Supelco®

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1.17922.0001

MQuant®
Percetic 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
500 - 1000 - 1500 - **2000** 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 individually in solutions with 1000 and 0 mg/l peracetic acid. The determination is not yet interfered with up to the concentrations of foreign substances given in the table. Cumulative effects were not checked; such effects can, however, not be excluded.

Concentrations of foreign substances in mg/l or °e			
NO_3^-	1000	Free chlorine (hypochlorite)	50
		Formaldehyde	1000
		Total hardness	37.5 °e
		H_2O_2	10 000

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:
MQuant® Universal indicator strips pH 0 - 14, Cat. No. 1.09535
Sodium hydroxide solution 1 mol/l Titripur®, Cat. No. 1.09137
Hydrochloric acid 1 mol/l Titripur®, Cat. No. 1.09057

6. Preparation

- Samples containing more than 2000 mg/l peracetic acid must be diluted with distilled water.
- **The pH must be within the range 2 - 10.** Adjust, if necessary, with sodium hydroxide solution or hydrochloric acid.

7. Procedure

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

Shake off excess liquid from the strip and **after 30 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 2000 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.

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