



Nitrite T

0.01 - 0.5 mg/l N

N-(1-Naphthyl)-ethylenediamine

270

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
MD 600, MD 610, MD 640, MultiDirect	ø 24 mm	560 nm	0.01 - 0.5 mg/l N
SpectroDirect	ø 24 mm	545 nm	0.01 - 0.5 mg/l N
XD 7000, XD 7500	ø 24 mm	540 nm	0.01 - 0.5 mg/l N

Material

Required material (partly optional):

Reagents	Packaging Unit	Part Number
Nitrite LR	Tablet / 100	512310BT
Nitrite LR	Tablet / 250	512311BT

Application List

- Galvanization
- Waste Water Treatment
- Drinking Water Treatment
- Raw Water Treatment

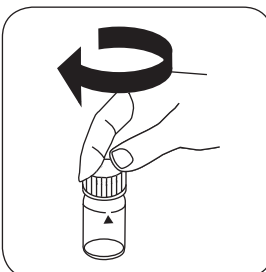
Implementation of the provision Nitrite with Tablet

Select the method on the device

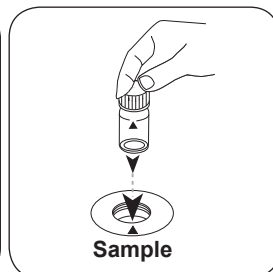
For this method, no ZERO measurements are to be carried out with the following devices: XD 7000, XD 7500



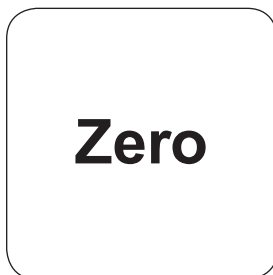
Fill 24 mm vial with **10 ml sample**.



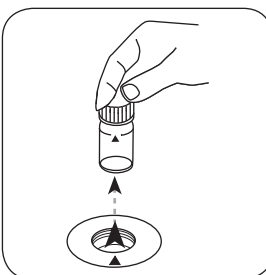
Close vial(s).



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

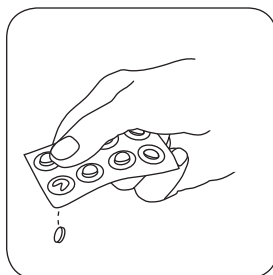


Press the **ZERO** button.

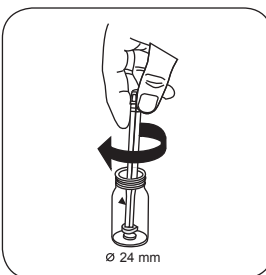


Remove the vial from the sample chamber.

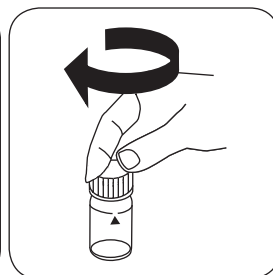
For devices that require **no ZERO measurement**, start here.



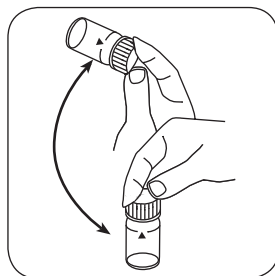
Add **NITRITE LR tablet**.



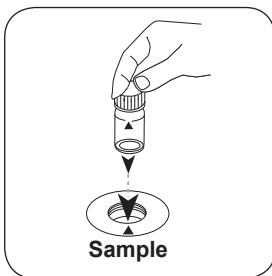
Crush tablet(s) by rotating slightly.



Close vial(s).



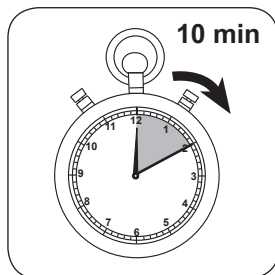
Dissolve tablet(s) by inverting.



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

Test

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



Wait for **10 minute(s) reaction time**.

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

The result in mg/l Nitrite appears on the display.

Analyses

The following table identifies the output values can be converted into other citation forms.

Unit	Cite form	Scale Factor
mg/l	N	1
mg/l	NO ₂	3.2846

Chemical Method

N-(1-Naphthyl)-ethylenediamine

Appendix

Interferences

Persistent Interferences

1. Antimony (III), iron (III), lead, mercury (I), silver, chloroplatinate, metavanadate, and bismuth can result in interference as a result of precipitation.
2. Copper(II) ions may give a low result as they accelerate the decomposition of the diazonium salt.
3. It is unlikely in practice that these interfering ions will occur in such high concentrations that they cause significant errors.

Method Validation

Limit of Detection	0.09 mg/l
Limit of Determination	0.27 mg/l
End of Measuring Range	0.5 mg/l
Sensitivity	1.698 mg/l
Standard Deviation	0.051 µg

Derived from

DIN ISO 15923-1 D49

^{a)} determination of free, combined and total | ^{b)} Reactor is necessary for COD (150 °C), TOC (120 °C) and total -chromium, - phosphate, -nitrogen, (100 °C) | ^{c)} MultiDirect: Adapter is necessary for Vacu-vials® (Order code 19 20 75) | ^{d)} Spectroquant® is a Merck KGaA Trademark | ^{e)} alternative reagent, used instead of DPD No.1/No.3 in case of turbidity in the water sample caused by high concentration of calcium and/or high conductivity | ^{f)} additionally required for determination of bromine, chlorine dioxide and ozone in the presence of chlorine | ^{g)} Reagent recovers most insoluble iron oxides without digestion | ^{h)} additionally required for samples with hardness values above 300 mg/l CaCO₃ | ⁱ⁾ high range by dilution | ^{j)} including stirring rod, 10 cm