Bromine T M80

0.05 - 13 mg/l Br_2 Br

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 100, MD 110, MD 200, MD 600, MD 610, MD 640, MultiDirect, PM 600, PM 620, PM 630	ø 24 mm	530 nm	0.05 - 13 mg/l Br_2
SpectroDirect, XD 7000, XD 7500	ø 24 mm	510 nm	0.05 - 13 mg/l Br_2
Scuba II	ø 24 mm	530 nm	0.2 - 13 mg/l Br_2

Application List

- Disinfection Control
- Raw Water Treatment
- Pool Water Control
- Pool Water Treatment

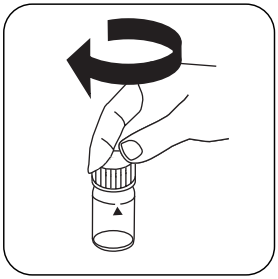
Preperation

1. Cleaning of vials:
   As many household cleaners (e.g. dishwasher detergent) contain reducing substances, the subsequent determination of oxidising agents (e.g. ozone and chlorine) may show lower results. To avoid measurement errors, the glassware used should be free of chlorine consumption. To achieve this, all glassware should be placed in a sodium hypochlorite solution (0.1 g/l) for one hour and then rinsed thoroughly with deionised water.
2. When preparing the sample, Bromine outgassing, e.g. through the pipette or shaking, must be avoided. The analysis must take place immediately after taking the sample.
3. Strong alkaline or acidic water samples must be adjusted between pH 6 and pH 7 before the analysis (use 0.5 mol/l Sulphuric acid or 1 mol/l Sodium hydroxide).

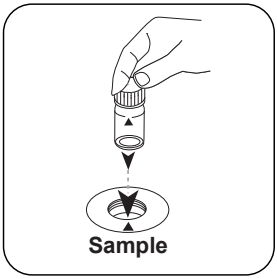
Implementation of the provision Bromine with Tablet

Select the method on the device
For this method, no ZERO measurements are to be carried out with the following devices: XD 7000, XD 7500

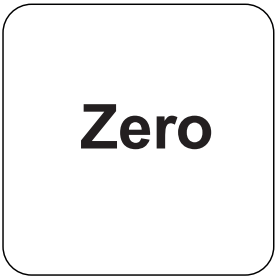
Fill 24 mm vial with **10 ml sample**.



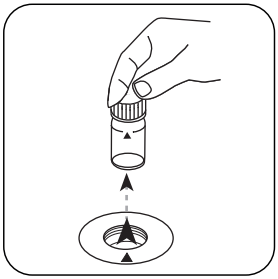
Close vial(s).



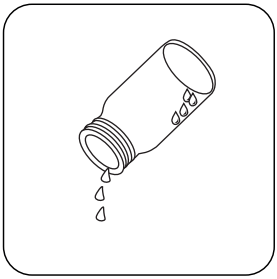
Place **sample vial** in the sample chamber. • Pay attention to the positioning.



Press the **ZERO** button.

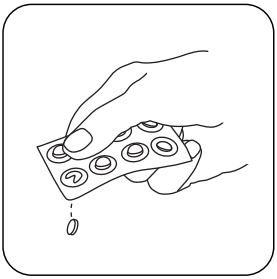


Remove the vial from the sample chamber.

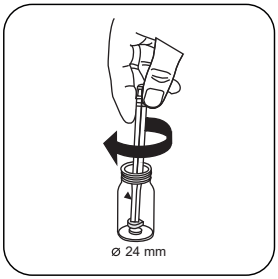


Empty vial except for a few drops.

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

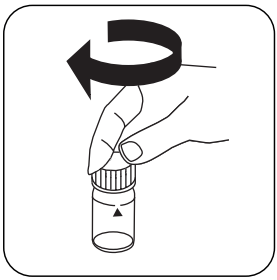


Add **DPD No. 1 tablet** .

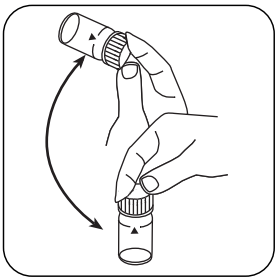


Crush tablet(s) by rotating slightly.

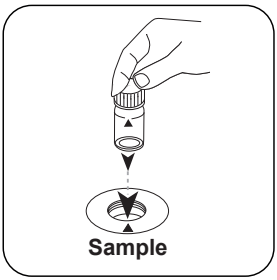
Fill up vial with **sample** to the **10 ml mark**.



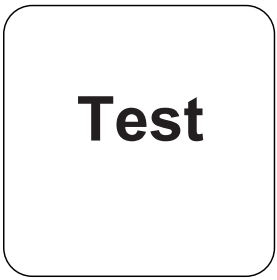
Close vial(s).



Dissolve tablet(s) by inverting.



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



Press the **TEST** (XD: **START**)button.
The result in mg/l Bromine appears on the display.

Chemical Method

DPD

Appendix

Calibration function for 3rd-party photometers

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

Note
Please select items for "Fields".

Interferences

Persistant Interferences

1. All oxidising agents in the samples react like bromine, which leads to higher results.
2. Concentrations above 22 mg/l Bromine can lead to results within the measuring range of up to 0 mg/l. In this case, the water sample must be diluted. 10 ml of the diluted sample should be mixed with the reagent and the measurement taken again (plausibility test).

Derived from

US EPA 330.5 (1983)
APHA Method 4500 Cl-G