

HYDROGEN PEROXIDE HR

TEST FOR HIGH LEVELS OF HYDROGEN PEROXIDE IN WATER

Photometer Method

**AUTOMATIC
WAVELENGTH
SELECTION**

0 – 100 mg/l

Hydrogen peroxide is used as a bleach and oxidising agent in a number of industrial processes. Applications include textile bleaching, commercial laundering and paper manufacturing. It is important in such processes to control the hydrogen peroxide level within the correct range so as to achieve the desired bleaching or oxidising effect without causing damage to the goods under treatment. Hydrogen Peroxide is also used in swimming pool water to control algae and improve clarity.

The Palintest Hydrogen Peroxide HR test provides a simple means of monitoring hydrogen peroxide levels in water over the range 0 - 100 mg/l.

Method

Hydrogen peroxide reacts with potassium iodide under acid conditions to release iodine which gives a yellow solution. A catalyst is used to speed up the rate of reaction. In the Palintest Hydrogen Peroxide HR test the reagents are provided in the form of two tablets. The test is simply carried out by adding one of each tablet to a sample of the water.

The intensity of the colour produced in the test is proportional to the hydrogen peroxide concentration and is measured using a Palintest Photometer.

Reagents and Equipment

Palintest Hydrogen Peroxide HR Tablets

Palintest Acidifying PT Tablets

Palintest Automatic Wavelength Selection Photometer

Round Test Tubes, 10 ml glass (PT 595)

Test Procedure

- 1 Fill test tube with sample to the 10 ml mark.
- 2 Add one Acidifying PT tablet and one Hydrogen Peroxide HR tablet. Crush tablets and mix to dissolve.
- 3 Select Phot 17 on Photometer.
- 4 Take Photometer reading in usual manner (see Photometer instructions).
- 5 The result is displayed as mg/l H_2O_2 .

Notes

- 1 The sample should be free of other oxidizing agents such as chlorine, bromine etc. as these react in a similar manner and will interfere with the test. It is unlikely that these oxidizing agents will be used in conjunction with hydrogen peroxide and, under normal circumstances, will not usually coexist in solution.
 - 2 For measuring low levels of hydrogen peroxide, use the Palintest Hydrogen Peroxide LR test (see PHOT.16.).
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