

Alkalinity AL 7

Test kit for the determination of acid binding capacity up to pH 4.5

Contents of test kit (*refill pack):

sufficient for 200 tests with an average alkalinity of 4 mmol/L

10 mL indicator m*

100 mL titration solution TL AL 7*

1 test tube with ring mark

1 titration syringe 0–7.2 mmol/L

(1 graduation mark \triangle 0.2 mmol/L)

2 plastic dropping tips

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.

Procedure:

1. Rinse test tube several times with the test sample and fill to ring mark.
2. Add 1 drop of indicator m and mix by shaking. If test sample turns red, the alkalinity is zero. If the test sample turns blue, proceed as follows:
3. Put dropping tip on to the titration syringe, press down plunger, dip the tip into the titration solution TL AL 7 and draw up plunger slowly, until the lower rim of the black plunger O-ring is level with value 0 on the barrel scale. The small air pocket below the plunger tip doesn't disturb the determination.
4. Addition of the titration solution: We recommend taking the syringe in the left hand and the test tube in the right hand (see drawing) and adding titration solution dropwise while gently shaking the test tube. As soon as the color turns red, read off alkalinity from the syringe barrel (lower rim of the black plunger O-ring).
5. If the 1st syringe filling is not sufficient to reach color change (values > 7.2 mmol/L), fill up the syringe once more with titration solution TL AL 7 and titrate to color change as described before. Add the additional used syringe contents.

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

Disposing of the samples:

Information regarding disposal can be found in the safety data sheet. You can download the SDS from www.mn-net.com/SDS.

Note:

To differentiate the alkalinity of hydroxide, carbonate and hydrogen carbonate we recommend VISOCOLOR® HE Carbonate Hardness C 20 (REF 915003).

1 mmol/L \triangle 40 mg/L NaOH \triangle 61 mg/L HCO₃⁻

