



Hydrazine L

M206

0.01 - 0.6 mg/L N₂H₄

Dimethylaminobenzaldehyde

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	430 nm	0.01 - 0.6 mg/L N ₂ H ₄
SpectroDirect, XD 7000, XD 7500	ø 24 mm	455 nm	5 - 600 µg/L N ₂ H ₄

Material

Required material (partly optional):

Reagents	Packaging Unit	Part Number
VARIO Hydra 2 Reagent	100 mL	531200

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

- Boiler Water
- Cooling Water

Preparation

1. Samples cannot be preserved and must be analysed immediately.
2. Sample temperature should be 21 °C ± 4 °C.

Notes

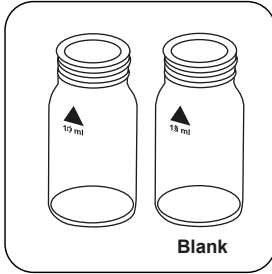
1. The blank may develop a faint yellow colour due to the reagent.
2. The unit mg/L is rounded. Measuring Range 0,01-0,6 mg/L.





Determination of Hydrazine with Vario liquid Reagent

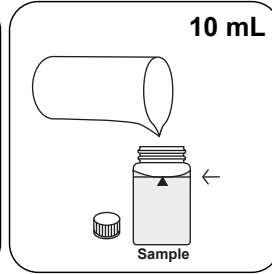
Select the method on the device.



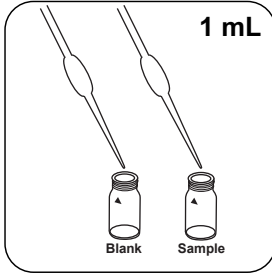
Prepare two clean 24 mm vials. Mark one as a blank.



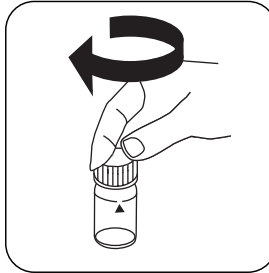
Put **10 mL deionised water** in the blank.



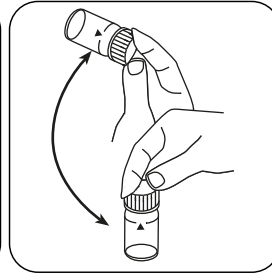
Put **10 mL sample** in the sample vial.



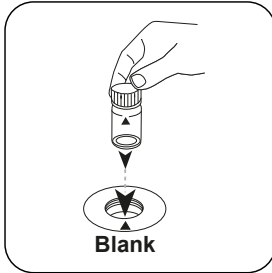
Add **1 mL Vario Hydra 2 Rgt solution** to each vial.



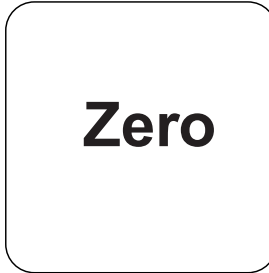
Close vial(s).



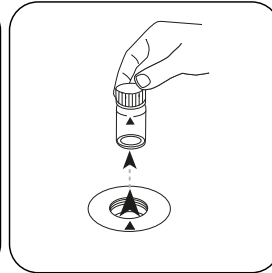
Invert several times to mix the contents.



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



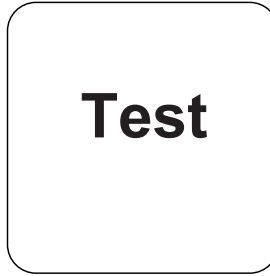
Press the **ZERO** button.



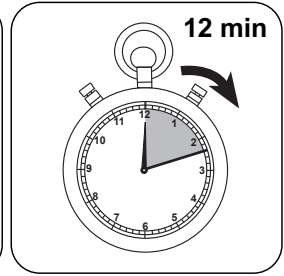
Remove the vial from the sample chamber.



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



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



Wait for **12 minute(s) reaction time**.

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

The result in Hydrazine 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 ₂ H ₄	1
µg/l	N ₂ H ₄	1000

Chemical Method

Dimethylaminobenzaldehyde

Appendix

Calibration function for 3rd-party photometers

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

	∅ 24 mm	□ 10 mm
a	-2.02787 • 10 ⁺¹	-2.02787 • 10 ⁺¹
b	3.38179 • 10 ⁺²	7.27086 • 10 ⁺²
c	-2.0392 • 10 ⁺¹	-9.42622 • 10 ⁺¹
d		
e		
f		

Interferences

Removeable Interferences

- Interferences as a result of highly coloured or turbid samples: Mix 1 part deionised water with 1 part household bleach. Add 1 drop of this mixture into a 25 ml water sample and mix. Use 10 ml prepared sample in place of deionised water in point 1.
Note: For measuring water samples, an unprepared sample must be used.
Principle: hydrazine is oxidised by household bleach. Colour interference will be eliminated by zeroing.

Interference	from / [mg/L]
NH ₄ ⁺	10
Morpholin	10
VO ₄ ³⁻	1



Derived from
DIN 38413-P1