

REF 985 004

en

Test 0-04

12.13

NANOCOLOR® Ammonium 10**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:	0.2–8.0 mg/L NH ₄ -N	0.2–10.0 mg/L NH ₄ ⁺ /NH ₃
Factor:	005.7	007.3/006.9
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 10
- 1 tube NANOFIX Ammonium 10 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 NH₄⁺, REF 913 15) or with VISOCOLOR® ECO Ammonium 15 (0.5–15 mg/L NH₄⁺, REF 931 010) 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
1.0 mL test sample (*the pH value of the sample must be between pH 1 and 13*)
 and
1 NANOFIX R2, close, shake.
(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 0-04.

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)