Zinc L M405

0.1 - 2.5 mg/L Zn Zn

Zincon / EDTA

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 100, MD 110, MD 600, MD 610, MD 640, XD 7000, XD 7500	ø 24 mm	610 nm	0.1 - 2.5 mg/L Zn

Material

Required material (partly optional):

Reagents	Packaging Unit	Part Number
KS 89 - Cationic Suppressor	65 mL	56L008965
Zinc LR Reagent Set	1 pc.	56R023965
Zinc Buffer Z1B	65 mL	56L024365
Zinc Indicator Z4P	Powder / 20 g	56P024420

Application List

- Waste Water Treatment
- Raw Water Treatment
- Cooling Water
- Galvanization

Notes

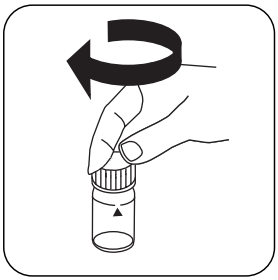
1. The measuring spoon supplied with the reagents must be used for the correct dosage.
2. This test is suitable for the determination of free soluble zinc. Zinc, which is bound to strong complexifying agents, is not measured.

Determination of Zinc with liquid reagent and powder

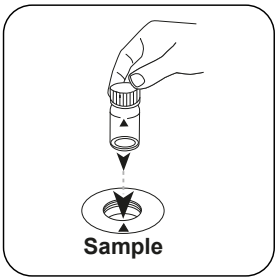
Select the method on the device.

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

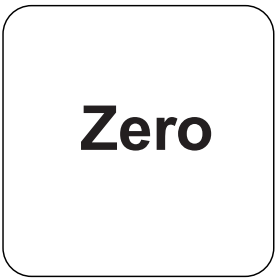
Fill 24 mm vial with **10 mL sample**.



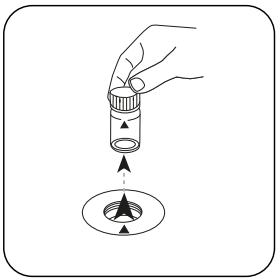
Close vial(s).



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

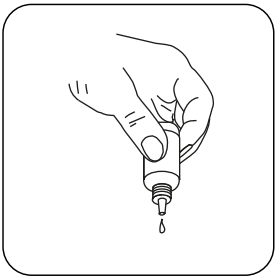


Press the **ZERO** button.

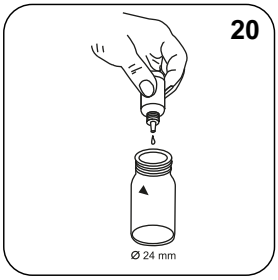


Remove the vial from the sample chamber.

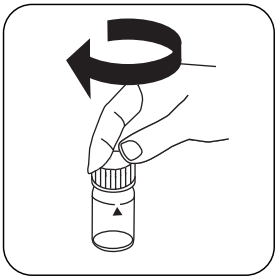
For devices that require **no ZERO measurement** , **start here**.



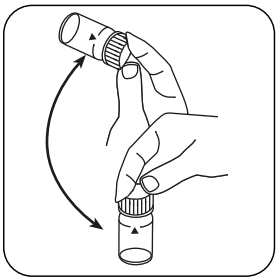
Hold cuvettes vertically and add equal drops by pressing slowly.



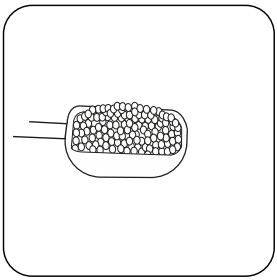
Add **20 drops Zinc Buffer Z1B**.



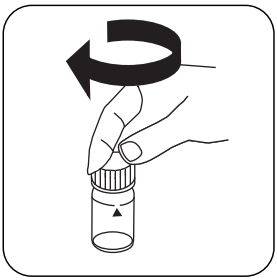
Close vial(s).



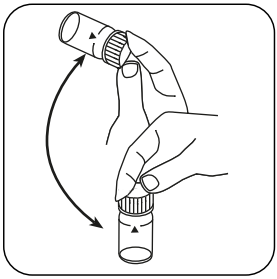
Invert several times to mix the contents.



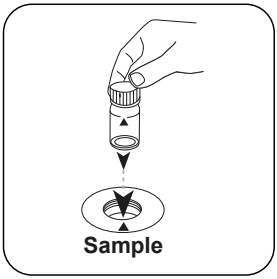
Add **a measuring scoop Zinc Indicator Z4P** .



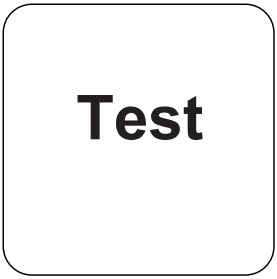
Close vial(s).



Swirl around to dissolve the powder.



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



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

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

Chemical Method

Zincon / EDTA

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	-2.34614 • 10^{-1}	-2.34614 • 10^{-1}
b	2.37378 • 10^{+0}	5.10363 • 10^{+0}
c	-1.49877 • 10^{+0}	-6.92806 • 10^{+0}
d	7.39829 • 10^{-1}	7.3527 • 10^{+0}
e		
f		

Interferences

Removeable Interferences

- Cationics such as quaternary ammonium compounds will cause the colour to change from rose red to purple, depending upon the level of copper present. In this event add drops of KS89 (cationic suppressor) one at a time, until it turns orange/blue. Note: After adding each drop, swirl the vial.

Bibliography

Photometrische Analyseverfahren, Schwedt, Wissenschaftliche Verlagsgesellschaft mbH, Stuttgart 1989
S.M. Khopkar, Basic Concepts of Analytical Chemistry (2004), New Age International Ltd. Publishers, New Dheli, p. 75