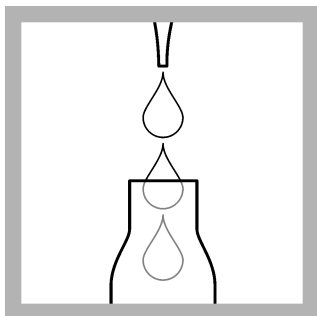
Review safety information and expiration date on the package.

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

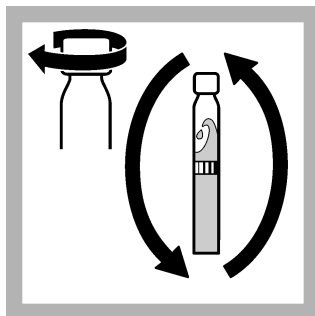
Dispose of reacted solutions according to local, state and federal regulations. Refer to the Safety Data Sheets for disposal information for unused reagents. Refer to the environmental, health and safety staff for your facility and/or local regulatory agencies for further disposal information.

This method is applicable on DR1900, DR2800, DR3800, DR3900, DR5000 and DR6000 only.

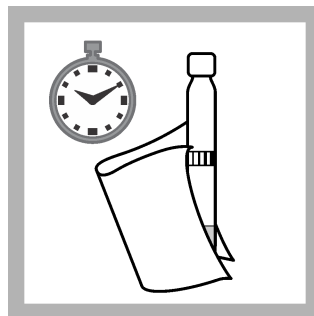
Procedure Measuring range I



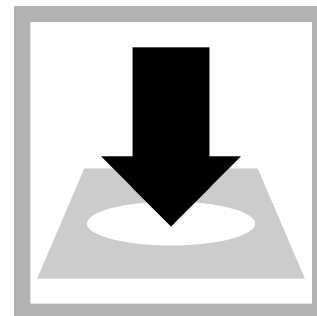
1. Carefully pipet 3.0 mL of solution A.



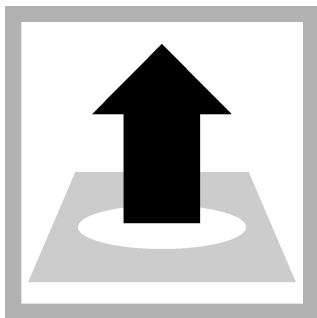
2. Close the vial and invert a few times until the freeze-dried contents are completely dissolved.



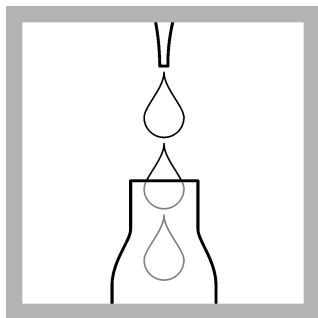
3. After 2 minutes, thoroughly clean the outside of the vial and evaluate.



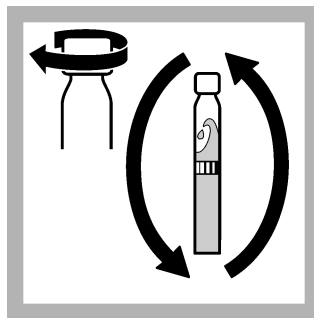
4. Insert the vial into the cell holder.
DR 1900: Go to LCK/TNTplus methods. Select the test, push **READ 1**.



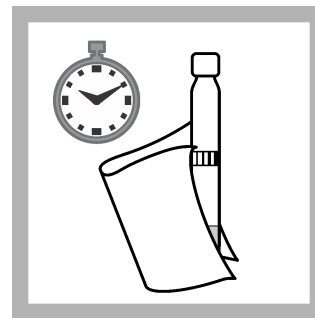
5. Remove the vial.



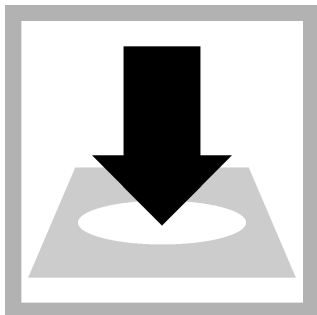
6. Carefully pipet **2.0 mL** of **sample**.



