

## 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 NANOFIXTA-2  
1 syringe 5 mL  
1 syringe 1 mL  
2 tips for syringe 1 mL  
1 instruction leaflet

### Hazard warning:

Information regarding safety can be found on the box' label and in the safety data sheet. You can download the SDS from [www.mn-net.com/SDS](http://www.mn-net.com/SDS).

### Procedure:

Required equipment: Test tubes 16 mm OD (REF 91680)

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 NANOFIXTA-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<sup>®</sup> ECO* test instructions for compact photometers PF-3/PF-12<sup>Plus</sup>

### 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:

Information regarding disposal can be found in the safety data sheet. You can download the SDS from [www.mn-net.com/SDS](http://www.mn-net.com/SDS).

### Storage:

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