

REF 985 006

en

Test 0-06

06.11

**NANOCOLOR<sup>®</sup> Ammonium 200****Method:**

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

Range:	<b>30–160 mg/L NH<sub>4</sub>-N</b>	<b>40–200 mg/L NH<sub>4</sub><sup>+</sup>/NH<sub>3</sub></b>
Factor:	<b>0116.</b>	<b>0150./0142.</b>
Wavelength (HW = 5–12 nm):	<b>585 nm</b>	
Reaction time:	<b>15 min (900 s)</b>	
Reaction temperature:	<b>20–25 °C</b>	

**Contents of reagent set:**

- 20 test tubes Ammonium 200
- 1 tube *NANOFIX* Ammonium 200 R2
- 1 test tube with blank value "NULL"

**Hazard warning:**

Reagent Ammonium 200 R2 contains hazards which are not labelled with <Xn> (certificate of exemption for small quantities), see safety data sheet.

**Preliminary tests:**

If the order of magnitude of the concentration in a sample is not known, a preliminary test with *QUANTOFIX<sup>®</sup>* 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:**

The photometric analysis of water samples with own color or turbidity always requires determination of a correction value.

The method can be applied also 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 13*) and
- 1 *NANOFIX* Ammonium 200 R2**, close and mix.  
(*Close *NANOFIX* tube immediately after use.*)
- Clean outside of test tube and measure after 15 min.

**Measurement:**

For *NANOCOLOR<sup>®</sup>* photometers and PF-10/PF-11/PF-12 see manual, test 0-06.

**Measurement when samples are colored or turbid:**

For all *NANOCOLOR<sup>®</sup>* 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 Seepage water (REF 925 013)