TNT849 Magnesium

DOC312.53.94353

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

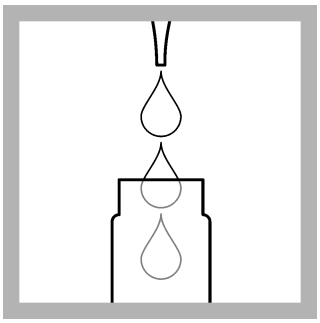
The pH of the water sample must be between pH 4–9.

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

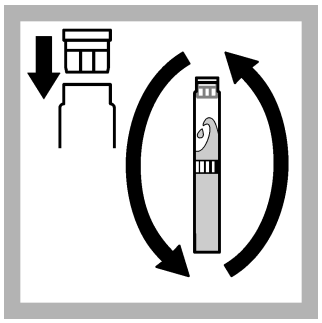
Before starting

This method is applicable on DR1900, DR2800, DR3800, DR3900, DR4900, DR5000 and DR6000 only.
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.

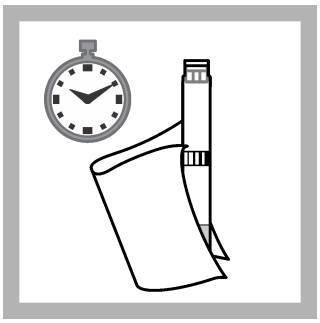
Procedure Measuring range I



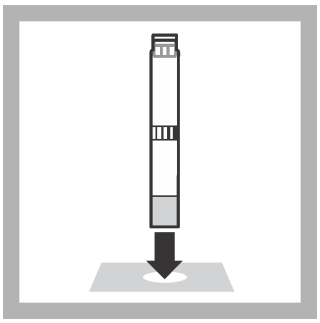
1. Carefully pipet **3.0 mL** of **solution A**.



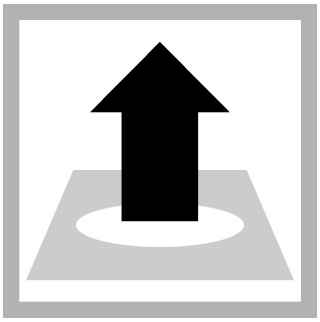
2. Close the vial and invert a few times until the freeze-dried contents are **completely dissolved**.



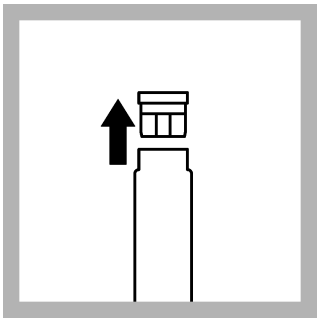
3. After **2 minutes**, thoroughly clean the outside of the vial and evaluate.



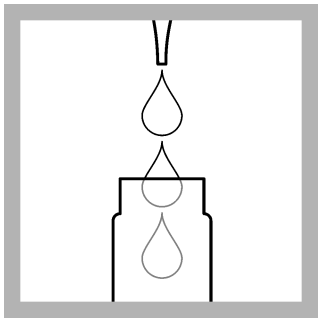
4. Insert the vial into the cell holder.
DR1900: Go to LCK/TNTplus methods. Select the test, push **READ 1**.



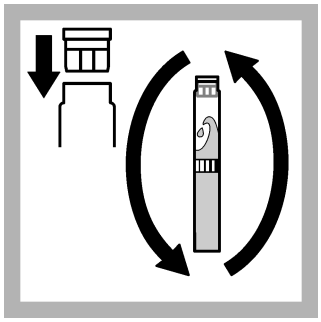
5. Remove the vial.



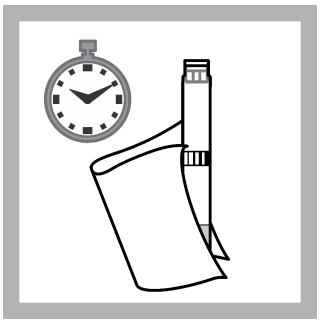
6. Open the vial.



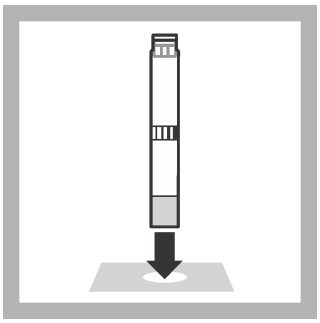
7. Carefully pipet **2.0 mL** of **sample**.



