



## Hypochlorite T

M212

0.2 - 16 % NaOCI

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	$\lambda$	Measuring Range
MD 600, MD 610, MD 640, MultiDirect, PM 600, PM 620, PM 630	ø 24 mm	530 nm	0.2 - 16 % NaOCI
XD 7000, XD 7500	ø 24 mm	470 nm	0.2 - 17 % NaOCI

### 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

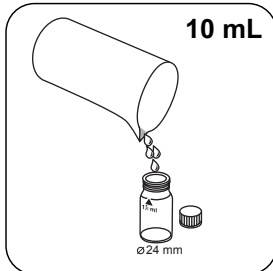
Select the method on the device.

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

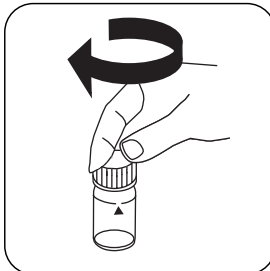
The sample is diluted x2000.

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.

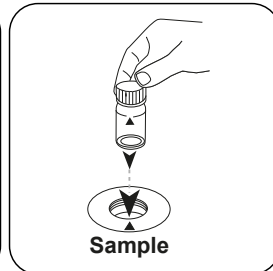
The test is performed with this solution.



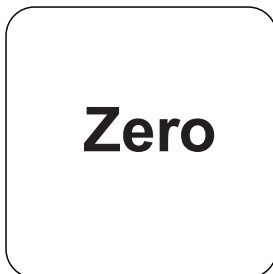
Fill 24 mm vial with **10 mL prepared sample**.



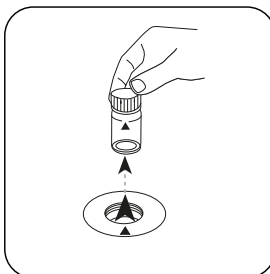
Close vial(s).



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

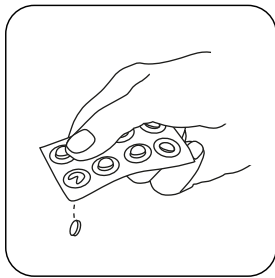


Press the **ZERO** button.

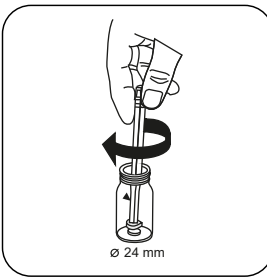


Remove the vial from the sample chamber.

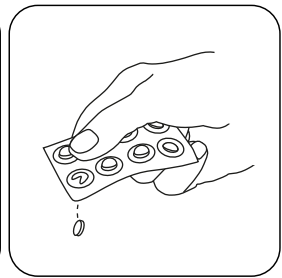
For devices that require **no ZERO measurement**, start here.



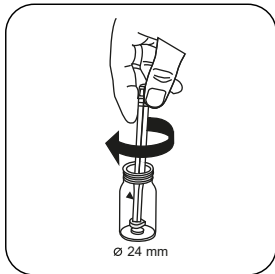
Add **CHLORINE HR (KI) tablet**.



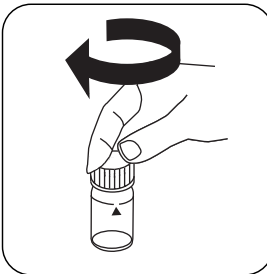
Crush tablet(s) by rotating slightly.



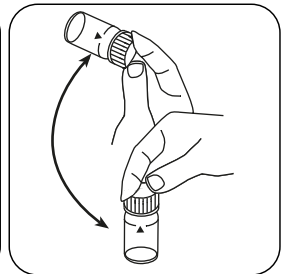
Add **ACIDIFYING GP tablet**.



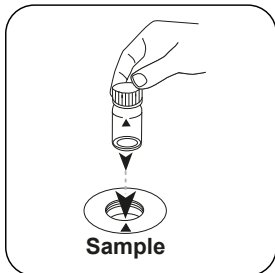
Crush tablet(s) by rotating slightly.



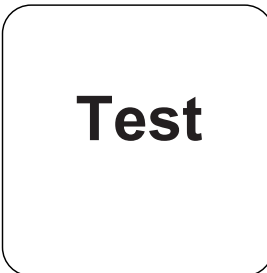
Close vial(s).



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

	∅ 24 mm	□ 10 mm
a	$2.01562 \cdot 10^{-1}$	$2.01562 \cdot 10^{-1}$
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