

REF 985062

en

Test 0-62

03.23

NANOCOLOR® Sulfate LR 200

Method:

Photometric determination as barium sulfate.

Range:	20 – 200 mg/L SO_4^{2-}
Wavelength (HW = 5 – 12 nm):	585 nm
Reaction time:	15 min (900 s)
Reaction temperature:	20 – 25 °C

Contents of reagent set:

20 test tubes Sulfate LR 200 R1
2 test tubes Sulfate LR 200 R2

Hazard warning:

Reagent R1 contains barium chloride 3 – 25 %.

H302, H412 Harmful if swallowed. Harmful to aquatic life with long lasting effects.

P273, P301+312, P330 Avoid release to the environment. IF SWALLOWED: Call a POISON CENTER / doctor / ... / if you feel unwell. Rinse mouth.

Preliminary tests:

If the order of magnitude of the concentration in a sample is not known, a preliminary test with QUANTOFIX® Sulfate (REF 91329) or with *VISOCOLOR® ECO* Sulfate (REF 931092) 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.

The following quantities of ions will not interfere: ≤ 100 mg/L Fe, CO_3^{2-} , ≤ 500 mg/L Zn^{2+} , ≤ 1000 mg/L Ca^{2+} , Cl^- .

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

Procedure:

Requisite accessories: piston pipette with tips

Open test tube, add

1.0 mL Sulfate LR 200 R2, close and mix. Add

4.0 mL sample solution (*the pH value of the sample must be between pH 2 and 11*) close and mix.

Clean outside of test tube and measure after 15 min.

Measurement:

For MACHEREY-NAGEL photometers see manual, test 0-62.

Measurement when samples are colored or turbid:

For all *NANOCOLOR®* photometers see manual, use key for correction value.

Photometers of other manufacturers:

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

Analytical quality control:

NANOCONTROL Standard Sulfate LR 200 (REF 92562), *NANOCONTROL* Multistandard Metals 1 (REF 925015) or *NANOCONTROL* Multistandard Drinking water (REF 925018).