

1.10001.0001

MQuant™

Peracetic Acid Test

1. Method

Peracetic acid reacts with a phenol derivative to form a violet dye. The concentration of peracetic acid is measured **semiquantitatively** 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

Measuring range / color-scale graduation	Number of determinations
100 - 150 - 200 - 250 - 300 - 400 - 500 mg/l peracetic acid	100

3. Applications

This test is suited for the selective determination of the peracetic acid concentration in disinfectant solutions, also in cases in which hydrogen peroxide is present.

4. Influence of foreign substances

This was checked in solutions with 200 and 0 mg/l peracetic acid. 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 °e			
Ascorbate	10	Free chlorine (hypochlorite)	10
Fe ²⁺	10	Combined chlorine (chloramine T)	5
Fe ³⁺	10	Formaldehyde	1000
NO ₂ ⁻	1000	Total hardness	38 °e
SO ₃ ²⁻	100	H ₂ O ₂	1000

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 100 test strips

Other reagents:

MColorpHast™ Indicator strips pH 0 - 6.0,

Cat. No. 109531

Sodium acetate anhydrous for analysis EMSURE®,

Cat. No. 106268

Acetic acid (glacial) 100 % anhydrous for analysis

EMSURE®, Cat. No. 100063

6. Preparation

- Samples containing more than 500 mg/l peracetic acid must be diluted with distilled water.
- **The pH must be within the range 3 - 5.**
If necessary adjust the pH to 3.5 with sodium acetate solution (50 g/l) or dilute acetic acid (100 g glacial acetic acid/l).

7. Procedure

Immerse the reaction zone of the test strip in the pre-treated sample (**15 - 30 °C**) for **1 sec**.

Allow excess liquid to run off via the long edge of the strip onto an absorbent paper towel and **after 10 sec** 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 peracetic acid.

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 500 mg/l peracetic acid 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. Note

Reclose the tube containing the test strips immediately after use.

