**Chloride L (B)****M92****0.5 - 20 mg/L Cl⁻****CL-****Mercury Thiocyanate / Iron Nitrate**

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 600, MD 610, MD 640, XD 7000, XD 7500 | ø 24 mm | 430 nm | 0.5 - 20 mg/L Cl ⁻ |

Material

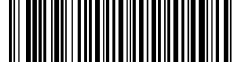
Required material (partly optional):

| Reagents | Packaging Unit | Part Number |
|----------------------|----------------|-------------|
| Chloride Reagent Set | 1 pc. | 56R018490 |

Application List

- Waste Water Treatment
- Cooling Water
- Drinking Water Treatment
- Raw Water Treatment
- Galvanization





Determination of Chloride with liquid reagent

Select the method on the device.

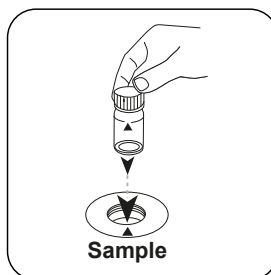
For this method, a ZERO measurement does not have to be carried out every time on the following devices: XD 7000, XD 7500



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



Close vial(s).



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

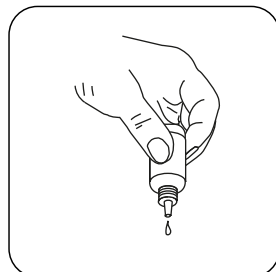


Press the **ZERO** button.

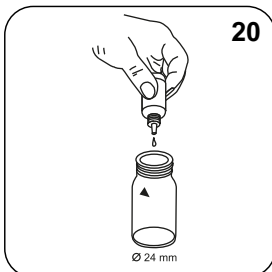


Remove the vial from the sample chamber.

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



Hold cuvettes vertically and add equal drops by pressing slowly.



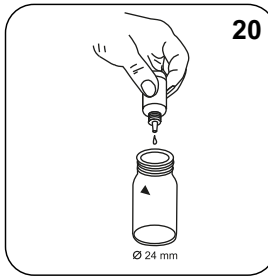
Add **20 drops KS251 (Chloride Reagent A)**.



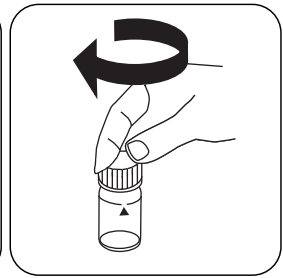
Close vial(s).



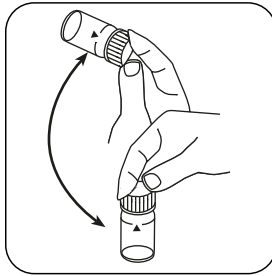
Invert several times to mix the contents.



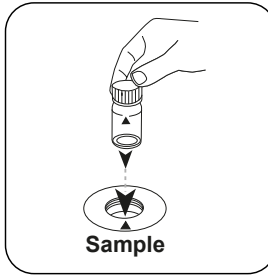
Add **20 drops** **KS253 (Chloride Reagent B)**.



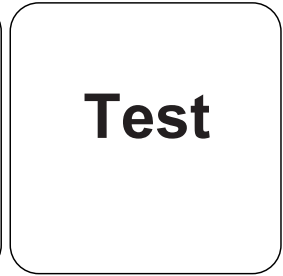
Close vial(s).



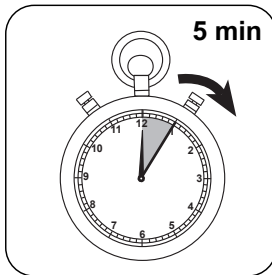
Invert several times to mix the contents.



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



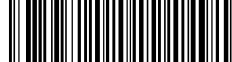
Press the **TEST (XD: START)** button.



Wait for **5 minute(s) reaction time**.

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

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



Analyses

The following table identifies the output values can be converted into other citation forms.

| Unit | Cite form | Scale Factor |
|------|-----------------|--------------|
| mg/l | Cl ⁻ | 1 |
| mg/l | NaCl | 1.65 |

Chemical Method

Mercury Thiocyanate / Iron Nitrate

Appendix

Calibration function for 3rd-party photometers

Conc. = a + b•Abs + c•Abs² + d•Abs³ + e•Abs⁴ + f•Abs⁵

| | ∅ 24 mm | □ 10 mm |
|---|--------------------------|--------------------------|
| a | $1.53241 \cdot 10^{+0}$ | $1.53241 \cdot 10^{+0}$ |
| b | $-1.29813 \cdot 10^{+1}$ | $-2.79098 \cdot 10^{+1}$ |
| c | $4.02483 \cdot 10^{+1}$ | $1.86048 \cdot 10^{+2}$ |
| d | $-3.11237 \cdot 10^{+1}$ | $-3.09319 \cdot 10^{+2}$ |
| e | $9.1645 \cdot 10^{+0}$ | $1.95823 \cdot 10^{+2}$ |
| f | | |

Interferences

Persistent Interferences

1. Reducing substances such as sulfite and thiosulfate, that can reduce iron (III) to iron (II) or mercury (II) to mercury (I) may interfere. Cyanide, Iodine and Bromide give a positive interference.

Derived from

DIN 15682-D31

DIN ISO 15923-1 D49