

Method Z240F/ Z240M – Phosphate PO₄

Specification

Description:	Test for determining the content of phosphate in fresh and marine water
Range:	0,05 -10 mg/l
Resolution:	0,01 mg/l
Wavelength:	610 nm

Reagent set

Product Code	Description	List of components
8240	Set of reagents for: method Z240F, Phosphate PO ₄ in fresh water method Z240M, Phosphate PO ₄ in marine water (reagents for approx. 35 tests)	<ul style="list-style-type: none"> ✓ Reagent PO₄-1 ✓ powder Reagent PO₄-2 ✓ spatula

Performing the measurement

- To measure the content of phosphate in fresh water select the **Z240F Phosphate PO₄ Fresh** method, in marine water the **Z240M Phosphate Marine** method (**Methods** → **Select method** → **Z240F/Z240M Phosphate PO₄**). How to select the method, see [8.1 Choosing method](#).

NOTE:

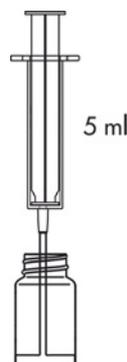
It is recommended to use the **GUIDE** system by pressing the context button **GUIDE** on the photometer. It will provide you with step-by step basic instruction how to perform measurement and a timer with beeper to count down reaction time. To enable this function press the button **GUIDE**.

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

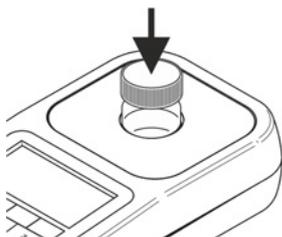
Take exactly 5 ml of the tested water with the syringe and pour into the vial.

NOTE:

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



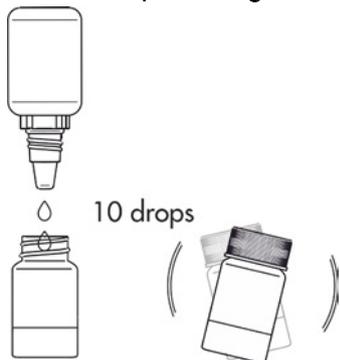
- Insert the vial into the round vial holder and press the **ZERO** key. The display will show **"-0.0-"**, which means the device is ready for measurement.



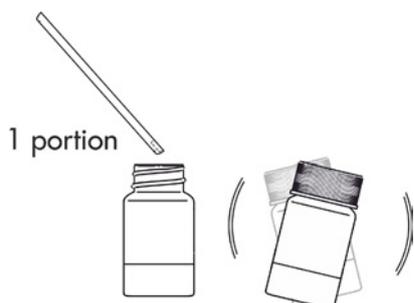
26 08 20		12:45	
PO ₄	Z240F Phosphate PO	tag 1	
Measuring ...			
ZERO	MEAS	GUIDE	

26 08 20		12:45	
PO ₄	Z240F Phosphate PO	tag 1	
-0.0- mg/l			
ZERO	MEAS	GUIDE	

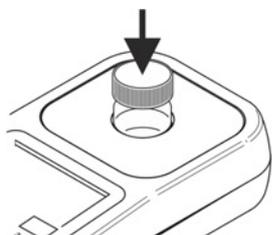
4. Add 10 drops of **Reagent PO₄-1** and shake to mix.



5. Add 1 portion of **powder Reagent PO₄-2** with the spatula, and shake until powder has dissolved. 6. Before taking a measurement wait **10 minutes**.



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



26 08 20		13:00
PO ₄	Z240F Phosphate PO	
	tag 1	
Measuring ...		
ZERO	MEAS	GUIDE

26 08 20		13:00
PO ₄	Z240F Phosphate PO	
	tag 1	
0.65 mg/l		
ZERO	MEAS	GUIDE REC

There are also available alternative units to display: ppm and P mg/l. They can be accessed by pressing the **left / right** cursors on the keyboard.

Potential interferences

the presence of:

iron (Fe)	- above 50 ppm	
copper (Cu)	- above 10 ppm	may interfere with the measurement
silica content	- above 50 ppm	
silicate content	- above 10 ppm	may interfere with the measurement
hydrogen sulphide, arsenate or high buffering capacity		may interfere with the measurement