

REF 985 014

en

Test 0-14 01.16

NANOCOLOR® Cadmium 2

Method:

Photometric determination with cadione

Range:	0.05–2.00 mg/L Cd ²⁺
Factor:	01.43
Wavelength (HW = 5–12 nm):	520 nm
Reaction time:	5 min (300 s)
Reaction temperature:	20–25 °C

Contents of reagent set:

20 test tubes Cadmium 2
1 test tube with 5 mL Cadmium 2 R2

Hazard warning:

This tube test does not contain any harmful substances which must be specially labelled as hazardous.

Preliminary tests:

For test of the absence of interfering complexing agents we recommend a preliminary test with NANOCOLOR® org. Complexing Agents 10 (REF 985 052).

Interferences:

Refer to NANOCOLOR® NanOx Metal (REF 918 978) or Crack Set (REF 918 08) for sample pretreatment.

The following quantities of ions will not interfere:

- < 5 mg/L Fe²⁺, Fe³⁺, anionic surfactants, cationic surfactants;
- < 10 mg/L Al³⁺, Cu²⁺;
- < 1000 mg/L Ca²⁺, PO₄³⁻

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

Procedure:

Requisite accessories: piston pipette with tips

Test sample	Blank value
Open test tube, add 4.0 mL test sample (<i>the pH value of the sample must be between pH 7 and 10</i>) and 200 µL (= 0.2 mL) R2, close and mix. Clean outside of test tube and measure after 5 min.	Open test tube, add 4.0 mL distilled water and 200 µL (= 0.2 mL) R2, close and mix. Clean outside of test tube and measure after 5 min.

Measurement:

For NANOCOLOR® photometers and PF-12 see manual, test 0-14.
For each analysis a blank value is required.

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 Metals 1 (REF 925 015)