



Iodine T

M215

0.05 - 3.6 mg/L I

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 | $\lambda$ | Measuring Range   |
|---|---------|-----------|-------------------|
| MD 600, MD 610, MD 640, MultiDirect, PM 620, PM 630 | ø 24 mm | 530 nm    | 0.05 - 3.6 mg/L I |
| SpectroDirect, XD 7000, XD 7500                     | ø 24 mm | 510 nm    | 0.05 - 3.6 mg/L I |

## Material

Required material (partly optional):

| Reagents                             | Packaging Unit | Part Number |
|--------------------------------------|----------------|-------------|
| DPD No.1                             | Tablet / 100   | 511050BT    |
| DPD No. 1                            | Tablet / 250   | 511051BT    |
| DPD No. 1                            | Tablet / 500   | 511052BT    |
| DPD No. 1 High Calcium <sup>e)</sup> | Tablet / 100   | 515740BT    |
| DPD No. 1 High Calcium <sup>e)</sup> | Tablet / 250   | 515741BT    |
| DPD No. 1 High Calcium <sup>e)</sup> | Tablet / 500   | 515742BT    |

## Application List

- Pool Water Control
- Disinfection Control





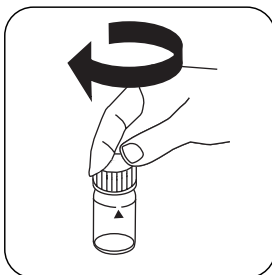
## Determination of Iodine with Tablet

Select the method on the device.

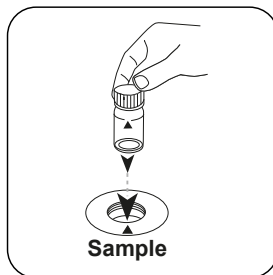
For this method, a ZERO measurement does not have to be carried out every time on the following devices: XD 7000, XD 7500



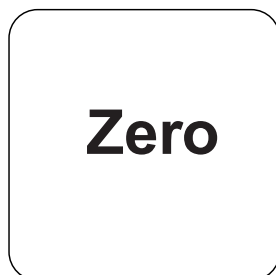
Fill 24 mm vial with **10 mL sample**.



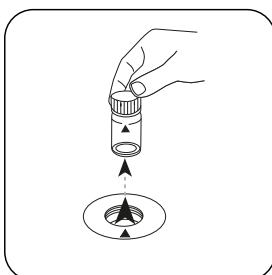
Close vial(s).



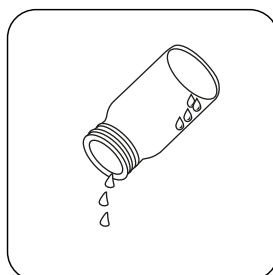
Place **sample vial** in the sample chamber. Pay attention to the positioning.



Press the **ZERO** button.

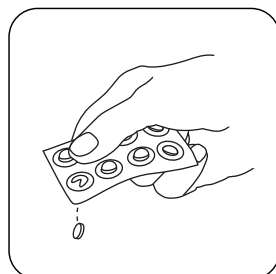


Remove the vial from the sample chamber.

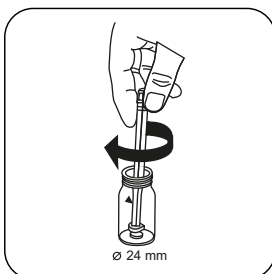


Empty vial except for a few drops.

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



Add **DPD No. 1 tablet**.



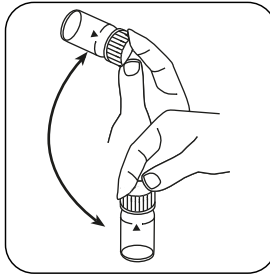
Crush tablet(s) by rotating slightly.



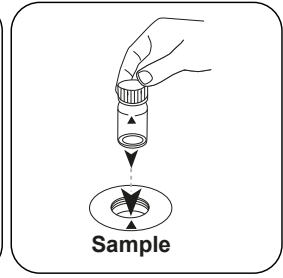
Fill up vial with **sample** to the **10 mL mark**.



Close vial(s).



Dissolve tablet(s) by inverting.



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

# Test

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

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



## Chemical Method

DPD

## Appendix

### Calibration function for 3rd-party photometers

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 | $-5.02604 \cdot 10^{-2}$ | $-5.02604 \cdot 10^{-2}$ |
| b | $5.98475 \cdot 10^{+0}$  | $1.28672 \cdot 10^{+1}$  |
| c | $1.56046 \cdot 10^{-1}$  | $7.21323 \cdot 10^{-1}$  |
| d |                          |                          |
| e |                          |                          |
| f |                          |                          |

## Interferences

### Persistent Interferences

1. All oxidising agents in the samples react like Iodine, which leads to higher results.

### Derived from

EN ISO 7393-2

<sup>\*)</sup> alternative reagent, used instead of DPD No.1/No.3 in case of turbidity in the water sample caused by high concentration of calcium and/or high conductivity