



PHMB T

M70

2 - 60 mg/L PHMB

Buffer / Indicator

Instrument specific information

The test can be performed on the following devices. In addition, the required cuvette and the absorption range of the photometer are indicated.

| Instrument Type | Cuvette | λ | Measuring Range |
|---|---------|-----------|------------------|
| MD 600, MD 610, MD 640, MultiDirect, PM 620, PM 630, XD 7000, XD 7500 | ø 24 mm | 560 nm | 2 - 60 mg/L PHMB |

Material

Required material (partly optional):

| Reagents | Packaging Unit | Part Number |
|-----------------|----------------|-------------|
| PHMB Photometer | Tablet / 100 | 516100BT |
| PHMB Photometer | Tablet / 250 | 516101BT |

Application List

- Pool Water Control

Notes

1. After the end of the test, the vials must be immediately rinsed and cleaned with a brush.
2. During extended use, vials and stirring rods can become discoloured blue. This discolouration can be easily removed if the vials and stirring rod are cleaned with a lab cleaner. Rinse thoroughly with tap water and then with deionised water.
3. With this test, the result will influence the analysis of the hardness and acid capacity of the water sample. This method is adjusted using water with the following composition:
Calcium hardness: 2 mmol/l
Acid capacity: 2.4 mmol/l.





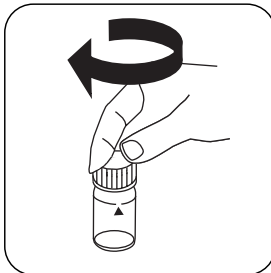
Determination of PHMB (Biguanide) with Tablet

Select the method on the device.

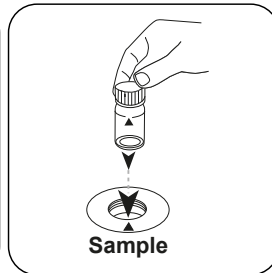
For this method, a ZERO measurement does not have to be carried out every time on the following devices: XD 7000, XD 7500



Fill 24 mm vial with **10 mL sample**.



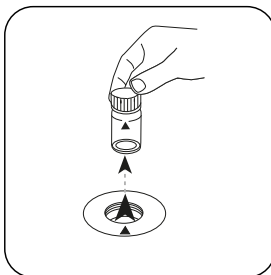
Close vial(s).



Place **sample vial** in the sample chamber. Pay attention to the positioning.



Press the **ZERO** button.

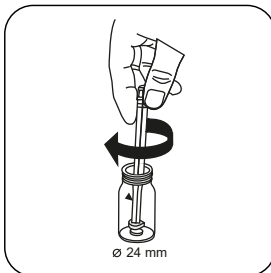


Remove the vial from the sample chamber.

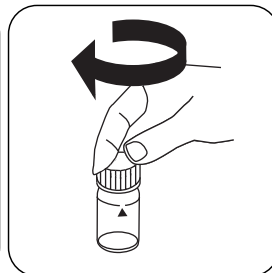
For devices that require **no ZERO measurement**, start here.



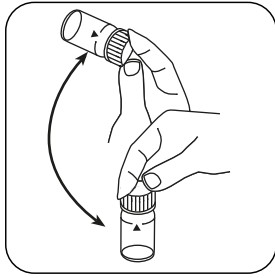
Add **PHMB PHOTOMETER tablet**.



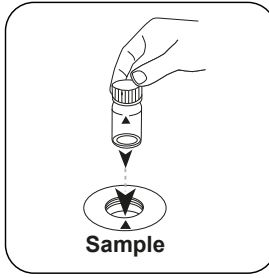
Crush tablet(s) by rotating slightly.



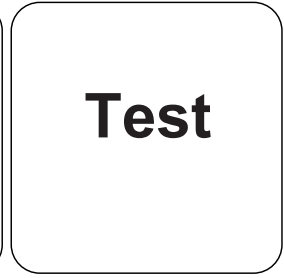
Close vial(s).



Dissolve tablet(s) by inverting.

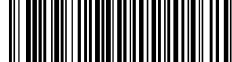


Place **sample vial** in the sample chamber. Pay attention to the positioning.



Press the **TEST** (XD: **START**) button.

The result in mg/L PHMB appears on the display.



Chemical Method

Buffer / Indicator

Calibration function for 3rd-party photometers

$$\text{Conc.} = a + b \cdot \text{Abs} + c \cdot \text{Abs}^2 + d \cdot \text{Abs}^3 + e \cdot \text{Abs}^4 + f \cdot \text{Abs}^5$$

| | ∅ 24 mm | □ 10 mm |
|---|--------------------------|--------------------------|
| a | $-2.00454 \cdot 10^{+1}$ | $-2.00454 \cdot 10^{+1}$ |
| b | $1.29751 \cdot 10^{+2}$ | $2.78966 \cdot 10^{+2}$ |
| c | $-4.47145 \cdot 10^{+1}$ | $-2.06693 \cdot 10^{+2}$ |
| d | $-1.07518 \cdot 10^{+2}$ | $-1.06855 \cdot 10^{+3}$ |
| e | $1.42602 \cdot 10^{+2}$ | $3.04706 \cdot 10^{+3}$ |
| f | | |