

REF 985 002

en

Test 0-02

12.16

**NANOCOLOR® Ammonium 2000**

**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:	300–1600 mg/L NH <sub>4</sub> -N	400–2000 mg/L NH <sub>4</sub> <sup>+</sup> /NH <sub>3</sub>
Wavelength (HW = 5–12 nm):	585 nm	
Reaction time:	15 min (900 s)	
Reaction temperature:	20–25 °C	

**Contents of reagent set:**

**Box A:** 20 test tubes A

**Box B:** 20 test tubes NH<sub>4</sub> 2000

1 tube NANOFIX Ammonium 2000 R2

**Hazard warning:**

Reagent R2 contains sodium nitroprusside 5–33% and dichloroisocyanuric acid sodium salt 10–20%.

For further information ask for a safety data sheet.

**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

**A) Dilution (Box A)**

Open **tube A**, add  
**500 µL** test sample (*the pH value of the sample must be between pH 1 and 13*), close and shake vigorously.

**B) Analysis (Box B)**

Open **test tube NH<sub>4</sub> 2000**, add  
**200 µL** (= 0.2 mL) **solution A** 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 0-02.

**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.