Oxygen active T M290

0.1 - 10 mg/L O_2

DPD

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	ø 24 mm	530 nm	0.1 - 10 mg/L O_2
SpectroDirect, XD 7000, XD 7500	ø 24 mm	510 nm	0.1 - 10 mg/L O_2

Material

Required material (partly optional):

Reagents	Packaging Unit	Part Number
DPD No. 4	Tablet / 100	511220BT
DPD No. 4	Tablet / 250	511221BT
DPD No. 4	Tablet / 500	511222BT
DPD No. 4 Evo	Tablet / 100	511970BT
DPD No. 4 Evo	Tablet / 250	511971BT
DPD No. 4 Evo	Tablet / 500	511972BT

Application List

- Pool Water Control

Preparation

1. When preparing the sample, Oxygen outgassing, e.g. through the pipette or shaking, must be avoided.
2. The analysis must take place immediately after taking the sample.

Notes

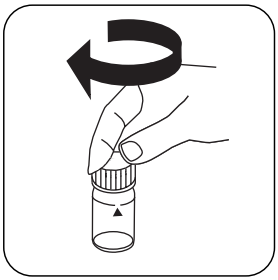
1. Active Oxygen is a synonym for a common disinfectant (based on “Oxygen“) in treating swimming pools.
2. EVO tablets can be used as an alternative to the corresponding standard tablet (e.g. DPD No. 4 EVO instead of DPD No. 4).

Determination of Oxygen, active with Tablet

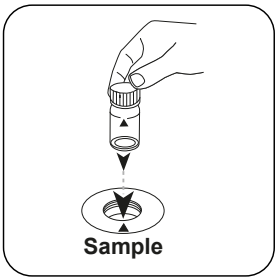
Select the method on the device.

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

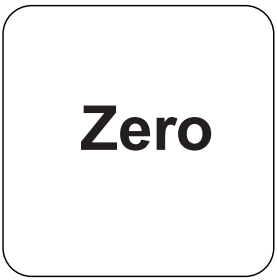
Fill 24 mm vial with **10 mL sample**.



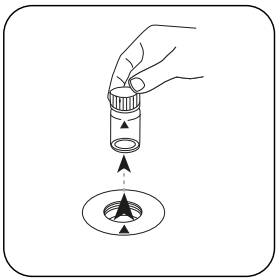
Close vial(s).



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

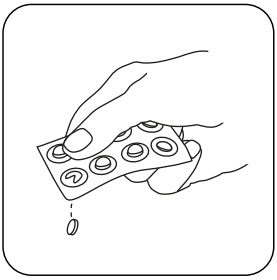


Press the **ZERO** button.

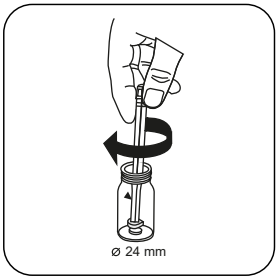


Remove the vial from the sample chamber.

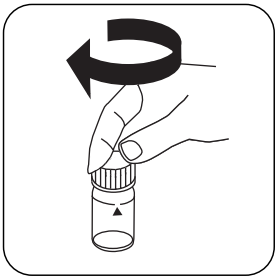
For devices that require **no ZERO measurement** , **start here**.



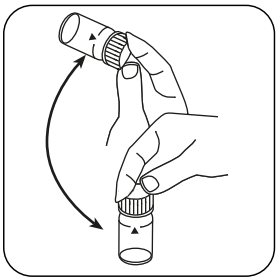
Add **DPD No. 4 tablet** .



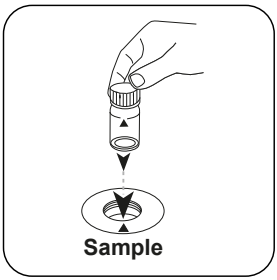
Crush tablet(s) by rotating slightly.



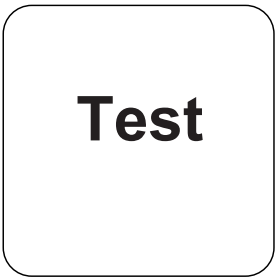
Close vial(s).



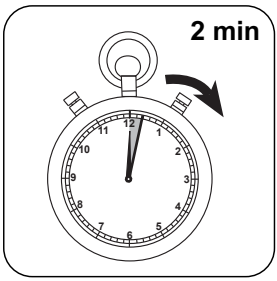
Dissolve tablet(s) by inverting.



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



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



Wait for **2 minute(s) reaction time**.

Once the reaction period is finished, the measurement takes place automatically.

The result in mg/L Active Oxygen appears on the display.

Chemical Method

DPD

Calibration function for 3rd-party photometers

Conc. = a + b•Abs + c•Abs^2 + d•Abs^3 + e•Abs^4 + f•Abs^5

	ø 24 mm	**□ 10 mm**
a	5.11265 • 10^{-2}	5.11265 • 10^{-2}
b	7.65587 • 10^{+0}	1.64601 • 10^{+1}
c	1.01147 • 10^{+0}	4.67552 • 10^{+0}
d		
e		
f		

Interferences

Persistant Interferences

- All oxidising agents in the samples react like active oxygen, which leads to higher results.