NANOCOLOR® Carbonate hardness 15 REF: 985015

Overview

The test is suitable for the photometric determination of carbonate hardness.

The test is suitable for water.

- Measuring range:

1.0 – 15.0 °d (method 0151)

0.4 – 5.4 mmol/L H^+ (method 0152)

1 – 18 °e (method 0153)

2 – 26 °f (method 0154)

20 – 270 mg/L $CaCO_3$ (method 0155)

- Wavelengths for photometric determination: 436 nm / 585 nm / 597 nm
- Number of tests: 20
- Shelf life: 12 months
- Reaction time: 2 minutes
- Storage temperature: 15 – 25 °C
- Storage conditions: upright

Method

Carbonate hardness or acid capacity is the name given to that part of the calcium and magnesium ions which is present in the form of carbonate or hydrogen carbonate. The photometric determination is performed with bromophenol blue.

Interferences

The method can be applied for analyzing seawater.

Reagents and accessories

Contents of reagents set:

- 1 tube with blanc solution
- 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.

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. Measure blank value
2. Open test tube. Pipette 4 mL of sample into test tube
3. Seal test tube and shake vigorously
4. Add 1 *NANOFIX* R2
5. Seal test tube and shake vigorously
6. Wait 2 min
7. Clean outside of test tube
8. 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*.

04/2023

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