

## Hydrazine C

M207

0.01 - 0.7 mg/L N<sub>2</sub>H<sub>4</sub> <sup>c)</sup>

PDMAB

### 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 13 mm	430 nm	0.01 - 0.7 mg/L N <sub>2</sub> H <sub>4</sub> <sup>c)</sup>
XD 7000, XD 7500	ø 13 mm	455 nm	0.01 - 0.7 mg/L N <sub>2</sub> H <sub>4</sub> <sup>c)</sup>

### Material

Required material (partly optional):

Reagents	Packaging Unit	Part Number
Vacu-vial Hydrazine Test Kit	1 Set	380470

The following accessories are required.

Accessories	Packaging Unit	Part Number
Adapter (13 mm) MultiDirect for Vacu-vial	1 pc.	192075
Adapter for round cuvettes 13 mm Ø	1 pc.	19802192

### Application List

- Boiler Water
- Cooling Water

### Notes

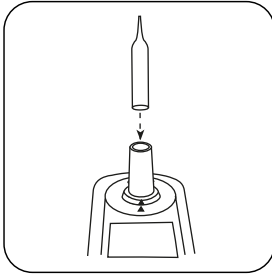
1. This method is adapted from a product by CHEMetrics. The measuring range and wavelength used for this photometer may differ from the data specified by CHEMetrics.
2. Before performing the test, you must read through the original instructions and safety data sheet that is delivered with the test kit (MSDS are also available on the homepage of [www.chemetrics.com](http://www.chemetrics.com)).
3. Vacu-vials® is a registered trademark of the company CHEMetrics, Inc. / Calverton, U.S.A.



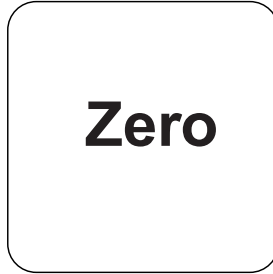


## Determination of Hydrazine with Vacu-vials® K-5003

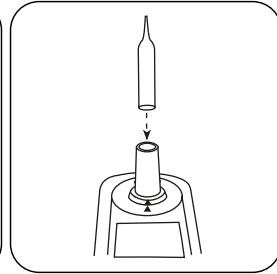
Select the method on the device.



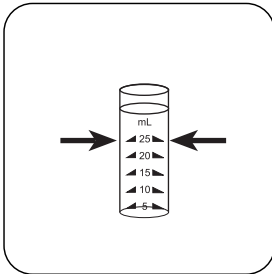
Place **Zero ampoule** in the sample chamber.



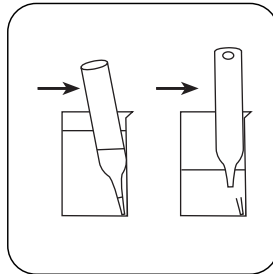
Press the **ZERO** button.



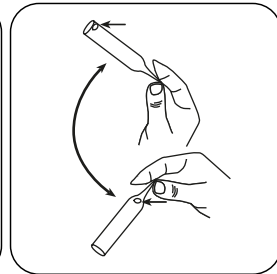
Remove zero ampoule from the sample chamber.



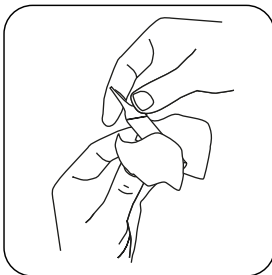
Fill the sample glass to the 25 mL mark with the sample.



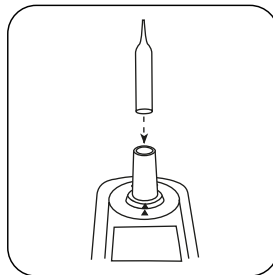
Place a Vacu-vial® ampoule in the sampling vessel. Break off the ampoule tip by applying light pressure against the vessel wall. Wait for the ampoule to fill completely.



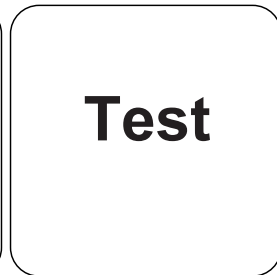
Invert the ampoule several times.



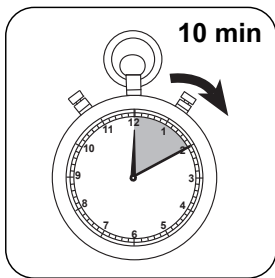
Dry the outside of the ampoule.



Place the ampoule in the sample chamber.



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 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 <sub>2</sub> H <sub>4</sub>	1
µg/l	N <sub>2</sub> H <sub>4</sub>	1000

## Chemical Method

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## 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]
NH <sub>4</sub> <sup>+</sup>	10
C <sub>2</sub> H <sub>9</sub> NO	10
VO <sub>4</sub> <sup>3-</sup>	1

## Method Validation

Limit of Detection	0.0087 mg/L
Limit of Quantification	0.026 mg/L
End of Measuring Range	0.7 mg/L
Sensitivity	0.67 mg/L / Abs
Confidence Intervall	0.003 mg/L
Standard Deviation	0.001 mg/L
Variation Coefficient	0.42 %

Derived from

DIN 38413-P1



<sup>41</sup> MultiDirect: Adapter is necessary for Vacu-vials® (Order code 19 20 75)