Method Z480M – Iodine I2 marine water

Specification

Description: Test for determining the content of iodine in marine water
Range: 10 - 200 µg/l
Resolution: 5 µg/l
Wavelength: 520 nm

Reagent set

Product code	Description	List of components
8480	Set of reagents for method Z480M, Iodine I_2 marine water (reagents for approx. 25 tests)	✓ Reagent I_2-1 ✓ Reagent I_2-2 (2 pcs.) ✓ Reagent I_2-3 (3 pcs.)

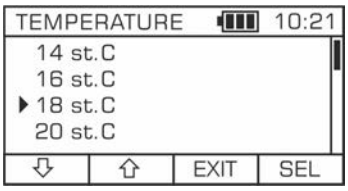
Performing the measurement

1. Select the Z480M Iodine I2 method (**Methods** → **Select method** → **Z480M Iodine I2**). 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**.*

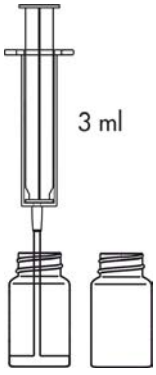
2. Prepare two vials and rinse them three times with the tested water.

3. Choose from the list the ambient temperature and confirm it by pressing the **SEL** button. The accuracy of temperature determination does not affect the accuracy of the result, the given temperature is indicative and affects only the reaction time selected by the photometer.



   NOTE:
   This method is intended for measurements in the temperature range from 14 to 34 °C.

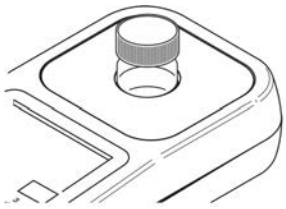
4. Fill both vials with exactly 3 ml of the tested water using a 5 ml syringe.

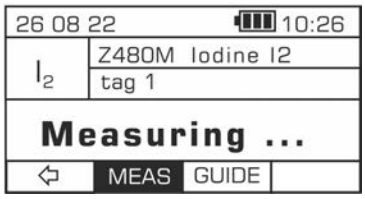


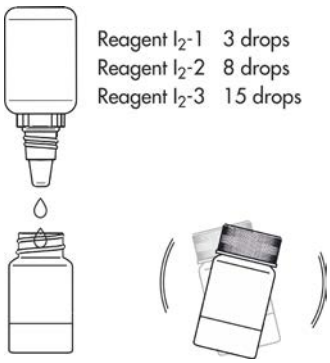
   NOTE:
   Make sure no air bubbles are present in the syringe. Trapped air bubbles can affect accuracy of the measurement.

FIRST VIAL

5. Add 3 drops of **Reagent I_2-1** and shake gently to mix.
6. Add 8 drops of **Reagent I_2-2** and shake gently to mix.
7. Add 15 drops of **Reagent I_2-3** and shake gently to mix.
8. Quickly insert the first vial into the round vial holder and press the **MEAS** key to perform the first measurement.



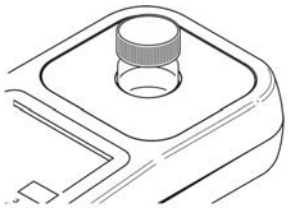


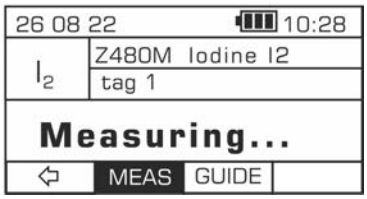


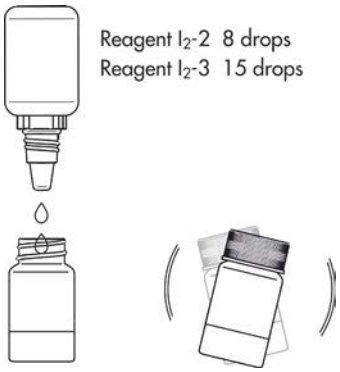
9. Replace the cap on **the first vial** and set it aside.

SECOND VIAL

10. Add 8 drops of **Reagent I_2-2** and shake gently to mix.
11. Add 15 drops of **Reagent I_2-3** and shake gently to mix.
12. Quickly insert **the second vial** into the round vial holder and press the **MEAS** key to perform the second measurement.



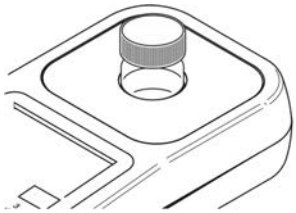


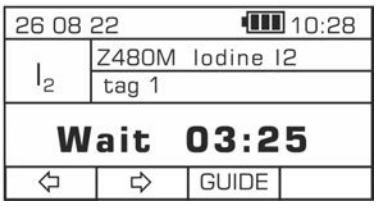


13. Replace the cap on **the second vial** and set it aside.

FINAL MEASUREMNT

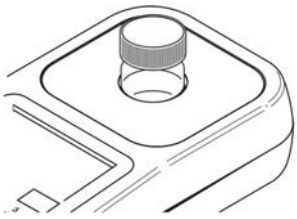
14. Insert **the first vial** into the round vial holder.
15. Wait until the time displayed on the timer elapses. The reaction time depends on the ambient temperature.

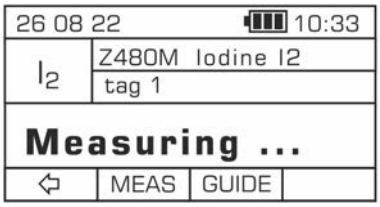


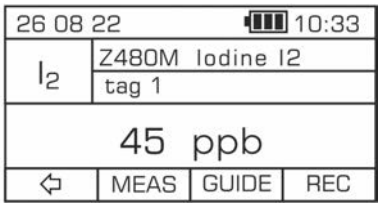


16. The photometer will automatically perform a third measurement after the time set on the in-build timer has passed.
17. Insert **the second vial** into the round vial holder.
18. Wait until the photometer automatically performs the final measurement after the built-in timer has elapsed.

19. The result – **the concentration of iodine** – is displayed in **ppb (µg/l)**.







Potential interferences

strongly oxidizing or reducing agents		may cause falsely high readings
the presence of: mercury (Hg) and silver (Ag) ions		may cause falsely low readings
very low content of chloride	- below 500 ppm	may cause falsely low readings