REF 985063

Test 0-63 10.24
NANOCOLOR® Sulfate HR 1000

Method:
Photometric determination as barium sulfate.

Range :	**200 – 1000 mg/L SO_4^{2-}**
Wavelength (HW = 5 – 12 nm) :	**690 nm**
Reaction time :	**10 min (600 s)**
Reaction temperature :	**20 – 25 °C**

Contents of reagent set:
20 test tubes Sulfate HR 1000 (R0)

Hazard warning:
This test does not contain any harmful substances which must be specially labelled as hazardous.

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: ≤ 50 mg/L Al^{3+}; ≤ 500 mg/L NO_3^-; ≤ 2000 mg/L CO_3^-; $Fe^{2+/3+}$; ≤ 5000 mg/L Ca^{2+}; ≤ 7500 mg/L Zn^{2+}; ≤ 12500 mg/L Cl^-.

Also suitable for the determination of sulfate in seawater with appropriate dilution in the measuring range.

Procedure:
Requisite accessories: piston pipette with tips

Open test tube, add
1.0 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 10 min.
*Adjust highly buffered samples to pH = 4 – 6.
When adding the sample, hold the glass vertically and add sample directly.

Measurement:
For MACHEREY-NAGEL photometers see manual, test 0-63.

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.

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