# QUANTOFIX® Sensitive Chlorine



## Description:

QUANTOFIX® Sensitive Chlorine are test strips for the semi-quantitative determination of total chlorine in solutions. This test is also suitable for total chlorine residue control in dialysis equipment.

Range: 0.1-10 mg/l Cl<sub>2</sub>

# Contents:

100 test strips

## Reaction's principle:

Total chlorine reacts with the potassium iodide and the organic redox indicator contained in the test field, forming a green colour.

#### General indications:

Remove only as many test strips as are required. Close the container immediately after removing the strips. Do not touch the test field with your fingers. Ideally, the colour evaluation should be carried out by diffuse daylight. Artificial light can lead to difficulties or an incorrect colour reading.

### 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 colour scale. Take the value which matches closest with the coloured test field (reading accuracy:  $\pm \frac{1}{2}$  coloured field of the scale).

The reaction colour 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, Cat. No. 985 017) 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 Cl<sub>2</sub>). 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.

#### Storage:

Avoid exposing the strips to sunlight and moisture. Keep container cool and dry (storage temperature between 4°C and 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.

# Explanation of the symbols:



Rev.: 2009-03

MACHEREY-NAGEL GmbH & Co. KG  $\cdot$  Neumann-Neander-Str. 6-8  $\cdot$  D-52355 Düren (Germany)

Tel.: +49 24 21 9 69-0 · Fax +49 24 21 9 69-199 e-mail: sales-de@mn-net.com · www.mn-net.com





