

# Alkalinity TA

**Test kit for the photometric determination of total alkalinity (acid capacity)**

## Method:

Alkalinity (acid capacity/acid binding capacity) describes the capability of water to neutralize acids with a pH range up to 4.3. The capability results from the sum of all bases (hydroxide ions) and buffers (carbonates, phosphates, etc.). The photometric determination of alkalinity uses bromophenol blue as an indicator.

## Measurement range:

0.4–17.5 °e

5–250 mg/L CaCO<sub>3</sub>

## Contents:

sufficient for 100 tests

23 mL TA- 1

2 x 50 NANOFIX TA-2

1 syringe 5 mL

1 syringe 1 mL

2 tips for syringe 1 mL

1 instruction leaflet

## Hazard warning:

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

## Procedure:

Required equipment: Test tubes 16 mm OD (REF 916 80)

1. Rinse test tube several times with the test sample and fill with **5 mL sample** (syringe 5 mL).
2. Place test tube in the photometer and measure **ZERO**.
3. Add **0.2 mL TA-1** (syringe 1 mL + syringe tip)
4. Add **1 NANOFIX TA-2**, close and shake vigorously.
5. Clean outside of the test tube and measure after **2 min**.
6. Rinse and close the tubes after use. The method can be applied also for the analysis of sea water.

To achieve more accurate results, the usage of pipettes is recommended.

## Measurement:

see VISOCOLOR® ECO test instructions for compact photometer PF-3

## Conversion table:

°d	°e	°f	mg/L CaCO <sub>3</sub>	mmol/L H <sup>+</sup>	gpg
1	1.3	1.8	18	0.36	1
2	2.5	3.6	36	0.72	2
3	3.8	5.4	54	1.08	3
4	5.0	7.1	71	1.42	4
5	6.3	8.9	89	1.78	5
6	7.5	10.7	107	2.14	6
7	8.8	12.5	125	2.50	7
8	10.0	14.3	143	2.86	8
9	11.3	16.1	161	3.22	9
10	12.5	17.8	178	3.56	10

## Sample disposal:

Used reagents and samples can be flushed down the drain with tap water.

## Storage:

Store the test kit in a cool (< 25 °C) and dry place.