# **QUANTOFIX® Peroxide 100**

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#### Description:

QUANTOFIX® Peroxide 100 are test sticks for the semi-quantitative determination of hydrogen peroxide and peroxides in solutions. These test sticks are also suitable for the determination of residual peroxide in dialysis equipment.

Range: 1-100 mg/l H<sub>2</sub>O<sub>2</sub>

#### Contents:

100 test sticks

## Reaction's principle:

Hydrogen peroxide reacts with peroxidase (POD) and the organic redox indicator in the test field to form a blue coloured oxidations compound.

#### Instructions for use:

Remove only the required number of test sticks from the tube, and then immediately replace the stopper, Do not touch the test field. Dip the test stick briefly (approx. 1 second) into the test solution. When hydrogen peroxide is present, the test field forms a blue colouration. Wait 5 seconds, then compare the test field with the colour scale. Compare the coloured test field with the closest colour block on the colour scale (accuracy  $\pm$  1/2 colour block).

Any further colour changes after 1 minute should not be considered positive.

QÚANTOFIX<sup>®</sup> Peroxide 100 is also suitable for the determination of peracetic acid and other organic and inorganic hydrogen peroxides.

For the determination of hydrogen peroxides in organic solvents the test pad is wetted with one drop of distilled water after evaporation of the solvent.

## Quality control:

For the control of the functions of the test sticks one uses a hydrogen peroxide solution with a concentration of 3 mg/l. For this a control standard of 500 mg/l  $H_2O_2$  is prepared, whereby 1.5 ml of the 30% hydrogen peroxide solution is diluted with 1000 ml of distilled water. Then 3ml of this standard control solution are diluted with 500 ml of distilled water (= 3 mg/l  $H_2O_2$ ). Now control the test sticks immediately. Should the results still be negative after a repeated control, than the remaining unused test sticks should be properly disposed of. Also with a negative control, whereby the test sticks are dipped into distilled water, there should be no blue colouration whatsoever. The reasons for both failures can be, that the expiry date has passed, the tubes was left open too long or improper storage, meaning not according to instructions.

### Interferences:

In the range of pH 2-9 the reaction is independent of the pH value of the buffered solution. Strongly acidic solutions must be buffered with sodium acetate, and alkaline solutions with citric acid, so that pH values between 5 and 7 are established. The test will produce a positive result, if other strong oxidation compounds (e. g. chlorine) are present.

# Storage conditions:

Protect the test sticks from direct sunlight and high relative humidity. Store unopened tubes in a refrigerator (2-8°C). Tubes which have already been opened should be stored cool and dry.

## Special instructions:

The stopper of the tubes contains a harmless desiccant. Should this desiccant be swallowed, then drink plenty of water.

Disposal: Used test sticks can be placed in the normal household waste.

## **Explanation of the symbols:**



**C €** Rev. 2004-07

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