

REF 91888

en

Test 1-88 12.18

NANOCOLOR® Sulfide

Method:

Photometric determination as methylene blue

Cuvette rectangular:	50 mm	20 mm	10 mm
Range (mg/L S ²⁻):	0.01–0.60	0.05–1.50	0.1–3.0
Wavelength (HW = 5–12 nm):	620 / 660 nm		
Reaction time:	5 min (300 s)		
Reaction temperature:	20–25 °C		

Contents of reagent set:

10 g Sulfide R1
 100 mL Sulfide R2
 100 mL Sulfide R3
 1 measuring spoon 70 mm

Hazard warning:

Reagent R1 contains sulfamic acid 90–100 %, reagent R2 contains sulfuric acid 51–65 %.
 H314 Causes severe skin burns and eye damage.
 P260sh, P280sh, P303+361+353, P305+351+338, P310 Do not breathe dust/vapors. Wear protective gloves/eye protection. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. For further information ask for a safety data sheet.

Interferences:

Sulfide concentration is tested in an acidic medium and, therefore, if the reagents are not mixed gently, some sulfide may escape as hydrogensulfide, leading to lower test results.

The following quantities of ions will not interfere:

< 10 mg/L SCN⁻, SO₃²⁻; < 100 mg/L NO₂⁻

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

Procedure:

Requisite accessories: volumetric flasks 25 mL, piston pipette with tips

Pour into two separate volumetric flasks 25 mL:

Test sample	Blank value
20 mL test sample (the pH value of the sample must be between pH 7 and 10)	20 mL test sample (the pH value of the sample must be between pH 7 and 10)
1 spoon R1, shake gently, wait 1 min Hold volumetric flask at an angle and pour down the inner side	–
1 mL R2, shake briefly	–
1 mL R3	–

Fill up sample and blank value to 25 mL mark with distilled water and mix again. After 5 min pour into cuvettes and measure.

Measurement:

For MACHEREY-NAGEL photometers see manual, test 1-88.

Measurement when samples are colored or turbid:

For all MACHEREY-NAGEL photometers see manual, use key for correction value.

Photometers of other manufacturers:

Verify factor for each type of instrument by measuring standard solutions.

Decreasing volume of analytical preparation:

In order to increase the number of determinations, you can work with volumetric flasks of 10 mL: 8 mL test sample + ½ microspoon R1 + 0.4 mL R2 + 0.4 mL R3, semi-micro cuvette (REF 91950).

Disposal:

The contents of cuvettes and flasks can be washed into drain with plenty of water.