

1.17924.0001  
1.17925.0001

## MQuant™ Chlorine Test

Cl<sub>2</sub>

### 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 <sub>2</sub>	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 <sup>3+</sup>	1000	500	Cu <sup>2+</sup>	250	250
Ca <sup>2+</sup>	1000	1000	Fe <sup>3+</sup>	250	1000
CN <sup>-</sup>	5	0.2	NO <sub>2</sub> <sup>-</sup>	5	0.5
Cr <sup>3+</sup>	1000	1000	S <sup>2-</sup>	5	0.1
Cr <sub>2</sub> O <sub>7</sub> <sup>2-</sup>	1	100			
Br <sub>2</sub>	10	0.05	NaCl	10 %	2.5 %
I <sub>2</sub>	5	0.5	NaNO <sub>3</sub>	10 %	1000
H <sub>2</sub> O <sub>2</sub>	10	0.5	Na <sub>2</sub> SO <sub>4</sub>	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 Cl<sub>2</sub> (Cat. No. 117925) or 500 mg/l Cl<sub>2</sub> (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 Cl<sub>2</sub>.

### 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 Cl<sub>2</sub> (Cat. No. 117925) or 500 mg/l Cl<sub>2</sub> (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 Cl<sub>2</sub> (Cat. No. 117925) or 200 mg/l Cl<sub>2</sub> (Cat. No. 117924) and analyze as described in section 7. Additional notes see under [www.qa-test-kits.com](http://www.qa-test-kits.com).

### 9. Note

**Reclose the tube containing the test strips immediately after use.**

