

REF 985 090

en

Test 0-90

01.14

**NANOCOLOR® Sulfite 100****Method:**

Photometric determination with potassium iodate / iodide

Range:	5–100 mg/L SO <sub>3</sub> <sup>2-</sup>
Factor:	0099.
Wavelength (HW = 5–12 nm):	470 nm
Reaction time:	0
Reaction temperature:	20–25 °C

**Contents of reagent set:**

- 19 test tubes Sulfite 100
- 2 test tubes with 10 mL Sulfite 100 R1
- 1 test tube with 9 mL Sulfite 100 R2
- 1 empty test tube for blank value

**Hazard warning:**

Reagent R2 contains sulfuric acid 30–51%.

H314 Causes severe skin burns and eye damage.

P260, P280, P301+330+331, P303+361+353, P304+340, P305+351+338 Do not breathe vapors. Wear protective gloves/eye protection. IF SWALLOWED: rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. For further information 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® Sulfite (10–1000 mg/L SO<sub>3</sub><sup>2-</sup>, REF 913 06) or with VISOCOLOR® HE Sulfite SU 100 (REF 915 008) rapidly gives this information. From the order of magnitude the required dilution can be calculated and prepared directly.

**Interferences:**

Oxidizing and reducing substances as well as starch interfere with the determination.

2 mg/L ascorbic acid simulate 1 mg/L sulfite.

The method can be used also for the analysis of sea water.

**Procedure:**

Requisite accessories: piston pipette with tips

Test sample	Blank value
Open test tube, add	Open <b>empty</b> test tube, add
<b>200 µL</b> (= 0.2 mL) R2, shake lightly, slowly add along wall of tube	<b>1.0 mL</b> R1 and
<b>4.0 mL</b> sample solution ( <i>the pH value of the sample must be between pH 1 and 13</i> ), close and mix.	<b>200 µL</b> (= 0.2 mL) R2, shake lightly, slowly add along wall of tube
Clean outside of test tube and measure immediately.	<b>4.0 mL</b> distilled water, close and mix.
	Clean outside of test tube and measure immediately.

**Measurement:**

For NANOCOLOR® photometers and PF-12 see manual, test 0-90.

For each analysis a blank value is required.

Sulfite contents below 5 mg/L are to be considered as negative results.

**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 Sulfite (REF 925 90)