

QUANTOFIX® Peracetic acid 500

Description:
QUANTOFIX® Peracetic Acid 500 are test strips for the semi-quantitative determination of peracetic acid (PAA) (CH_3COOOH) in solutions.

Measuring range:

Visually
50–500 mg/L peracetic acid

Reflectometrically
50–500 mg/L peracetic acid

Color gradation:

0 · 50 · 100 · 200 · 300 · 400 · 500 mg/L peracetic acid

Hazard warnings:

This test does not contain hazardous substances that must be labelled.

Pack content:

1 aluminum container with 100 test strips

Reaction principle:

Peracetic acid oxidizes the aromatic amine contained in the test field forming a green 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 1 second.
2. Shake off excess liquid.
3. Wait 15 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: $\pm \frac{1}{2}$ 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 (15 seconds).

Quality control:

To check the correct functioning of the test strips, use a peracetic acid solution with a concentration of 200 mg/L. To prepare the solution, use a volumetric flask and add to 0.11 mL peracetic acid 39 % fully distilled water, filling the flask to the 250 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 distilled 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 4–6, the reaction will take place without interferences. Acidic solutions must be buffered with sodium acetate, and alkaline solutions with diluted acetic acid to a pH of 5. The following ions interfere with the determination when the concentrations below are exceeded (tested with 0 and 200 mg/L respectively of peracetic acid solutions):

5 mg/L: bound chlorine (chloramine), Fe^{2+}

10 mg/L: free chlorine (hypochlorite)

15 mg/L: ascorbic acid, Fe^{3+}

75 mg/L: sulphite (SO_3^{2-})

1000 mg/L: formaldehyde, nitrate (NO_3^-), hydrogen peroxide (H_2O_2)

30 °d: total hardness

Storage:

Avoid exposing the strips to sunlight and moisture. Keep container cool and dry (storage temperature 4–30 °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:

Information regarding disposal can be found in the safety data sheet. You can download the SDS from www.mn-net.com/SDS.

