

REF 985060

en

Test 0-60

03.18

**NANOCOLOR® Sulfate MR 400**

#### Method:

Photometric determination as barium sulfate.

Range:	40–400 mg/L SO <sub>4</sub> <sup>2-</sup>
Wavelength (HW = 5–12 nm):	800 nm
Reaction time:	15 min (900 s)
Reaction temperature:	20–25 °C

#### Contents of reagent set:

20 test tubes Sulfate MR 400 (R0)  
2 test tubes Sulfate MR 400 R2

#### Hazard warning:

Reagent R0 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 V/SOCOLOR® 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<sub>3</sub><sup>2-</sup>, ≤ 500 mg/L Zn<sup>2+</sup>, ≤ 1000 mg/L Ca<sup>2+</sup>, Cl<sup>-</sup>.

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 MR 400 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 0-60.

#### 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) or NANOCONTROL Multistandard Drinking water (REF 925018).