

Method Z450M – Potassium K Marine

Specification

Description:	Test for determining the content of potassium in marine water
Range:	50 - 500 mg/l
Resolution:	2,5 mg/l
Wavelength:	610 nm

Reagent set

Product Code	Description	List of components
8450	Set of reagents for method Z450M, Potassium K Marine (reagents for approx. 25 tests)	<ul style="list-style-type: none"> ✓ powder Reagent K ✓ spatula ✓ 1 ml syringe

NOTE:

To perform this method measurement it is required to have also deionized water available as a separate product (no 8903/100 ml bottle).

Performing the measurement

- Select the **Z450M Potassium K Marine** method (Methods → Select method → Z450M Potassium K Marine). How to select the method, see [8.1 Choosing method](#).

NOTE:

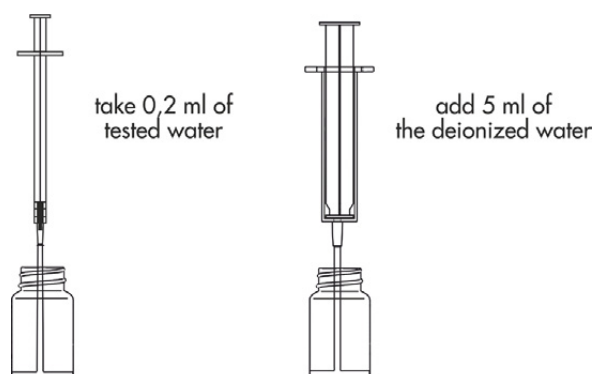
It is recommended to use the **GUIDE** system by pressing the context button **GUIDE** on the photometer. It will provide you with step-by step basic instruction how to perform measurement and a timer with beeper to count down reaction time. To enable this function press the button **GUIDE**.

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

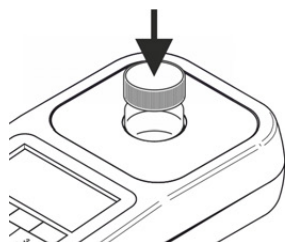
Take exactly 0,2 ml of the tested water with 1 ml syringe and pour into the vial, then add 5 ml of the deionized water with 5 ml syringe and shake to mix.

NOTE:

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



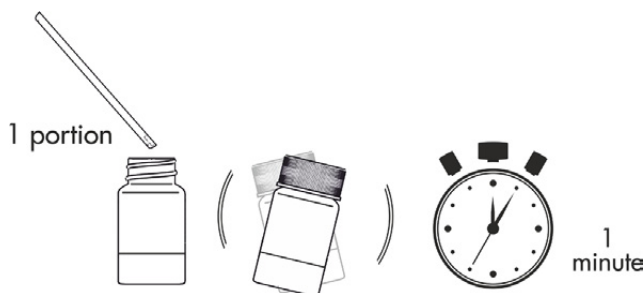
- Insert the vial into the round vial holder and press the **ZERO** key. The display will show "-0.0-", which means the device is ready for measurement.



26 08 20		12:35	
K	Z450M Potassium K	tag 1	
Measuring ...			
ZERO	MEAS	GUIDE	

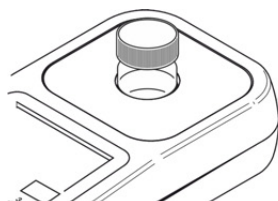
26 08 20		12:35	
K	Z450M Potassium K	tag 1	
-0.0- mg/l			
ZERO	MEAS	GUIDE	

- Add 1 portion of **powder Reagent K** with the spatula into the vial, replace the cap and mix thoroughly. Before making a measurement wait exactly **1 minute**.



NOTE:
Press the powder in the spatula groove and make sure it is completely filled.

- After exactly 1 min insert the vial into the round vial holder and press the **MEAS** key to take a measurement. The result - **the concentration of potassium** - is displayed in **mg/l (ppm)**.



26 08 20		12:36	
K	Z450M Potassium K	tag 1	
Measuring ...			
ZERO	MEAS	GUIDE	

26 08 20		12:36	
K	Z450M Potassium K	tag 1	
382.5 mg/l			
ZERO	MEAS	GUIDE	REC

Potential interferences

ammonia content - above 3 ppm may interfere with the measurement

very high content of:

calcium (Ca) - above 4 000 ppm

magnesium (Mg) - above 4 000 ppm

sodium (Na) - above 8 000 ppm

chloride - above 12 000 ppm

phosphate - above 50 ppm may interfere with the measurement