LCK343 Nitrite

DOC312.53.94410

2–90 mg/L NO_2-N or 7–295 mg/L NO_2 LCK343

Scope and application: For wastewater plants and industrial wastewater.

Test preparation

Test 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).

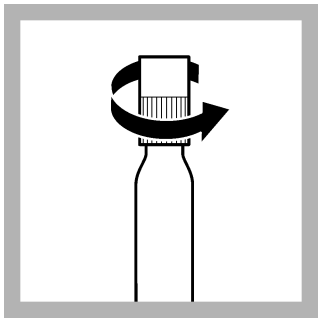
Before starting

Not more than **3 hours** should elapse between sampling and analyzing the sample.
The method is applicable for DR1900, DR3900, DR4900 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.

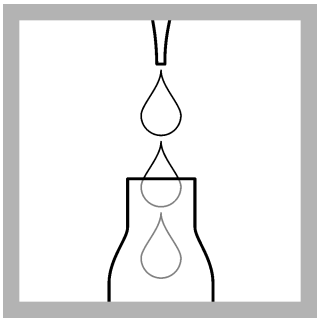
Procedure



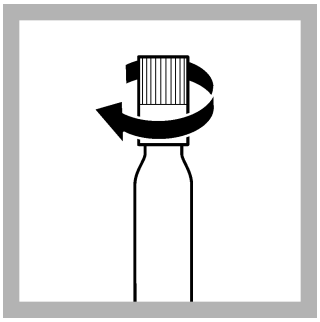
1. Carefully remove the foil from the screwed-on DosiCap Zip.



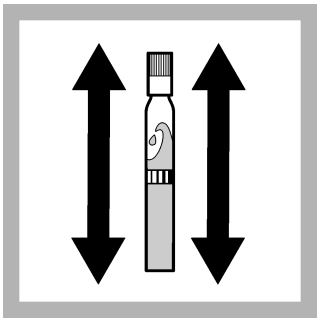
2. Unscrew the DosiCap Zip.



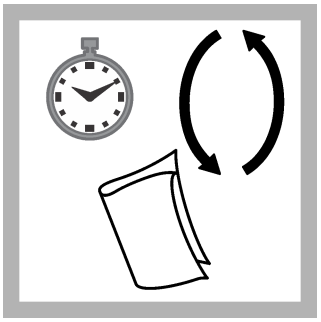
3. Carefully pipet **0.2 mL sample**.



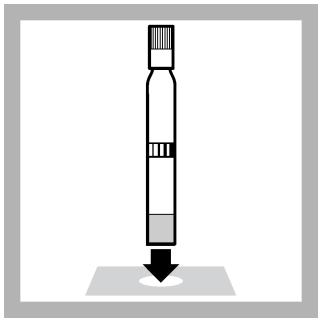
4. **Immediately** screw the DosiCap Zip back on; **fluting at the top**.



5. Shake **vigorously**until the freeze-dried contents are **completely dissolved**.



6. After **15 minutes**, invert a few more times, thoroughly clean the outside of the cuvette and evaluate.



7. 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. Chromium(VI) ions interfere with the determination. Copper(II) ions interfere with the determination even at concentrations below 1 mg/L.

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

Interfering substance	Interference level
Sn^{4+}	10 mg/L
Ni^{2+}, Ag^{+}	20 mg/L
Co^{2+}, Zn^{2+}, Cd^{2+}, Mn^{2+}	50 mg/L
Cr^{3+}, Hg^{2+}	100 mg/L
Mg^{2+}	200 mg/L
Fe^{2+}	300 mg/L
Fe^{3+}	600 mg/L
K^{+}, NO_3^{-}, Ca^{2+}, Cl^{-} , NH_4^{+}	2000 mg/L
SO_4^{2-}	4000 mg/L
PO_4^{3-}	5000 mg/L

Summary of method

Nitrites react with primary aromatic amines in acidic solution to form diazonium salts. These combine with aromatic compounds that contain an amino group or a hydroxyl group to form intensively colored azo dyes.

HACH LANGE GMBH
Willstätterstraße 11
D-40549 Düsseldorf
Tel. +49 (0) 2 11 52 88-0
Fax +49 (0) 2 11 52 88-143
info-de@hach.com
www.hach.com

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