

Chloride L (A)

**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 <sup>-</sup>

### **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**

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

### **Notes**

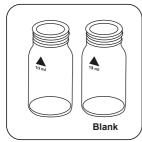
1. The reagents are to be stored in closed containers (in a fridge) at +4 °C - +8 °C.





### **Determination of 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.



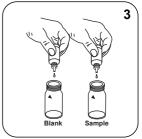
Put 1 mL sample in the vial.



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).



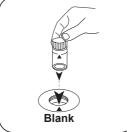
Invert several times to mix the contents.



Press the ENTER button.



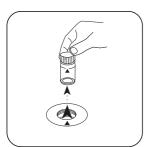
Wait for 3 minute(s) reaction time.



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.

**Test** 

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 <sup>-</sup>	1
mg/l	NaCl	1.65

### **Chemical Method**

Iron(III)-thiocyanate

## **Appendix**

## Calibration function for 3rd-party photometers

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

	ø 24 mm	□ 10 mm
а	-4.54503 • 10 <sup>+0</sup>	-4.54503 • 10 <sup>+0</sup>
b	4.04636 • 10+1	8.69967 • 10+1
С	8.94686 • 10+1	4.13569 • 10 <sup>+2</sup>
d		
е		
f		

### Interferences

#### **Persistant Interferences**

 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 CI-E