

visicolor® Powder Pillows

Free Chlorine

DPD-Reagent for the photometric determination of free chlorine in drinking water, swimming pools and water reservoirs

Measuring range:

0.03–6.00 mg/L Cl₂

Method:

At a pH value of 6.2 to 6.5 in a phosphate buffered system, free chlorine reacts with *N,N*-diethyl-1,4-phenylene diamine (DPD) and forms a red-violet dye. In order to obtain accurate results the sample must be analyzed immediately after collection and cannot be preserved for later analysis. Bubbles in the sample cell can cause higher chlorine contents and must be avoided. This may require an additional gentle shaking.

Hazard warning:

Information regarding safety can be found on the box' label and in the safety data sheet. You can download the SDS from www.mn-net.com/SDS.

Procedure:

Requisite accessories: 2 test tubes 16 mm OD (REF 91680) or 2 test tubes 24 mm OD (REF 936101)

- 1 Rinse test tube several times with sample (*pH value of sample must be between pH 4 and 8*)

Blank (optional):

- 2 Fill one test tube with 5 mL* of sample
- 3 Clean test tube
- 4 Place test tube in photometer as blank value and adjust for zero

Sample:

- 5 Fill another test tube with 5 mL* of sample
- 6 Add content of 1 Powder Pillow free Chlorine
- 7 Close test tube and shake well
- 8 Clean test tube
- 9 Wait for 1 min
- 10 Measure

*Alternative procedure: Use 10 mL of sample.

Measurement:

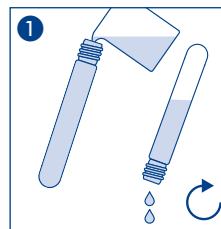
See manual for all MACHEREY-NAGEL photometers.
After use, rinse out test tubes thoroughly and seal them.
Suitable for the analysis of sea water.

Interferences:

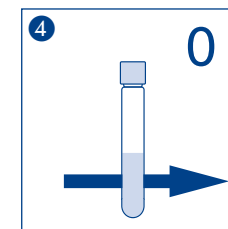
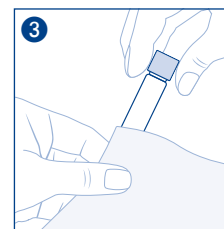
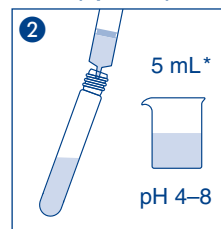
The temperature of the water sample should be between 10 °C and 50 °C.
Br₂ and I₂ interfere at all levels.
Bromamines and Chloramines interfere at all levels.
Manganese compounds in high oxidation states interfere at all levels.
Traces of remaining iodide from prior measurements might lead to higher amounts of free chlorine.
ClO₂ and other oxidizing agents interfere at all levels.

Disposal of samples:

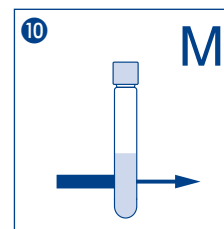
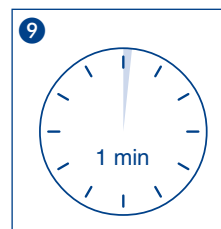
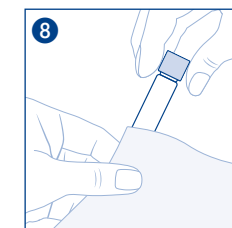
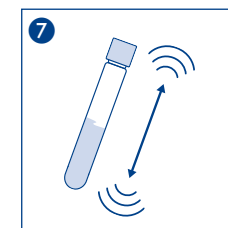
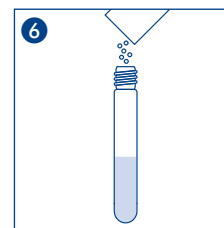
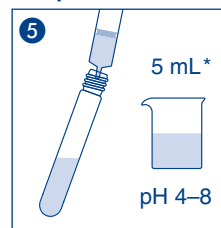
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Blank (optional):



Sample:



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