

REF 985 065

en

Test 0-65 05.11

NANOCOLOR® Nitrate 8

Method:

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

Range:	0.30–8.00 mg/L NO ₃ ⁻	1.3–35.0 mg/L NO ₃ ⁻
Factor	19.00	0084.1
Wavelength (HW = 5–12 nm):	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 52% / phosphoric acid 39%.
R35 Causes severe burns. S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. 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 NO₃⁻, 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⁻, CO₃²⁻; < 10 mg/L Cl₂
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 and PF-12 see manual, test 0-65.

Measurement when samples are coloured or turbid:

For all *NANOCOLOR*® photometers see manual, chapter 5.11., 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)