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)	✓ Reagent PO_4-1 ✓ powder Reagent PO_4-2 ✓ spatula

Performing the measurement

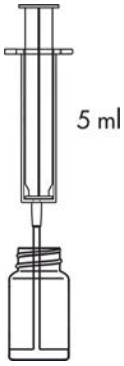
1. To measure the content of phosphate in fresh water select the Z240F Phosphate PO4 Fresh method, in marine water the Z240M PO4 Phosphate Marine method (**Methods → Select method → Z240F/Z240M Phosphate PO4**). How to select the method, see *8.1 Choosing method*.

   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**.*

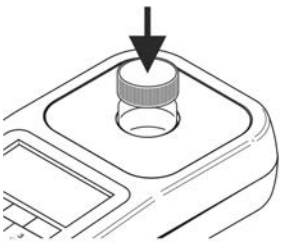
2. Rinse the vial and the syringe three times with the tested water.

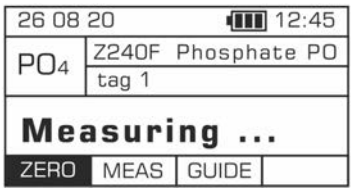
   Take exactly 5 ml of the tested water with the syringe and pour into the vial.

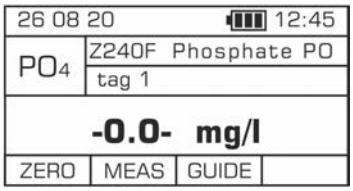
   NOTE:
   Make sure no air bubbles are present in the syringe. Trapped air bubbles can affect accuracy of the measurement.



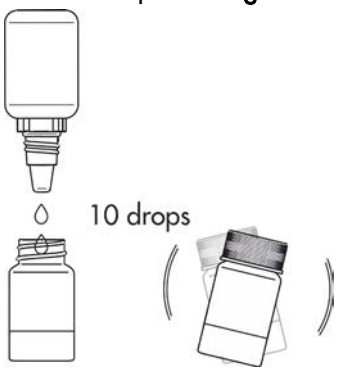
3. Insert the vial into the round vial holder and press the **ZERO** key. The display will show **"-0.0-"**, which means the device is ready for measurement.



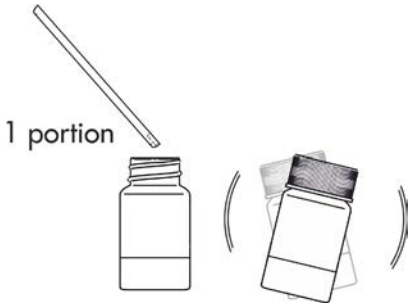




4. Add 10 drops of **Reagent PO_4-1** and shake to mix.

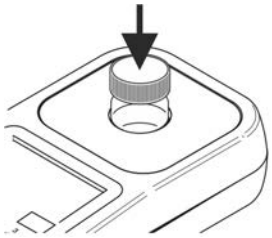


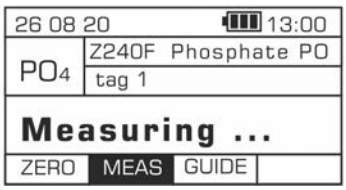
5. Add 1 portion of **powder Reagent PO_4-2** with the spatula, and shake until powder has dissolved.

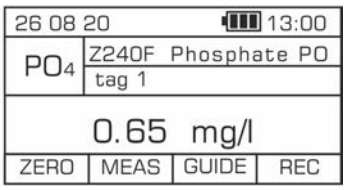


6. Before taking a measurement wait **10 minutes**.

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)**.







There are also available alternative units to display: ppm and P mg/l. They can be accessed by pressing the **left / right** 4 6 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