

REF 985 066

en

Test 0-66

05.12

NANOCOLOR® Nitrate 250**Method:**

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

Range:	4–60 mg/L NO ₃ -N	20–250 mg/L NO ₃ ⁻
Factor range (depends on wavelength):	0068.–0081.	0303.–0355.
Wavelength (HW = 5–17 nm):	385 nm	
Factor:	0042.	0185.
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 250

1 test tube with 11 mL Nitrate 250 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 details 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 > 3 mg/L (check with QUANTOFIX® Nitrite – REF 913 11). This can be circumvented by addition of 1 spoon of amidosulphonic acid (REF 918 973) to 10 mL test sample. Wait 10 min to determine nitrate.

The following ions will not interfere: < 2500 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

0.2 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 0-66.

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 influx (REF 925 012) or Multistandard Seepage water (REF 925 013)