7. Close the vial and invert a few times.



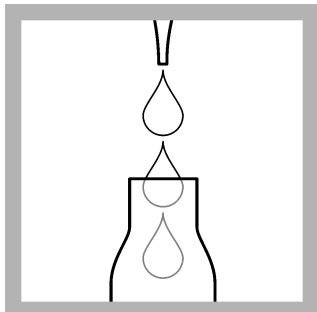
8. After **1 minute**, thoroughly clean the outside of the vial and evaluate.



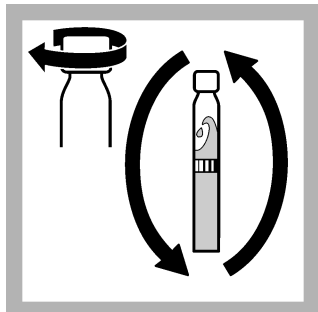
9. Insert the vial into the cell holder.

DR 1900: Push **READ 2**.

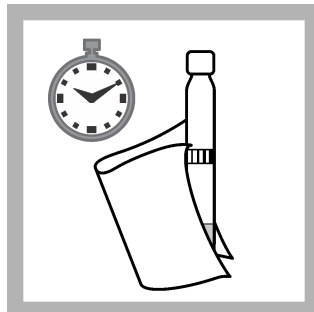
Procedure Measuring range II



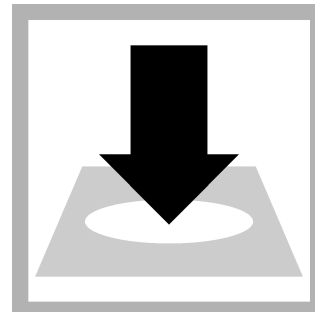
1. Carefully pipet **3.5 mL** of **solution A**.



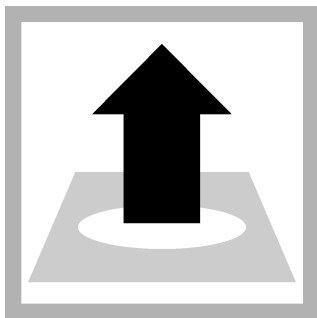
2. Close the vial and invert a few times until the freeze-dried contents are **completely dissolved**.



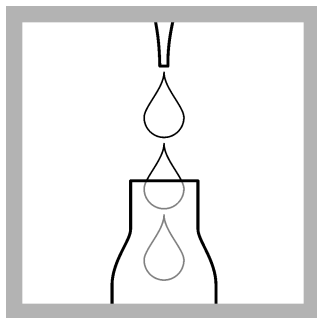
3. After **2 minutes**, thoroughly clean the outside of the vial and evaluate.



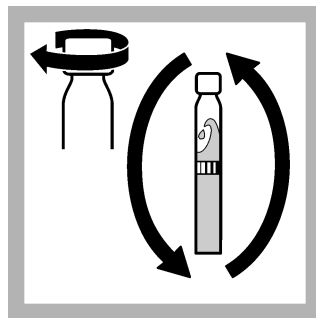
4. Insert the vial into the cell holder.
DR 1900: Go to LCK/TNTplus methods. Select the test, push **READ 1**.



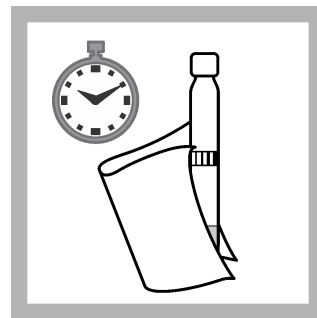
5. Remove the vial.



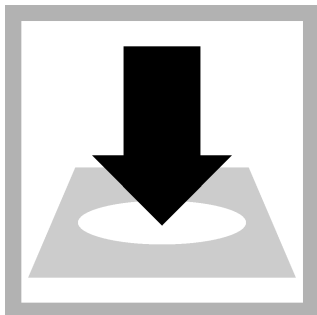
6. Carefully pipet **0.5 mL** of **sample**.



7. Close the vial and invert a few times.



8. After **1 minute**, thoroughly clean the outside of the vial and evaluate.



9. Insert the vial into the cell holder.

DR 1900: Push **READ 2**.

Interferences

The ions listed in the table have been individually checked against the given concentrations and do not cause interference.

There are no known interferences when the tests are used with drinking water and boiler water.

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

Interference level	Interfering substance
Measuring range I	less than 20 mg/L Ca
Measuring range II	less than 100 mg/L Ca

Summary of method

Magnesium ions react with metal phthaleins to give a violet color.

TNT  **plus**[®]



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