Nickel 50 L M255

0.02 - 1 mg/L Ni

Dimethylglyoxime

Instrument specific information

The test can be performed on the following devices. In addition, the required cuvette and the absorption range of the photometer are indicated.

Instrument Type	Cuvette	λ	Measuring Range
SpectroDirect, XD 7000, XD 7500	□ 50 mm	443 nm	0.02 - 1 mg/L Ni

Material

Required material (partly optional):

Reagents	Packaging Unit	Part Number
Nickel Reagent Test	1 pc.	2419033

The following accessories are required.

Accessories	Packaging Unit	Part Number
Measuring spoon no. 8, black	1 pc.	424513

Application List

- Galvanization
- Raw Water Treatment
- Waste Water Treatment

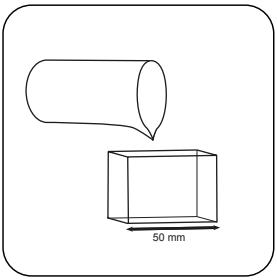
Preparation

1. The test sample and the reagents should be at room temperature when undertaking the test.
2. The pH value of the sample must be between 3 and 10.

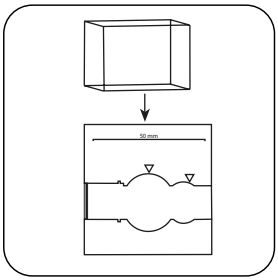
Determination of Nickel with Reagents test

Select the method on the device.

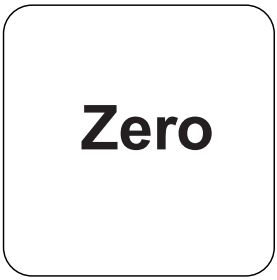
For this method, a ZERO measurement does not have to be carried out every time on the following devices: XD 7000, XD 7500



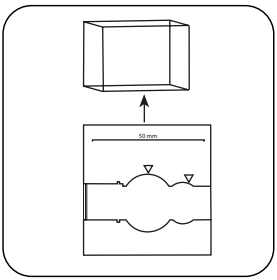
Fill 50 mm vial with **sample**.



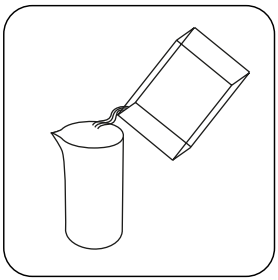
Place **sample vial** in the sample chamber. • Pay attention to the positioning.



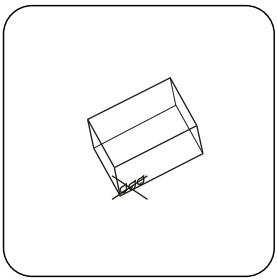
Press the **ZERO** button.



Remove **vial** from the sample chamber.

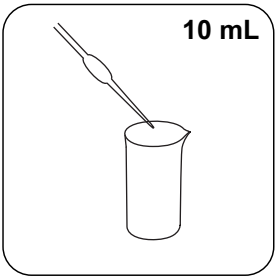


Empty vial.

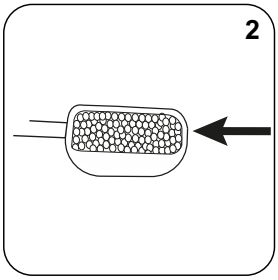


Dry the vial thoroughly.

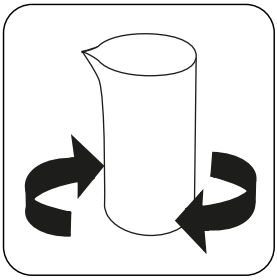
For devices that require **no ZERO measurement** , **start here**.



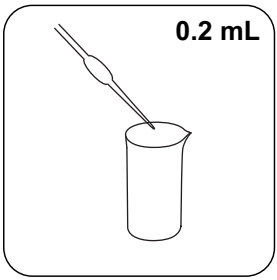
Fill a suitable sample vessel with **10 mL sample** .



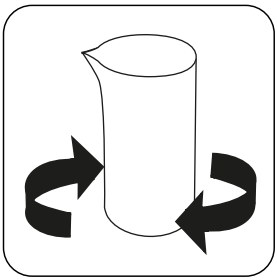
Add **2 level measuring scoop No. 8 (black) Nickel-51** .



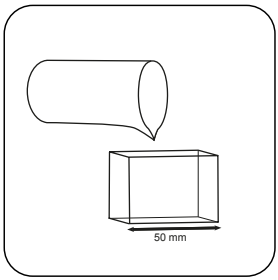
Invert several times to mix the contents.



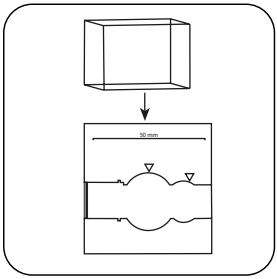
Add **0.2 mL Nickel-52**.



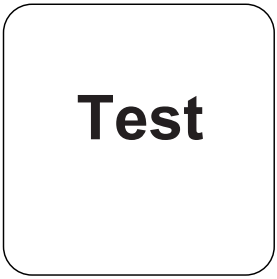
Invert several times to mix the contents.



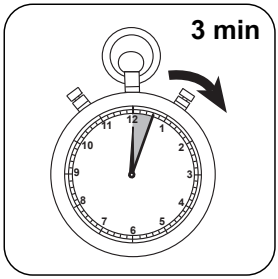
Fill 50 mm vial with **sample**.



Place **sample vial** in the sample chamber. • Pay attention to the positioning.



Press the **TEST** (XD: **START**)button.



Wait for **3 minute(s) reaction time**.

Once the reaction period is finished, the measurement takes place automatically.

The result in mg/L Nickel appears on the display.

Chemical Method

Dimethylglyoxime

Appendix

Calibration function for 3rd-party photometers

Conc. = a + b•Abs + c•Abs^2 + d•Abs^3 + e•Abs^4 + f•Abs^5

	□ **50 mm**
a	$-1.35208 \cdot 10^{-2}$
b	$9.07687 \cdot 10^{-1}$
c	
d	
e	
f	

Bibliography

Photometrische Analyseverfahren, Schwedt, Wissenschaftliche Verlagsgesellschaft mbH, Stuttgart 1989