REF 985 062

Test 0-62 02.17

NANOCOLOR® Sulfate LR 200



Method:

Photometric determination as barium sulfate.

Range: 20–200 mg/L SO₄^{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 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.

The following quantities of ions will not interfere: \leq 100 mg/L Fe, CO_3^{2-} , \leq 500 mg/L Zn^{2+} , \leq 1000 mg/L Ca^{2+} , $C\Gamma$.

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 200 (REF 925 86), NANOCONTROL Multistandard Metals 1 (REF 925 015) or NANOCONTROL Multistandard Drinking water (REF 925 018).

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