Hypochlorite T M212

0.2 - 16 % NaOCl

Potassium Iodide

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
MD50, MD 600, MD 610, MD 640, MultiDirect, PM 600, PM 620, PM 630	ø 24 mm	530 nm	0.2 - 16 % NaOCl
XD 7000, XD 7500	ø 24 mm	470 nm	0.2 - 17 % NaOCl

Material

Required material (partly optional):

Reagents	Packaging Unit	Part Number
Acidifying GP	Tablet / 100	515480BT
Acidifying GP	Tablet / 250	515481BT
Chlorine HR (KI)	Tablet / 100	513000BT
Chlorine HR (KI)	Tablet / 250	513001BT
Chlorine HR (KI)	Tablet / 100	501210
Chlorine HR (KI)	Tablet / 250	501211
Set Chlorine HR (KI)/Acidifying GP 100 Pc. #	100 each	517721BT
Set Chlorine HR (KI)/Acidifying GP 250 Pc. #	250 each	517722BT
Dilution set sodium hypochlorite	1 pc.	414470

Application List

- Disinfection Control

Notes

1. This method provides a fast and simple test. The test can be performed on site but the result will not be as precise as a laboratory method.
2. By strictly following the test procedure, an accuracy of +/- 1 weight % can be achieved.

Determination of Sodium hypochlorite with Tablet

Select the method on the device.

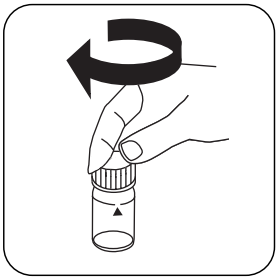
For this method, a ZERO measurement does not have to be carried out every time on the following devices: XD 7000, XD 7500

The sample is diluted x2000.

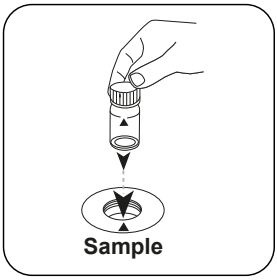
1. First rinse a 5 mL syringe with the solution to be examined and then fill to the 5 mL mark.
2. Empty the syringe into a 100-ml beaker.
3. Fill the measuring beaker up to the 100 mL mark with chlorine-free water.
4. Mix contents by stirring.
5. Fill a clean 5 mL syringe to the 1 mL mark with the diluted solution.
6. Empty the syringe into a clean 100 mL beaker.
7. Fill the measuring beaker up to the 100 mL mark with chlorine-free water.
8. Mix contents by stirring.

The test is performed with this solution.

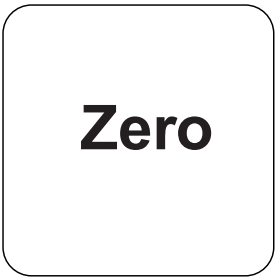
Fill 24 mm vial with **10 mL prepared sample** .



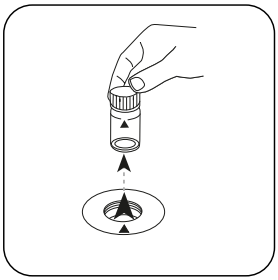
Close vial(s).



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

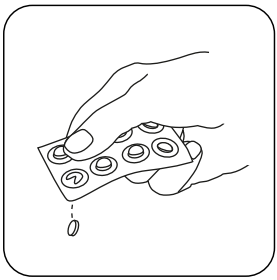


Press the **ZERO** button.

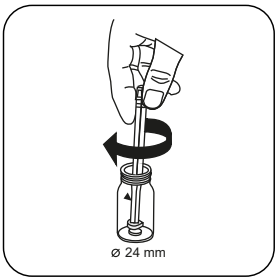


Remove the vial from the sample chamber.

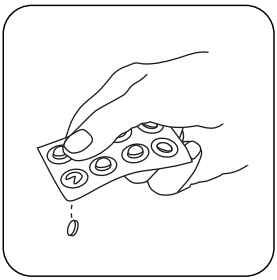
For devices that require **no ZERO measurement** , **start here**.



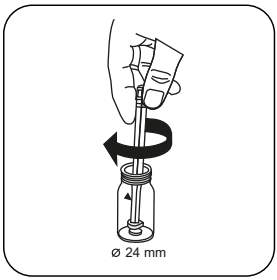
Add **CHLORINE HR (KI) tablet**.



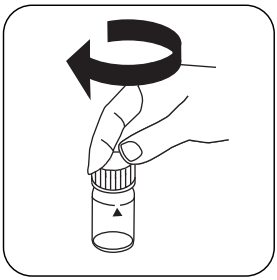
Crush tablet(s) by rotating slightly.



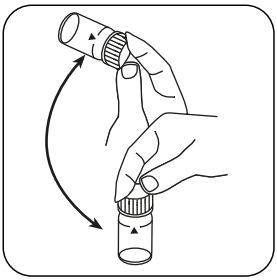
Add **ACIDIFYING GP tablet**.



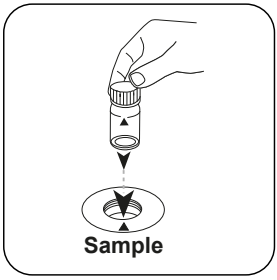
Crush tablet(s) by rotating slightly.



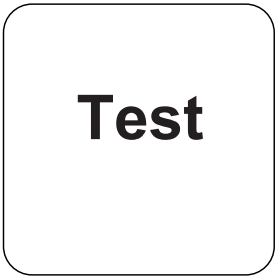
Close vial(s).



Dissolve tablet(s) by inverting.



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



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

The display will show the content of effective chlorine in % by weight (w/w %) relative to the **undiluted** sodium hypochlorite solution.

Chemical Method

Potassium Iodide

Appendix

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	$2.01562 \cdot 10^{-1}$	$2.01562 \cdot 10^{-1}$
b	$9.7265 \cdot 10^{+0}$	$2.0912 \cdot 10^{+1}$
c	$-7.90521 \cdot 10^{-1}$	$-3.65418 \cdot 10^{+0}$
d		
e		
f		

Method Validation

Limit of Detection	0.03 %
Limit of Quantification	0.1 %
End of Measuring Range	16.8 %
Sensitivity	9.21 % / Abs
Confidence Intervall	0.12 %
Standard Deviation	0.05 %
Variation Coefficient	0.55 %

Derived from

EN ISO 7393-3

including stirring rod, 10 cm