

Nitrite VHR L**M271****25 - 2500 mg/L NO₂⁻****Ferrous Sulfate Method****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	ø 24 mm	580 nm	25 - 2500 mg/L NO ₂ ⁻
XD 7000, XD 7500	ø 24 mm	585 nm	25 - 2500 mg/L NO ₂ ⁻

Material

Required material (partly optional):

Reagents	Packaging Unit	Part Number
Nitrite VHR L, 500 ml	500 mL	471170
Nitrite VHR L, 500 ml, Set	500 mL	471160

The following accessories are required.

Accessories	Packaging Unit	Part Number
Pipette, 1000 µl	1 pc.	365045
Pipette tips, 0,1-1 ml (blue), 1000 pc.	1 pc.	419073

Application List

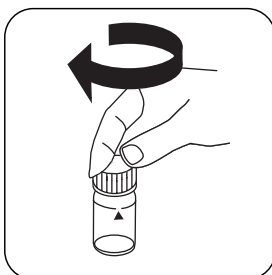
- Cooling Water

Determination of Nitrite VHR L

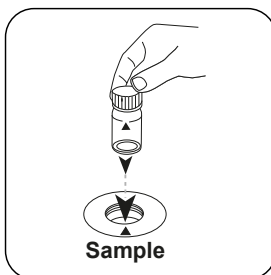
Select the method on the device.



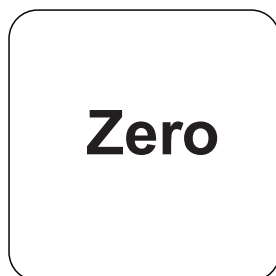
Place **10 mL Nitrite VHR L solution** in the sample cuvette.



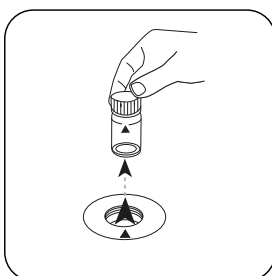
Close vial(s).



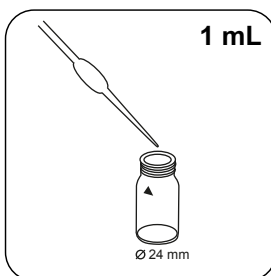
Place **sample vial** in the sample chamber. Pay attention to the positioning.



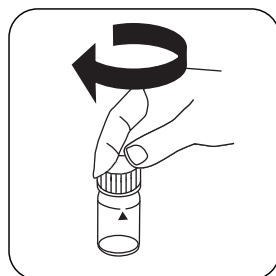
Press the **ZERO** button.



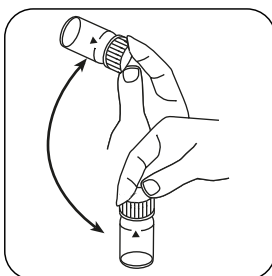
Remove the vial from the sample chamber.



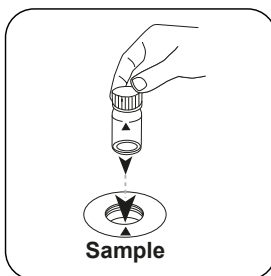
Add **1 mL sample**.



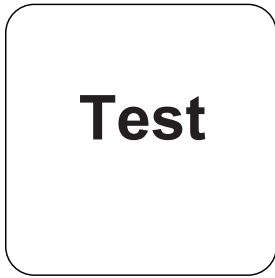
Close vial(s).



Invert several times to mix the contents (1-2 times).



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



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

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

Chemical Method

Ferrous Sulfate Method

Calibration function for 3rd-party photometers

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

	∅ 24 mm	□ 10 mm
a	$1.45432 \cdot 10^{+0}$	$1.45432 \cdot 10^{+1}$
b	$1.22994 \cdot 10^{+3}$	$2.64437 \cdot 10^{+3}$
c		
d		
e		
f		

Method Validation

Limit of Detection	8.77 mg/L
Limit of Quantification	26.31 mg/L
End of Measuring Range	2500 mg/L
Sensitivity	1235.02 mg/L / Abs
Confidence Intervall	13.11 mg/L
Standard Deviation	5.42 mg/L
Variation Coefficient	0.43 %