

REF 985 001

en

Test 0-01

08.15

NANOCOLOR® Zirconium 100

Method:

Under acidic conditions zirconium ions react with an indicator dye to form a red colored complex

Range:	5–100 mg/L Zr
Wavelength (HW = 5–12 nm):	540 nm
Reaction time:	5 min (300 s)
Reaction temperature:	20–25 °C

Contents of reagent set:

20 test tubes Zirconium 100 R1
1 tube NANOFIX Zirconium 100 R2

Hazard warning:

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

Interferences:

The amount of total zirconium can be determined after decomposition with *NANOCOLOR® NanOx Metal* (REF 918 978).

Oxidizing substances interfere with the determination.

The following quantities of ions will not interfere:

< 10 g/L Zn, Fe, Al
< 1000 mg/L F⁻, NH₄⁺
< 15 mg/L PO₄³⁻

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

Procedure:

Requisite accessories: piston pipette with tips

Open test tube, add
200 µL (0.2 mL) sample solution (*the pH value of the sample must be between pH 0 and 13*)
and
1 **NANOFIX** Zirconium 100 R2, close and mix.
Clean outside of test tube and measure after 5 min.

Measurement:

For *NANOCOLOR®* photometers and PF-12 / PF-12^{Plus} see manual, test 0-01.

Measurement when samples are colored or turbid:

For *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.