

Method Z420 – Manganese Mn

Specification

Description: Test for determining the content of manganese in fresh water
 Range: 0,05-5 mg/l
 Resolution: 0,01 mg/l
 Wavelength: 470 nm

Reagent set

Product Code	Description	List of components
8420	Set of reagents for method Z420, Manganese Mn, fresh water (reagents for approx. 35 tests)	<ul style="list-style-type: none"> ✓ powder Reagent Mn-1 ✓ Reagent Mn-2 ✓ Reagent Mn-3 ✓ Reagent Mn-4 ✓ spatula

Performing the measurement

- Select the **Z420 Manganese** method (**Methods** → **Select method** → **Z420 Manganese Mn**).
 How to select the method, see [8.1 Choosing method](#).

NOTE:

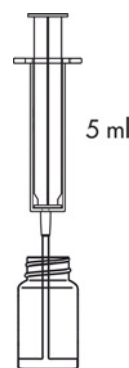
*It is recommended to use the GUIDE system by pressing the context button **GUIDE** on the photometer. It will provide you with step-by step basic instruction how to perform measurement and a timer with beeper to count down reaction time. To enable this function press the button **GUIDE**.*

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

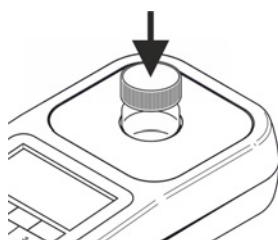
Take exactly 5 ml of the tested water with the syringe and pour into the vial.

NOTE:

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



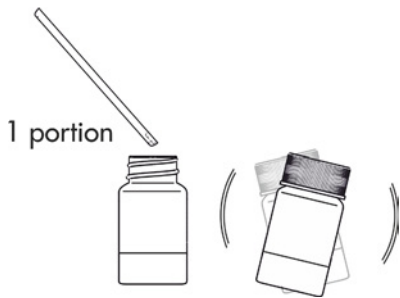
- Insert the vial into round vial holder and press the **ZERO** key. The display will show "**-0.0-**", which means the device is ready for measurement.



26 08 20		12:35	
Mn	Z420 Manganese Mn		
	tag 1		
Measuring ...			
ZERO	MEAS	GUIDE	

26 08 20		12:35	
Mn	Z420 Manganese Mn		
	tag 1		
-0.0- mg/l			
ZERO	MEAS	GUIDE	

4. Add 1 portion of **powder Reagent Mn-1** with the spatula, shake until the powder has dissolved.

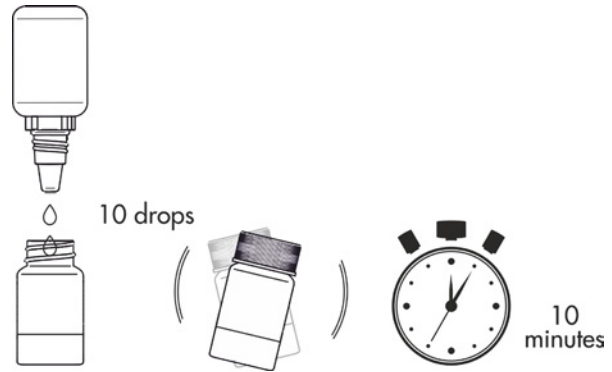


5. Add 10 drops of **Reagent Mn-2** and shake to mix.

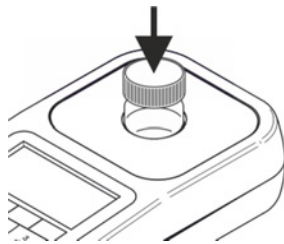
6. Add 10 drops of **Reagent Mn-3** and shake to mix.

7. Add 10 drops of **Reagent Mn-4** and shake to mix.

8. Before taking a measurement, **wait 10 minutes**.



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



26 08 20		12:40	
Mn	Z420 Manganese Mn	tag 1	
Measuring ...			
ZERO	MEAS	GUIDE	

26 08 20		12:40	
Mn	Z420 Manganese Mn	tag 1	
1.20 mg/l			
ZERO	MEAS	GUIDE	REC

Potential interferences

phosphate content

- above 20 ppm

may cause falsely low readings