REF 985 065

Test 0-65 03.17
NANOCOLOR® Nitrate 8

en

Method:
Photometric determination with 2,6-dimethylphenol in sulfuric acid / phosphoric acid

Range:	**0.30–8.00 mg/L NO_3-N**	**1.3–35.0 mg/L NO_3^-**
Wavelength (HW = 5–12 nm):	**350 / 365 nm**	
Reaction time:	**10 min (600 s)**	
Reaction temperature:	**20–25 °C**	

Contents of reagent set:
20 test tubes Nitrate 8
1 test tube with 11 mL Nitrate 8 R2

Hazard warning:
Test tubes contain sulfuric acid 51–80 % and phosphoric acid 25–50 %, reagent R2 contains 2-propanol 20–50 %.
H314 Causes severe skin burns and eye damage.
P260, P280, P301+330+331, P303+361+353, P304+340, P305+351+338, P501 Do not breathe vapours. Wear protective gloves / eye protection. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water / shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Dispose of contents / container to regulated waste treatment. 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® Nitrate / Nitrite (10–500 mg/L NO_3^-, REF 913 13) rapidly gives this information. From the order of magnitude the required dilution can be calculated and prepared directly. In the same check it is possible to proof the interferences of nitrite.

Interferences:
Nitrite interferes > 1 mg/L (check with QUANTOFIX® Nitrite – REF 913 11). This can be circumvented by addition of 1 spoon of amidosulfonic acid (REF 918 973) to 10 mL test sample. Wait 10 min to determine nitrate.
The following ions will not interfere: < 1000 mg/L Cl^-, CO_3^{2-}; < 10 mg/L Cl_2.

The method can not be applied for the analysis of sea water.

Procedure:
Requisite accessories: piston pipette with tips

Open test tube, add
0.5 mL test sample *(the pH value of the sample must be between pH 1 and 13)* and
0.5 mL R2, mix by **shaking gently** *(Test tube becomes warm!)*.
Clean outside of test tube and measure after 10 min.

Measurement:
For *NANOCOLOR*® photometers see manual, test 0-65.

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.

Analytical quality control:
NANOCONTROL Multistandard Sewage outflow 1 (REF 925 011) or Sewage outflow 2 (REF 925 010)

MACHEREY-NAGEL GmbH & Co. KG · Neumann-Neander-Str. 6–8 · 52355 Düren · Germany
Tel.: +49 24 21 969-0 · Fax: +49 24 21 969-199 · info@mn-net.com · ***www.mn-net.com***
PD 14122 / A036701 / 985 065 / 0375