

1.17924.0001
1.17925.0001

MQuant™ Chlorine Test

Cl₂

1. Method

Chlorine oxidizes an organic compound to a violet dye. The chlorine concentration is measured **semi-quantitatively** by visual comparison of the reaction zone of the test strip with the fields of a color scale.

2. Measuring range and number of determinations

Cat. No.	Measuring range / color-scale graduation mg/l Cl ₂	Number of determinations
117925	0.5 - 1 - 2 - 5 - 10 - 20	75
117924	25 - 50 - 100 - 200 - 500	100

3. Applications

Sample material:

Wastewater
Bleaching solutions
Disinfectant and rinsing solutions

4. Influence of foreign substances

The determination is not yet interfered with up to the concentrations of foreign substances given in the table.

Concentrations of foreign substances in mg/l or %					
	117924	117925		117924	117925
Al ³⁺	1000	500	Cu ²⁺	250	250
Ca ²⁺	1000	1000	Fe ³⁺	250	1000
CN ⁻	5	0.2	NO ₂ ⁻	5	0.5
Cr ³⁺	1000	1000	S ²⁻	5	0.1
Cr ₂ O ₇ ²⁻	1	100			
Br ₂	10	0.05	NaCl	10 %	2.5 %
I ₂	5	0.5	NaNO ₃	10 %	1000
H ₂ O ₂	10	0.5	Na ₂ SO ₄	5 %	10 %

5. Reagents and auxiliaries

The test strips are stable up to the date stated on the pack when stored closed at +2 to +8 °C.

Package contents:

Tube containing 75 test strips (Cat. No. 117925)
or
containing 100 test strips (Cat. No. 117924)

Other reagents:

Dichloroisocyanuric acid sodium salt dihydrate GR for analysis, Cat. No. 110888

6. Preparation

Samples containing more than 20 mg/l Cl₂ (Cat. No. 117925) or 500 mg/l Cl₂ (Cat. No. 117924) must be diluted with distilled water.

7. Procedure

Immerse the reaction zone of the test strip in the pre-treated sample (15 - 25 °C) for 2 sec.

Shake off excess liquid from the strip and **immediately** (Cat. No. 117925) or **after exactly 10 sec** (Cat. No. 117924) determine with which color field on the label the color of the reaction zone coincides most exactly.

Read off the corresponding result in mg/l Cl₂.

Notes on the measurement:

- The color of the reaction zone may continue to change after the specified reaction time has elapsed. This must not be considered in the measurement.
- If the color of the reaction zone is equal to or more intense than the darkest color on the scale, repeat the measurement using **fresh**, diluted samples until a value of less than 20 mg/l Cl₂ (Cat. No. 117925) or 500 mg/l Cl₂ (Cat. No. 117924) is obtained.

Concerning the result of the analysis, the dilution (see also section 6) must be taken into account:

Result of analysis = measurement value x dilution factor

8. Method control

To check test strips and handling:

Dissolve 1.85 g of dichloroisocyanuric acid sodium salt dihydrate in distilled water, make up to 1000 ml with distilled water, and mix. Corresponds to approx. 1000 mg/l free chlorine.

(The exact chlorine content can be determined titrimetrically according to EN ISO 7393-3.)

Dilute this standard solution with distilled water to 10 mg/l Cl₂ (Cat. No. 117925) or 200 mg/l Cl₂ (Cat. No. 117924) and analyze as described in section 7. Additional notes see under www.qa-test-kits.com.

9. Note

Reclose the tube containing the test strips immediately after use.

