

## Method Z640 – Free chlorine Cl<sub>2</sub>

### Specification

Description:	Test for determining the content of free chlorine in fresh water
Range:	0.1 - 5 mg/l
Resolution:	0.01 mg/l
Wavelength:	470 nm

### Reagent set

Product Code	Description
8640	Set of reagents for method Z640, Free chlorine Cl <sub>2</sub> fresh water (reagents for approx. 50 tests)

#### List of components

- ✓ blister with tablets DPD No. 1 – 5 pcs.
- ✓ crusher

### Performing the measurement

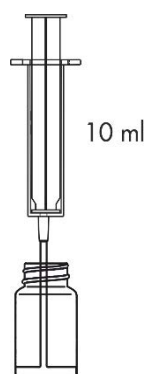
- Select the **Z640 Free chlorine Cl<sub>2</sub>** method (**Methods** → **Select method** → **Z640 Free chlorine Cl<sub>2</sub>**).  
How to select the method, see [8.1 Choosing method](#).

**NOTE:**

*It is recommended to use the GUIDE system by pressing the context button **GUIDE** on the photometer. It will provide you with step-by step basic instruction how to perform measurement and a timer with beeper to count down reaction time. To enable this function press the button **GUIDE**.*

- Rinse the vial and the syringe three times with the tested water.

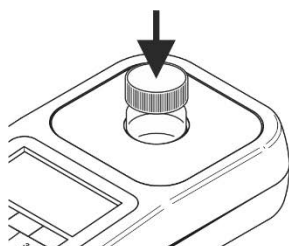
Take exactly 10 ml of the tested water with the syringe and pour into the vial.



**NOTE:**

*Make sure no air bubbles are present in the syringe. Trapped air bubbles can affect accuracy of the measurement.*

- Insert the vial into the round vial holder and press the **ZERO** key. The display will show **"-0.0-"**, which means the device is ready for measurement.



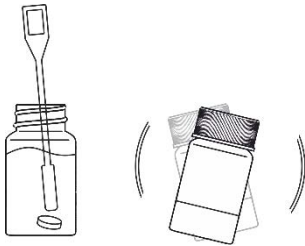
24 09 22		12:35
Cl <sub>2</sub>	Z640 Free chlorin	
	tag 1	
<b>Measuring ...</b>		
ZERO		GUIDE

24 09 22		12:35
Cl <sub>2</sub>	Z640 Free chlorin	
	tag 1	
<b>-0.0- mg/l</b>		
ZERO	MEAS	GUIDE

4. Add one DPD No. 1 tablet into the vial with water.



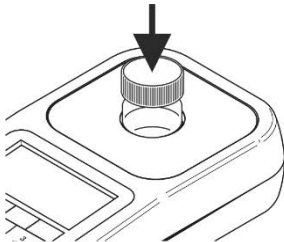
5. Crush the tablet in the vial with the crusher, recap the vial and shake until the tablet has dissolved.



6. Wait **2 minutes** before measuring.



7. Insert the vial into the round vial holder and press the **MEAS** key to take a measurement. The result - **the concentration of free chlorine** - is displayed in **mg/l (ppm)**.



24 09 22		[Battery Icon] 12:38	
Cl <sub>2</sub>	Z640 Free chlorin		
	tag 1		
<b>Measuring ...</b>			
ZERO	MEAS	GUIDE	

24 09 22		[Battery Icon] 12:38	
Cl <sub>2</sub>	Z640 Free chlorin		
	tag 1		
<b>0.12 mg/l</b>			
ZERO	MEAS	GUIDE	REC

## Potential interferences

the presence of:

bromine (Br), iodine (I), ozone (O<sub>3</sub>),  
oxidised form of chromium (Cr) and manganese (Mn)

may interfere with the measurements

alkalinity above 14 °d

may cause falsely low readings