8. Close the vial and invert a few times.

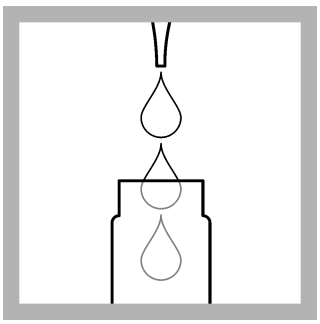


9. After **1 minute**, thoroughly clean the outside of the vial and evaluate.

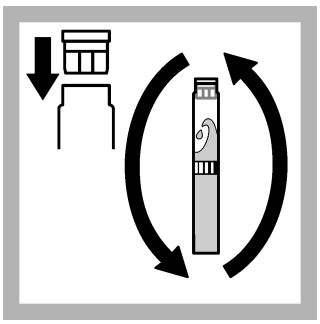


10. Insert the vial into the cell holder.
DR1900: Push **READ 2**.

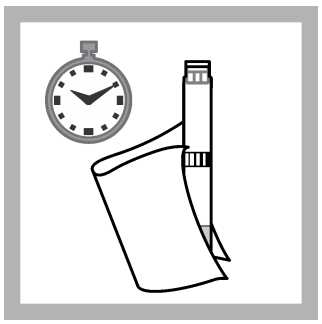
Procedure Measuring range II



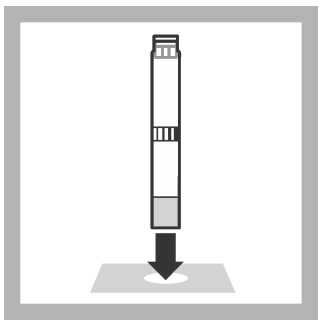
1. Carefully pipet **3.5 mL** of **solution A**.



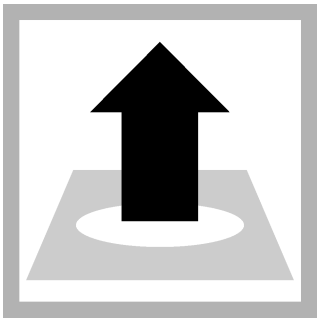
2. Close the vial and invert a few times until the freeze-dried contents are **completely dissolved**.



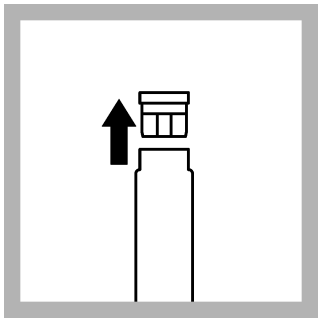
3. After **2 minutes**, thoroughly clean the outside of the vial and evaluate.



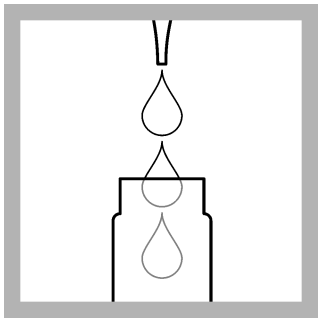
4. Insert the vial into the cell holder.
DR1900: Go to LCK/TNTplus methods. Select the test, push **READ 1**.



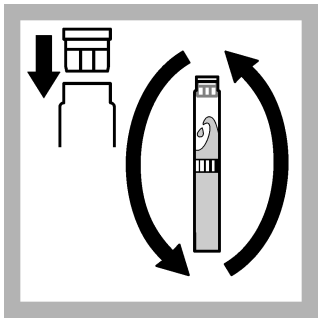
5. Remove the vial.



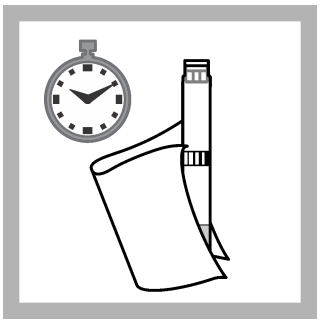
6. Open the vial.



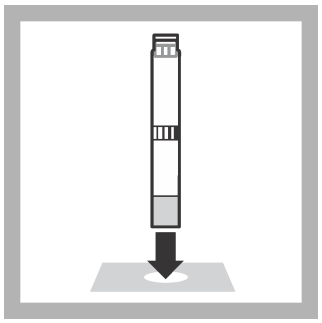
7. Carefully pipet **0.5 mL** of **sample**.



8. Close the vial and invert a few times.



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



10. Insert the vial into the cell holder.
DR1900: Push **READ 2**.

Interferences

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

There is no interference from:

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

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

Summary of method

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

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**

HACH COMPANY
WORLD HEADQUARTERS
Telephone: (970) 669-3050
FAX: (970) 669-2932

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02/2026, Edition 3