

Nitrite T M270

0.01 - 0.5 mg/L N

N-(1-Naphthyl)-ethylendiamine

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
XD 7000, XD 7500	ø 24 mm	540 nm	0.01 - 0.5 mg/L N
SpectroDirect	ø 24 mm	545 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
ValidCheck Nitrite 0.1 mg/l NO ₂ - N	1 pc.	48221225
ValidCheck Nitrite 0.4 mg/l NO ₂ - N	1 pc.	48221425

Application List

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



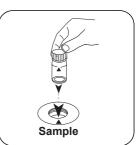


Determination of Nitrite with Tablet

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 24 mm vial with 10 mL Close vial(s). sample.

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

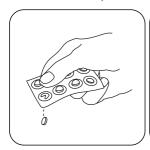




Press the **ZERO** button.

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.

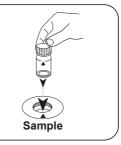


Close vial(s).

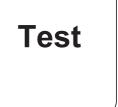




Dissolve tablet(s) by inverting.



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



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)-ethylendiamine

Appendix

Calibration function for 3rd-party photometers

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

	ø 24 mm	□ 10 mm
а	-5.14368 • 10 ⁻³	-5.14368 • 10 ⁻³
b	1.76663 • 10 ⁻¹	3.79825 • 10-1
С	1.20299 • 10 ⁻²	5.56082 • 10 ⁻²
d		
е		
f		

Interferences

Persistant Interferences

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

Derived from

DIN ISO 15923-1 D49