

REF 985032

en

Test 0-32

07.17

**NANOCOLOR® Anionic surfactants 4****Method:**

Photometric determination with methylene blue

Range:	0.20–4.00 mg/L MBAS	0.20–3.50 mg/L SDS
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 Anionic surfactants 4

1 test tube with 11 mL Anionic surfactants 4 R2

**Hazard warning:**

Test tubes contain chloroform 95–100 % and methanol 3–10 %.

H331, H351, H361 Toxic if inhaled. Suspected of causing cancer. Suspected of damaging fertility or the unborn child.

P201, P261sh, P280sh, P311, P405 Obtain special instructions before use. Avoid breathing dust/vapors. Wear protective gloves/eye protection. Call a POISON CENTER/doctor. Store locked up. For further information ask for a safety data sheet.

**Interferences:**

Cationic surfactants cause low results, depending on the kind of the cationic surfactant.

The following ions will not interfere: < 1000 mg/L K<sup>+</sup>, Na<sup>+</sup>, PO<sub>4</sub><sup>3-</sup>, SO<sub>4</sub><sup>2-</sup>; < 500 mg/L NH<sub>4</sub><sup>+</sup>, Cu<sup>2+</sup>, Zn<sup>2+</sup>, Cl<sup>-</sup>; < 200 mg/L Ca<sup>2+</sup>, Mg<sup>2+</sup>, Ni<sup>2+</sup>, NO<sub>2</sub><sup>-</sup>; < 100 mg/L Al<sup>3+</sup>, NO<sub>3</sub><sup>-</sup>; < 50 mg/L Cr(III), Cr(VI); < 20 mg/L Fe<sup>3+</sup>.

The method can be applied also for the analysis of sea water after dilution (1+19).

**Procedure:**

Requisite accessories: piston pipette with tips

Open test tube, add

**4.0 mL** test sample (*the pH value of the sample must be between pH 4 and 9*) and **500 µL** (= 0.5 mL) R2, close and **shake for 1 min**.Clean outside of test tube and measure after 10 min (*wait for phase separation*).**Measurement:**

For MACHEREY-NAGEL photometers see manual, test 0-32.

**Note:**

The calibration data is calculated as dodecylbenzenesulfonic acid methyl ester MBAS (method 0321) / sodium dodecylsulfate SDS (method 0322). For measuring other anionic surfactants verify calibration data by measuring standard solutions.

**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.