Chloride L (B) M91

5.00 - 60 mg/L Cl^-

Iron(III)-thiocyanate

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
SpectroDirect, XD 7000, XD 7500	ø 24 mm	455 nm	5.00 - 60 mg/L Cl^-

Material

Required material (partly optional):

Reagents	Packaging Unit	Part Number
Chloride Reagent Test	1 pc.	2419031

Application List

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

Preparation

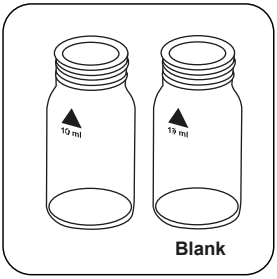
1. The test sample and the reagents should be at room temperature when undertaking the test.
2. The pH value of the sample must be between 3 and 9.

Notes

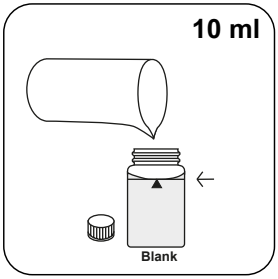
1. The reagents are to be stored in closed containers (in a fridge) at +4 °C – +8 °C.

Implementation of the provision Chloride Reagent test

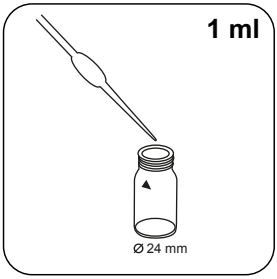
Select the method on the device



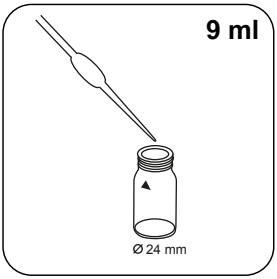
Prepare two clean 24 mm vials. Mark one as a blank.



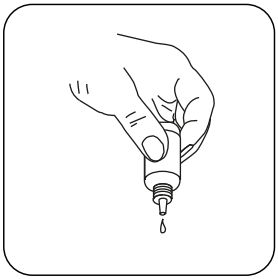
Put **10 ml deionised water** in the blank.



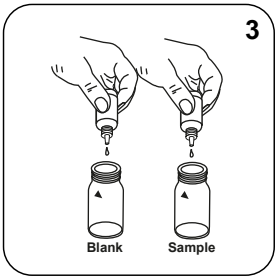
Put **1 ml sample** in the vial.



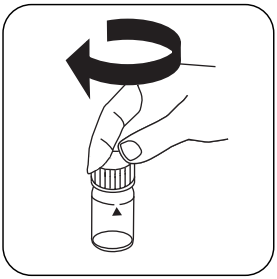
Fill 24 mm vial with **9 ml deionised water** .



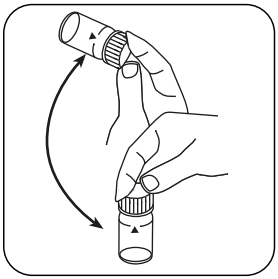
Hold cuvettes vertically and add equal drops by pressing slowly.



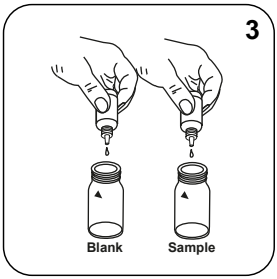
Add **3 drops Chloride-51 solution** to each vial.



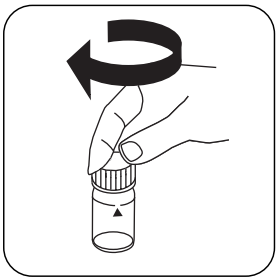
Close vial(s).



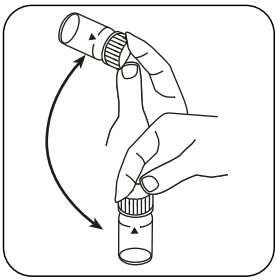
Invert several times to mix the contents.



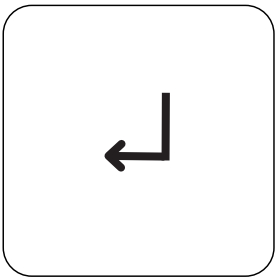
Add **3 drops Chloride-52 solution** to each vial.



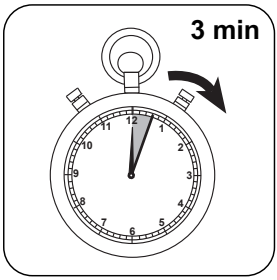
Close vial(s).



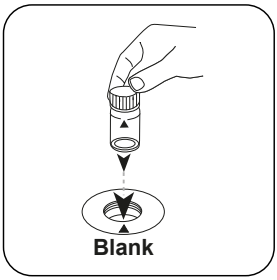
Invert several times to mix the contents.



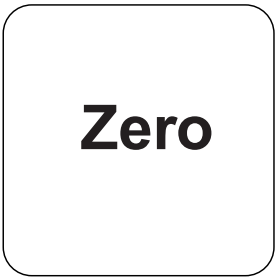
Press the **ENTER** button.



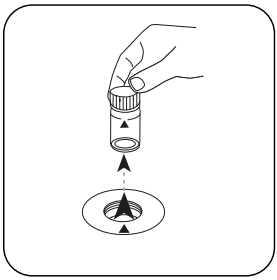
Wait for **3 minute(s) reaction time**.



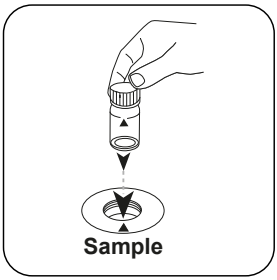
Place **blank** in the sample chamber. • Pay attention to the positioning.



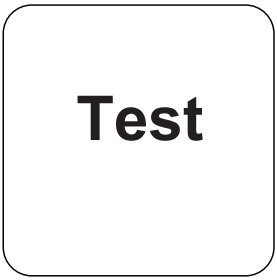
Press the **ZERO** button.



Remove the vial from the sample chamber.



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



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

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

Iron(III)-thiocyanate

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	$-4.54503 \cdot 10^{+0}$	$-4.54503 \cdot 10^{+0}$
b	$4.04636 \cdot 10^{+1}$	$8.69967 \cdot 10^{+1}$
c	$8.94686 \cdot 10^{+1}$	$4.13569 \cdot 10^{+2}$
d		
e		
f		

Interferences

Persistant 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 intereference.

Derived from

APHA Method 4500 Cl-E