

REF 985 008

en

Test 0-08

03.15

NANOCOLOR® Ammonium 100**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:	4–80 mg/L NH ₄ -N	5–100 mg/L NH ₄ ⁺ /NH ₃
Factor:	0045.	0058./0055.
Wavelength (HW = 5–12 nm):	585 nm	
Reaction time:	15 min (900 s)	
Reaction temperature:	20–25 °C	

Contents of reagent set:

20 test tubes Ammonium 100
 1 tube NANOFIX Ammonium 100 R2
 1 test tube with blank value "NULL"

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.

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) 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 also be applied for the analysis of sea water.

Procedure:

Requisite accessories: piston pipette with tips

Open test tube, add

500 µL (= 0.5 mL) test sample (*the pH value of the sample must be between pH 1 and 13*) 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 0-08.

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 Seepage water (REF 925 013) after dilution (1+1)