

REF 985 086

en

Test 0-86

07.14

**NANOCOLOR® Sulfate 200**

**Method:**

Photometric determination as barium sulfate

Range:	10–200 mg/L SO <sub>4</sub> <sup>2-</sup>
Accuracy:	± 10 % at 100 mg/L
Factor:	non linear
Wavelength (HW = 5–12 nm):	436 nm
Reaction time:	2 min (120 s)
Reaction temperature:	20–25 °C

**Contents of reagent set:**

- 20 test tubes Sulfate 200
- 1 bottle with 5 g Sulfate 200 R2
- 1 measuring spoon 85 mm

**Hazard warning:**

Reagent R2 contains barium chloride 25–83 %.

H301 Toxic if swallowed.

P301+310, P330, P405, P501 IF SWALLOWED: Immediately call a POISON CENTER/doctor /... Rinse mouth. Store locked up. Dispose of contents/container to regulated waste treatment. For further information please ask for a safety data sheet.

**Preliminary tests:**

If the order of magnitude of the concentration in a sample is not known, a preliminary test with QUANTOFIX® Sulfate (REF 913 29) or with VISOCOLOR® ECO Sulfate (REF 931 092) rapidly gives this information. From the order of magnitude the required dilution can be calculated and prepared directly.

**Interferences:**

Turbidities of sample interfere and test sample must first be filtered before the determination. In drinking, surface and ground water the test results are accurate. In polluted waste water the test result can be smaller than the real concentration.

The method can not be applied for the analysis of sea water.

**Procedure:**

Requisite accessories: piston pipette with tips

Open test tube, add

**4.0 mL** test sample (*the pH value of the sample must be between pH 1 and 13*), close and mix.

Place test tube in photometer as blank value, adjust to zero.

Open test tube again, add

**1 level spoon** R2, close and **immediately** after addition shake vigorously for **10 s**.

Clean outside of test tube and measure after 2 min.

**Measurement:**

For NANOCOLOR® photometers and PF-12 see manual, test 0-86.

**Photometers of other manufacturers:**

For other photometers check whether measurement of round glass tubes is possible. Verify calibration for each type of instrument by measuring standard solutions.

**Analytical quality control:**

NANOCONTROL Multistandard Metals 1 (REF 925 015) or Multistandard Drinking water (REF 925 018)