

# QUANTOFIX® Peracetic Acid 2000

## Description:

QUANTOFIX™ Peracetic Acid 2000 are test strips for the semi-quantitative determination of peracetic acid (PAA) ( $\text{CH}_3\text{COOOH}$ ) in solutions. Peracetic acid is used as an ecological disinfectant, for example in the food, beverage, cosmetic, pharmaceutical and medical industries. This test is also suitable for checking the concentration of peracetic acid used besides hydrogen peroxide in dialysis equipment.

*Measuring range* 500–2000 mg/L peracetic acid

*Color gradation* 0–500–1000–1500–2000 mg/L peracetic acid

## Pack content:

1 aluminium container with 100 test strips

## Reaction principle:

Peracetic acid oxidizes the phenol and pyrazole derivatives contained in the test field forming a red color.

## General indications:

Remove only as many test strips as are required. Close the container immediately after removing a strip. Do not touch the test field.

## Instructions for use:

1. Insert the test strip into the test solution for 2 seconds.
2. Shake off excess liquid.
3. Wait 20 seconds.
4. Then, compare the test field immediately with the color scale. Take the value which matches closest with the colored test field (reading accuracy:  $\pm 1/2$  colored field of the scale).

The reaction color of the test field may change after the value has been taken. It is therefore crucial to evaluate the coloration within the prescribed time scale in order to achieve a correct result. Ignore color changes that occur after the reaction time (20 seconds).

## Quality control:

To check the correct functioning of the test strips, use a peracetic acid solution with a concentration of 1000 mg/L. To prepare the solution, use a volumetric flask and add to 0.225 mL peracetic acid 39% fully desalinated water, filling the flask to the 100 mL mark. Immediately perform the measurement with the test strip. If the control solution produces a negative result even after repeating the process, then the remaining unused test strips must be discarded. Even during a negative control (inserting a test strip into fully desalinated water), no color deviation from the 0 mg/L PES test field may occur. Possible reasons for incorrect functioning of the test strips may be that the use-by-date has been exceeded, the container has been left open for too long or has been stored incorrectly.

## Interferences:

If the sample solution has a pH value of 2–9, the reaction will take place without interferences. Strong acid solutions must be buffered with sodium hydroxide and alkaline solutions with hydrochloric acid. The following ions interfere with the determination when the concentrations below are exceeded (tested with 0 and 1000 mg/L respectively of peracetic acid solutions):

50 mg/L: free chlorine (hypochlorite)

1000 mg/L: formaldehyde, nitrate ( $\text{NO}_3^-$ )

10000 mg/L: hydrogen peroxide ( $\text{H}_2\text{O}_2$ )

30 °d: total hardness

## Storage:

Avoid exposing the strips to sunlight and moisture. Keep container cool and dry (storage temperature not above +30 °C).

If correctly stored, the test strips may be used until the use-by-date printed on the packaging.

## Additional information:

The test strip container stopper contains a non-toxic drying agent. If swallowed, drink plenty of water.

Disposal: Dispose of used test strips as domestic waste.

## Product data and ordering information

Type	Semi-quantitative test strips
Presentation	Tube of 100 test strips
Color reaction	bright-yellow to red
Gradation	0 · 500 · 1000 · 1500 · 2000 mg/l (ppm) peracetic acid
REF	91342

