

REF 985 032

en

Test 0-32 12.14

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
Factor:	05.00	04.23
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 90–100 % and methanol 3–10 %.

H351, H361 Suspected of causing cancer. Suspected of damaging fertility or the unborn child.

P201, P202, P280, P308+313, P405 Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/eye protection. IF exposed or concerned: Get medical advice/attention. 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⁺, Na⁺, PO₄³⁻, SO₄²⁻; < 500 mg/L NH₄⁺, Cu²⁺, Zn²⁺, Cl⁻; < 200 mg/L Ca²⁺, Mg²⁺, Ni²⁺, NO₂⁻; < 100 mg/L Al³⁺, NO₃⁻; < 50 mg/L Cr(III), Cr(VI); < 20 mg/L Fe³⁺.

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 NANOCOLOR® photometers and PF-12 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.