

REF 918 44

en

Test 1-44 10.16

NANOCOLOR® Hydrazine

Method:

Photometric determination with 4-dimethylaminobenzaldehyde

Cuvette rectangular:	50 mm	20 mm	10 mm
Range (mg/L N ₂ H ₄):	0.002–0.250	0.005–0.750	0.01–1.50
Wavelength (HW = 5–12 nm):	436 nm		
Wavelength (HW = 5–12 nm):	445 nm		
Reaction time:	10 min (600 s)		
Reaction temperature:	20–25 °C		

Contents of reagent set:

2 x 100 mL Hydrazine R1

2 x 100 mL Hydrazine R2

Hazard warning:

Reagent R1 contains sulfuric acid 15–30 %.

H314 Causes severe skin burns and eye damage.

P260, P280, P301+330+331, P303+361+353, P304+340, P305+351+338, P501 Do not breathe vapors. Wear protective gloves/eye protection. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Dispose of contents/container to regulated waste treatment. For further information ask for a safety data sheet.

Interferences:

No interference will occur due to the presence of foreign matter (e.g. heavy metal ions, neutral salts, ammonia and phosphate ions), which may possibly be present in condensate, feed water or boiler water.

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

Note:

Please contact MACHEREY-NAGEL for special working instructions concerning a simplified procedure in a beaker (without filling up) an evaluation in 50 mm cuvette.

Procedure:

Requisite accessories: volumetric flasks 25 mL, piston pipette with disposable tips

Pour into two separate volumetric flasks 25 mL:

Sample	Blank value
20 mL test sample (the pH value of the sample must be between pH 1 and 7)	20 mL distilled water
2 mL R1, mix	2 mL R1, mix
2 mL R2, mix	2 mL R2, mix

Fill up sample and blank value to 25 mL mark with distilled water and mix again. After 10 min pour contents into cuvettes and measure.

Note:

The reaction temperature is 20–25 °C for the test and for the reagents.

Measurement:

For NANOCOLOR® photometers see manual, test 1-44.

Measurement when samples are colored or turbid:

For all NANOCOLOR® photometers see manual, use key for correction value.

Photometers of other manufacturers:

Verify factor for each type of instrument by measuring standard solutions.

Decreasing volume of analytical preparation:

In order to increase the number of determinations, you can work with volumetric flasks of 10 mL: 8 mL test sample + 0.8 mL R1 + 0.8 mL R2, semi-micro cuvette (REF 919 50).

Storage:

Do not store Hydrazine R2 higher than room temperature and close R2 immediately after use. If test is not used for some time, we recommend that R2 be stored in a refrigerator and removed in time for the next analysis. If R2 is dark colored, use a new reagent set.

Disposal:

The contents of cuvettes and flasks can be washed into drain with plenty of water.