

Overview

The test is suitable for the photometric determination of chlorine dioxide with N,N-diethyl-1,4-phenylenediamine (DPD). Chlorine is not included in the determination. Analogous to APHA 4500-ClO₂ D and DIN 38408-G5.

The test is suitable for water.

- Measuring range: 0.15–5.00 mg/L ClO₂
- Number of tests: 20
- Wavelength for photometric determination: 540 nm
- Shelf life: 12 months
- Storage temperature: 15–25 °C
- Storage conditions: upright

Method

Chlorine dioxide reacts with N,N-diethyl-1,4 phenylenediamine (DPD) to form a red dye. The concentration of the dye is determined photometrically.

Interferences

Free chlorine is not included in this determination.

The method can be applied for analyzing seawater.

Turbidities cause higher measurement values.

Reagents and accessories

Contents of reagents set:

- 20 test tubes R0
- 1 NANOFIX R2

Required devices:

- MACHEREY-NAGEL photometer
- Digital piston pipette 1–5 mL (REF 916909) with pipette tips (REF 916916)
- Tweezers for sampling NANOFIX capsules (REF 916114)

Sampling and preparation

See DIN EN ISO 5667-3-A21.

Adjust to pH 4–10 prior to analysis.

Quality control

The measurement of a blank value and a standard is recommended before every measuring series as quality control measure.

LOT-specific certificates are available at www.mn-net.com.

Procedure

1. Open test tube. Pipette 4 mL of sample into test tube
2. Seal test tube and shake vigorously
3. Add 1 NANOFIX R2
4. Seal test tube and shake vigorously
5. Clean outside of test tube
6. Measure

Notes

When using other photometers, make sure measurements are possible in test tubes (16 mm OD) and calibrate the method.

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.

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