

Chlorine (free)**561700200****1 - 300 mg/L Cl₂**

Material

Reagents	Packaging Unit	Part Number
Chlorine Free Buffer FCL1	65 mL	56L015165
Chlorine Free LR Titrant FCL2	65 mL	56L015265
Chlorine Free HR Titrant FCL3	65 mL	56L015365

The following accessories are required.

Accessories	Packaging Unit	Part Number
Syringe, plastic, 20 mL	1 pc.	56A006501
Titration jar with cap, plastic, 60 mL	1 pc.	56A006701

Application List

- Cooling Water
- Disinfection Control

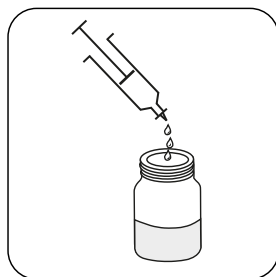
Notes

1. Colours may vary depending on sample and test conditions.
2. Test should be carried out immediately on fresh samples.
3. If adding chlorine in an intermittent dose, wait 10-15 minutes after dosing before sampling and testing.
4. This wait is not necessary for continuously dosed systems.
5. Add 10 drops of Chlorine Free Buffer FCL1 if you are testing samples with a hardness greater than 400 mg/L (as CaCO₃).
6. Dilute samples of less than 20 mL to approximately 20 mL with distilled or deionised water.

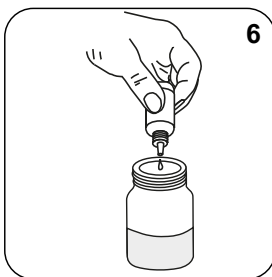
Sampling

Select the sample volume from the table according to the expected measuring range and read off the factor to calculate the result.

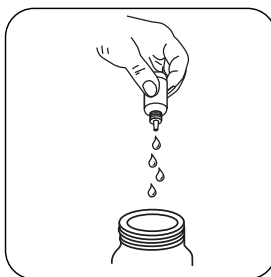
Expected Range	Titrant used	Sample Size	Factor
1-4 mg/L	Chlorine Free LR Titration FCL2	40 mL	0.25
2-8 mg/L	Chlorine Free LR Titration FCL2	20 mL	0.50
5-15 mg/L	Chlorine Free LR Titration FCL2	10 mL ⁶	1.0
10-30 mg/L	Chlorine Free LR Titration FCL2	5 mL ⁶	2.0
15-40 mg/L	Chlorine Free HR Titration FCL3	40 mL	2.5
25-80 mg/L	Chlorine Free HR Titration FCL3	20 mL	5
50-150 mg/L	Chlorine Free HR Titration FCL3	10 mL ⁶	10
100-300+ mg/L	Chlorine Free HR Titration FCL3	5 mL ⁶	20



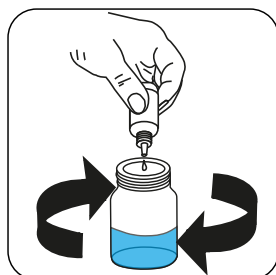
Attention! Select the appropriate sample volume according to the instructions in the chapter Sampling.



Add **6 drops Free Chlorine Buffer FCL1**. **Note:** Add **10 drops when hardness of sample is greater than 400 mg/l (as CaCO₃)**.



Attention! Record the number of drops that will be added. **Note:** Make sure to swirl the jar after adding each drop!



Add **Chlorine Free LR Titrant FCL2** or **Chlorine Free HR Titrant FCL3** drop by drop to the sample until colouration turns from **colourless/pale yellow to blue**.

Calculate test result: Free Chlorine (as Cl₂) mg/L = Number of drops x factor (see table)