

REF 985073

en

Test 0-73

03.23

**NANOCOLOR® Sulfide 3**

#### Method:

Photometric determination as methylene blue

|                              |                                  |
|------------------------------|----------------------------------|
| Range:                       | 0.05 – 3.00 mg/L S <sup>2-</sup> |
| Wavelength (HW = 5 – 12 nm): | 620 nm                           |
| Reaction time:               | 10 min (600 s)                   |
| Reaction temperature:        | 20 – 25 °C                       |

#### Contents of reagent set:

- 20 test tubes Sulfide 3
- 1 bottle with 1.5 g Sulfide 3 R2
- 1 test tube with 5 mL Sulfide 3 R3
- 1 measuring spoon 70 mm

#### Hazard warning:

Test tubes contain sulfuric acid 51 – 65 %, reagent R2 contains sulfamic acid 90 – 100 %.  
H314 Causes severe skin burns and eye damage.  
P260 sh, P280 sh, 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. 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 hydrogen sulfide, leading to lower test results.  
The following ions will not interfere: < 100 mg/L NO<sub>3</sub><sup>-</sup>, NO<sub>2</sub><sup>-</sup>; < 20 mg/L SCN<sup>-</sup>; < 10 mg/L SO<sub>3</sub><sup>2-</sup>.  
The method can be applied also for the analysis of sea water after dilution (1 + 3).

#### Procedure:

Requisite accessories: piston pipette with tips

- Open test tube, add
- 1 level measuring spoonful** of R2 and
- 4.0 mL** test sample (*the pH value of the sample must be between pH 7 and 10*), close and shake gently. Wait **1 min**.
- Add
- 200 µL** (= 0.2 mL) R3, close and mix.
- Clean outside of test tube and measure after 10 min.

#### Measurement:

For MACHEREY-NAGEL photometers see manual, test 0-73.

#### 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.