



## Hydrazine VARIO L

206

0.005 - 0.6 mg/l  $\text{N}_2\text{H}_4$ 

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	$\lambda$	Measuring Range
MD 600, MD 610, MD 640, MultiDirect	ø 24 mm	430 nm	0.005 - 0.6 mg/l $\text{N}_2\text{H}_4$
SpectroDirect, XD 7000, XD 7500	ø 24 mm	455 nm	0.005 - 0.6 mg/l $\text{N}_2\text{H}_4$

### Material

Required material (partly optional):

Reagents	Packaging Unit	Part Number
VARIO Hydra 2 Reagent	Liquid / 100 ml	531200

### Application List

- Boiler Water
- Cooling Water

### Preperation

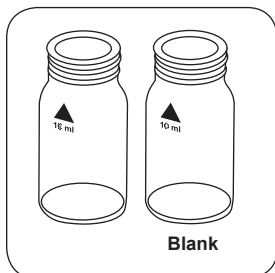
1. Samples cannot be preserved and must be analysed immediately.
2. Sample temperature should be  $21^\circ\text{C} \pm 4^\circ\text{C}$ .

### Notes

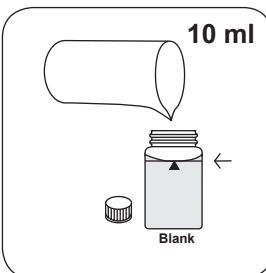
1. The blank may develop a faint yellow colour due to the reagent.

## Implementation of the provision Hydrazine with Vario Fluid Re-agent

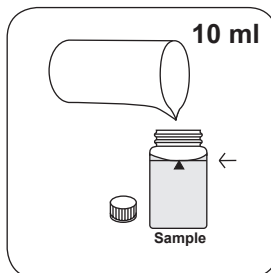
Select the method on the device



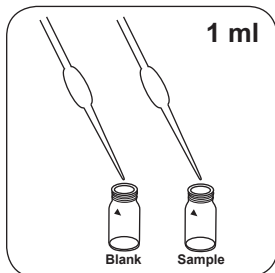
Prepare two clean 24 mm vials. Mark one as a blank.



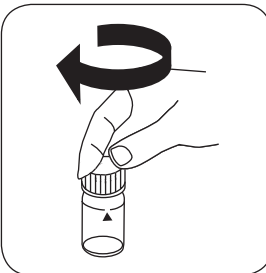
Put **10 ml deionised water** in the blank.



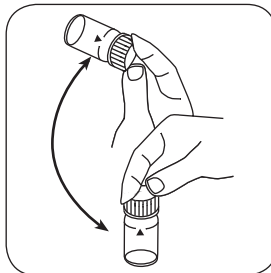
Put **10 ml sample** in the sample vial.



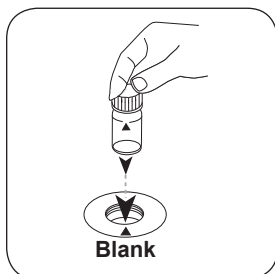
Add **1 ml Vario Hydra 2 Rgt solution** to each vial.



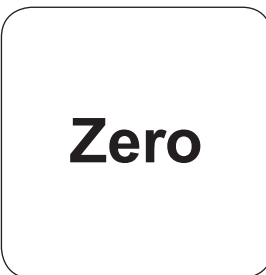
Close vial(s).



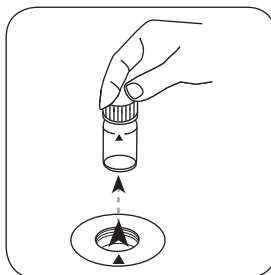
Invert several times to mix the contents.



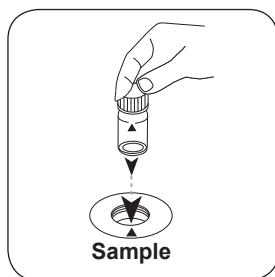
Place **blank** in the sample chamber. • Pay attention to the positioning.



Press the **ZERO** button.



Remove the vial from the sample chamber.



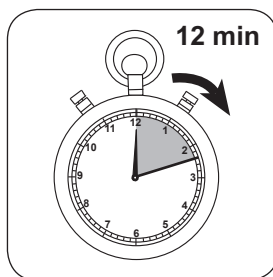
Place **sample vial** in the sample chamber. • Pay attention to the positioning.

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

The result in Hydrazine appears on the display.



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



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

## Analyses

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

Unit	Cite form	Scale Factor
mg/l	$\text{N}_2\text{H}_4$	1
µg/l	$\text{N}_2\text{H}_4$	1,000

## Chemical Method

Dimethylaminobenzaldehyde

## Appendix

### 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]
$\text{NH}_4^+$	10
Morpholin	10
$\text{VO}_4^{3-}$	1

#### Derived from

DIN 38413-P1

<sup>a)</sup> determination of free, combined and total | <sup>b)</sup> Reactor is necessary for COD (150 °C), TOC (120 °C) and total -chromium, - phosphate, -nitrogen, (100 °C) | <sup>c)</sup> MultiDirect: Adapter is necessary for Vacu-vials® (Order code 19 20 75) | <sup>d)</sup> Spectroquant® is a Merck KGaA Trademark | <sup>e)</sup> 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 | <sup>f)</sup> additionally required for determination of bromine, chlorine dioxide and ozone in the presence of chlorine | <sup>g)</sup> Reagent recovers most insoluble iron oxides without digestion | <sup>h)</sup> additionally required for samples with hardness values above 300 mg/l  $\text{CaCO}_3$  | <sup>i)</sup> high range by dilution | <sup>j)</sup> including stirring rod, 10 cm