

REF 985 005

en

Test 0-05

08.16

**NANOCOLOR® Ammonium 50****Method:**

Photometric determination as indophenol: At a pH value of about 12.6 ammonium reacts with hypochlorite and salicylate in the presence of sodium nitroprusside as catalyst to form a blue indophenol.

Range:	1.0–40.0 mg/L NH <sub>4</sub> -N	1.0–50.0 mg/L NH <sub>4</sub> <sup>+</sup> / NH <sub>3</sub>
Wavelength (HW = 5–12 nm):	690 nm	
Reaction time:	15 min (900 s)	
Reaction temperature:	20–25 °C	

Contents of reagent set:

20 test tubes Ammonium 50

1 tube NANOFIX Ammonium 50 R2

1 test tube with blank value "NULL"

**Hazard warning:**

Reagent R2 contains sodium nitroprusside 5–33 %.

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® Ammonium (10–400 mg/L NH<sub>4</sub><sup>+</sup>, REF 913 15) rapidly gives this information. From the order of magnitude the required dilution can be calculated and prepared directly.

**Interferences:**

Good reproducibility is obtained in weakly polluted waters. High pollution causes errors and requires distillation prior to analysis.

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

**Procedure:**

Requisite accessories: piston pipette with tips

Open test tube, add

**0.2 mL** (= 200 µL) test sample (*the pH value of the sample must be between pH 1 and 10*) and

**1 NANOFIX R2**, close and mix.

(*Close NANOFIX tube immediately after use.*)

Clean outside of test tube and measure after 15 min.

Measurement:

For NANOCOLOR® photometers and PF-12 see manual, test 0-05.

**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)