

QUANTOFIX® Chlorine Sensitive

Description:

QUANTOFIX® Chlorine Sensitive are test strips for the semiquantitative determination of total chlorine in solutions.

Measuring range:

Visually
0.1–10 mg/L Cl₂

Reflectometrically
0.1–10 mg/L Cl₂

Color gradation:

0 · 0.1 · 0.5 · 1 · 3 · 10 mg/L Cl₂

Pack content:

1 aluminum container with 100 test strips

Hazard warnings:

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

Reaction's principle:

Total chlorine reacts with the potassium iodide and the organic redox indicator 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. Dip the test strip into the sample solution, moving back and forth for 15 sec.
2. Shake off excess liquid.
3. Compare the test field 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.

Quality control:

To check the correct functioning of the test strips, use a total chlorine solution with a concentration of 1 mg/L. For this purpose, first prepare a stock solution of 100 mg/L by adding 0.1 g calcium hypochlorite to 1000 mL distilled water while continuously stirring. Then, filter the solution and subject it to photometric analysis (i.e. with *NANOCOLOR*® Chlorine/Ozone 2, REF 985017) to determine the exact content. Dilute 1 mL from the stock solution (100 mg/L) in 100 mL distilled water, then add 1 spatula tip of ammonium chloride (= 1 mg/L Cl₂). 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 distilled water), no positive coloration 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:

The presence of other strong oxidants such as bromine, iodine and hydrogen peroxide will also lead to false positive results.

Disposal:

Used test strips can be placed in the normal household waste.

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.

U.S. Patent No. 9,052,303

