Test 0-68 03.23

NANOCOLOR® Nitrite 2

Method:

Photometric determination with sulfanilamide and N-(1-naphthyl)ethylenediamine

Range:	0.003 – 0.46 mg/L NO ₂ -N	0.02 – 1.5 mg/L
NO ₂		

Wavelength (HW = 5-12 nm): 540 nm Reaction time: 10 min (600 s)

Reaction temperature: 20 – 25 °C

Contents of reagent set:

20 test tubes Nitrite 2

1 test tube with 5 mL Nitrite 2 R2

Hazard warning:

Reagent R2 contains citric acid 20-40%.

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® Nitrite $(1-80 \text{ mg/L NO}_2^-, \text{REF 91311})$ rapidly gives this information. From the order of magnitude the required dilution can be calculated and prepared directly.

Interferences:

Free chlorine, organic colloids and humic acids can cause interference.

The following ions will not interfere: \leq 3 mg/L Fe(III), Cr(VI).

The method can be applied also for the analysis of sea water.

Note:

For removal of emulsions, turbidities and color prior to the test, e.g. for nitrite in cooling lubricants, seepage water from waste deposits etc., use Reagents for sample preparation by clarification precipitation (REF 918937).

Procedure:

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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 1 and 7) and **200 \muL** (= 0.2 mL) R2, close and mix.

Clean outside of test tube and measure after 10 min.

Measurement:

For NANOCOLOR® photometers and PF-12 see manual, test 0-68.

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 Nitrite (REF 92568)