Sulphide T M365

0.04 - 0.5 mg/L S^{2-}

DPD / Catalyst

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	660 nm	0.04 - 0.5 mg/L S^{2-}
SpectroDirect, XD 7000, XD 7500	ø 24 mm	668 nm	0.04 - 0.5 mg/L S^{2-}

Material

Required material (partly optional):

Reagents	Packaging Unit	Part Number
Sulfide No. 1	Tablet / 100	502930
Sulfide No. 2	Tablet / 100	502940

Application List

- Drinking Water Treatment
- Raw Water Treatment
- Waste Water Treatment

Sampling

1. To avoid loss of sulphide, the sample shall be taken carefully under minimal exposure to air. Also, the test must be performed immediately after sampling.

Notes

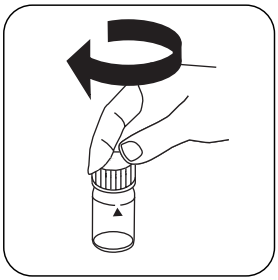
1. The tablets must be added in the correct sequence.

Determination of Sulphide with Tablet

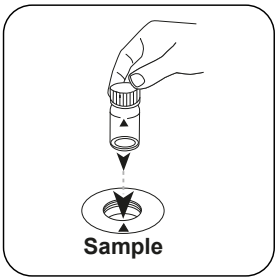
Select the method on the device.

For this method, a ZERO measurement does not have to be carried out every time on the following devices: XD 7000, XD 7500

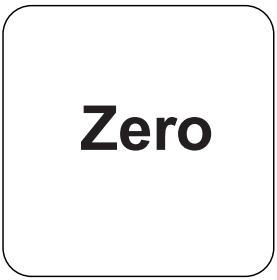
Fill 24 mm vial with **10 mL sample**.



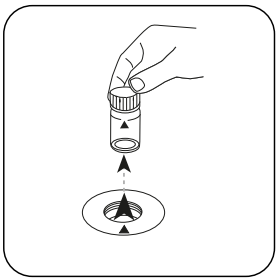
Close vial(s).



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

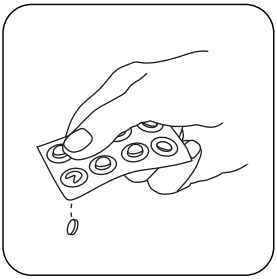


Press the **ZERO** button.

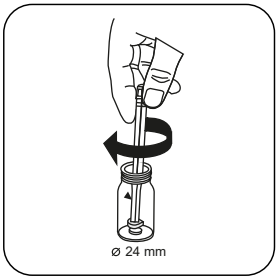


Remove the vial from the sample chamber.

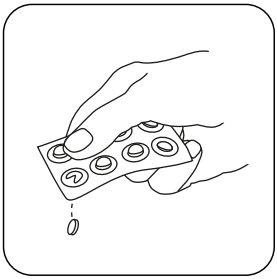
For devices that require **no ZERO measurement** , **start here**.



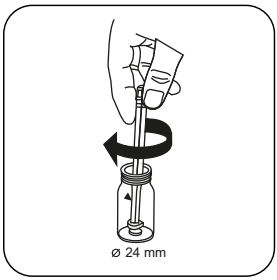
Add **SULFIDE No. 1 tablet** .



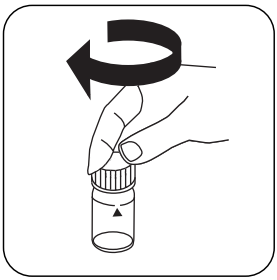
Crush tablet(s) by rotating slightly.



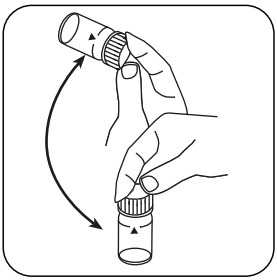
Add **SULFIDE No. 2 tablet** .



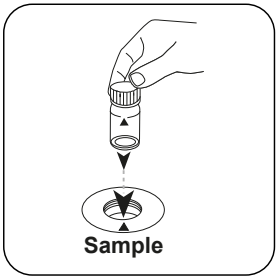
Crush tablet(s) by rotating slightly.



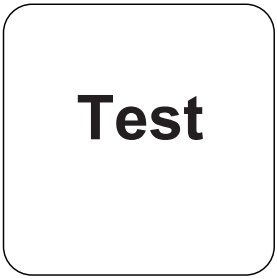
Close vial(s).



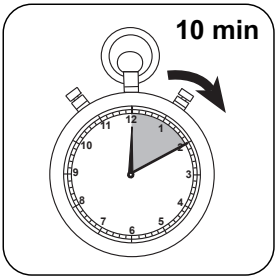
Dissolve tablet(s) by inverting.



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 Sulphide 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	S^{2-}	1
mg/l	H_2S	1.0629

Chemical Method

DPD / Catalyst

Appendix

Calibration function for 3rd-party photometers

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

	ø 24 mm	□ 10 mm
a	$-5.52335 \cdot 10^{-2}$	$-5.52335 \cdot 10^{-2}$
b	$3.44705 \cdot 10^{-1}$	$7.41116 \cdot 10^{-1}$
c	$-2.88766 \cdot 10^{-2}$	$-1.33482 \cdot 10^{-1}$
d		
e		
f		

Interferences

Removeable Interferences

- Chlorine and other oxidising agents that react with DPD, do not interfere with the test
- The recommended analysis temperature is 20 ° C. Deviations from the temperature can lead to excess or may show lower results.

Bibliography

Photometrische Analyseverfahren, Schwedt, Wissenschaftliche Verlagsgesellschaft mbH, Stuttgart 1989
Photometrische Analyse, Lange/ Vjedelek, Verlag Chemie 1980

Derived from

DIN 38405-D26/27