

**Zinc (Total Complexed)****56I700380****0.1 - 5 mg/L Zn****Material**

<b>Reagents</b>	<b>Packaging Unit</b>	<b>Part Number</b>
Zinc Indicator Z4P	Powder / 20 g	56P024420
Zinc Titrant Z5	65 mL	56L019465
Zinc Buffer Z1B	65 mL	56L024365

The following accessories are required.

<b>Accessories</b>	<b>Packaging Unit</b>	<b>Part Number</b>
Syringe, plastic, 20 mL	1 pc.	56A006501
Titration jar with cap, plastic, 60 mL	1 pc.	56A006701
Filter Circle 0.45 µm, 25 mm	1 pc.	56A020050
Filter Holder 25 mm	1 pc.	56A009101

**Application List**

- Cooling Water
- Boiler Water

**Notes**

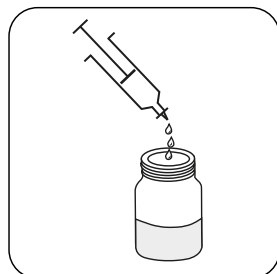
1. Colours may vary depending on sample and test conditions.
2. If the sample is observed to have suspended zinc in the water, pass the sample through a 0.45 µm membrane filter to remove any suspended zinc.
3. Strongly complexed zinc will not be measured. Therefore this test is not suitable for use with Zinc/EDTA programmes.
4. QAC's can interfere with this test.

## Sampling

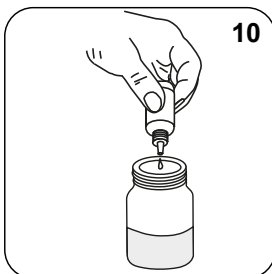
Select the sample volume from the table according to the expected measuring range and read off the factor to calculate the result.

<b>Expected Range</b>	<b>Titrant used</b>	<b>Sample Size</b>	<b>Factor</b>
0.1-1.0 mg/L	Zinc Titrant Z5	50 mL	0.1
1.0-2.0 mg/L	Zinc Titrant Z5	40 mL	0.125
2.0-3.0 mg/L	Zinc Titrant Z5	20 mL	0.25
3.0-5.0 mg/L	Zinc Titrant Z5	10 mL	0.5

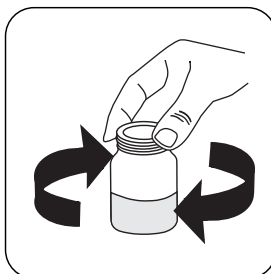
## Determination of soluble zinc



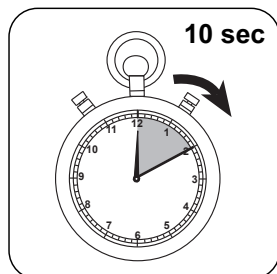
**Attention!** Select the appropriate sample volume according to the instructions in the chapter Sampling.



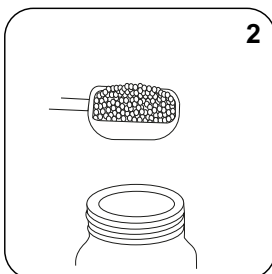
Add **10 drops Zinc Buffer Z1B**.



Swirl to mix.



Wait for **10 second(s)** reaction time.



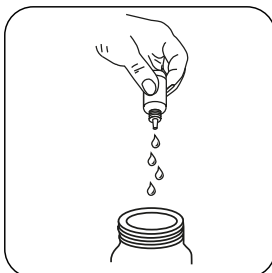
Add **2 measuring scoop(s) Zinc Indicator Z4P**.



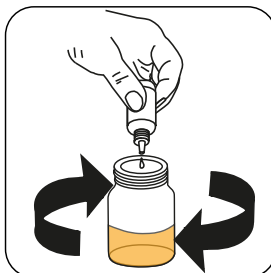
Swirl to mix.



The sample will turn **purple**.



**Attention!** Record the number of drops that will be added.  
**Note:** Make sure to swirl the jar after adding each drop!



Add **Zinc Titrant Z5** drop by drop to the sample until colouration turns from **purple** to **pale orange**.

**Calculate test result: Zinc (as Zinc) mg/L = Number of drops Zinc Titrant Z5 x factor (see table)**