

**Alkalinity**

56I700140-2

0.025 - 6 % NaOH

Caustic and  
Carbonate  
Alkalinity**Material**

<b>Reagents</b>	<b>Packaging Unit</b>	<b>Part Number</b>
Acidity / Alkalinity P Indicator PA1	65 mL	56L013565
Alkalinity Reagent ALK3	65 mL	56L013265
Alkalinity Reagent ALK4	65 mL	56L013365
Alkalinity Indicator Screened Methyl Orange	65 mL	56L053765

The following accessories are required.

<b>Accessories</b>	<b>Packaging Unit</b>	<b>Part Number</b>
Syringe, plastic, 20 mL	1 Pieces	56A006501
Titration jar with cap, plastic, 60 mL	1 Pieces	56A006701

**Application List**

- Disinfection Control
- Food and Beverage

**Remarks**

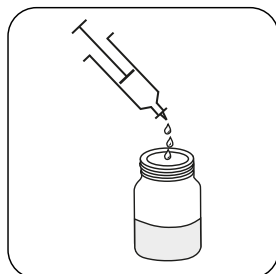
1. Colours may vary depending on sample and test conditions.

## Sampling

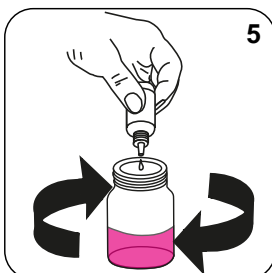
Select the sample volume from the table according to the expected measuring range and read off the factor to calculate the result.

Expected Range	Titrant used	Sample Size	Factor
250 - 750 mg/L NaOH	Alkalinity Reagent ALK4	40 mL	25
500 - 1500 mg/L NaOH	Alkalinity Reagent ALK4	20 mL	50
1000-3000 mg/L NaOH	Alkalinity Reagent ALK4	10 mL	100
2000-6000 mg/L NaOH	Alkalinity Reagent ALK4	5 mL	200
0.25-0.75 %	Alkalinity Reagent ALK3	40 mL	0.025
0.5-1.5 %	Alkalinity Reagent ALK3	20 mL	0.05
1-3 %	Alkalinity Reagent ALK3	10 mL	0.1
2-6 %	Alkalinity Reagent ALK3	5 mL	0.2

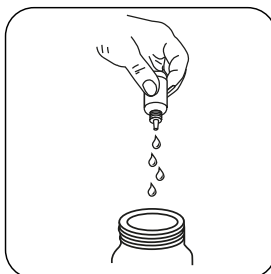
## Determination of Alkalinity Caustic and Carbonate



**Attention!** Select the appropriate sample volume according to the instructions in the chapter Sampling.

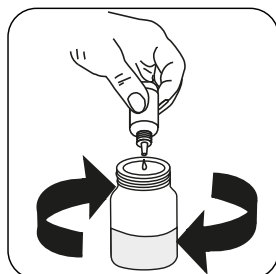


Add 5 drops of **Acidity / Alkalinity P Indicator PA1** to give a **pink** colour.

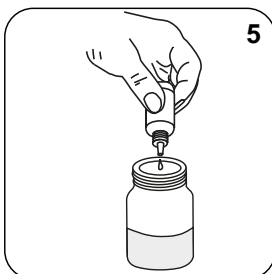


**Attention!** Record the number of drops that will be added. **(V1)**

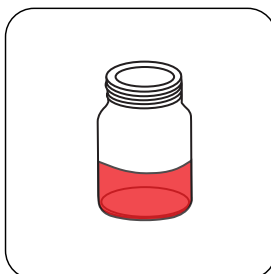
**Note:** Make sure to swirl the jar after adding each drop!



Add **Alkalinity Reagent ALK3 or Alkalinity Reagent ALK4** drop by drop to the sample until discolouration turns from **pink to colourless**.



Add 5 drops **Alkalinity Indicator Screened Methyl Orange**.



If sample turn **red**, stop here. **(V2=0)**



**Attention!** Record the number of drops that will be added. (**V2**)

**Note:** Make sure to swirl the jar after adding each drop!



Add **Alkalinity Reagent ALK3 or Alkalinity Reagent ALK4** drop by drop to the sample until colouration turns from **colourless to red**.



If sample is **colourless** to **green**, continue titration.

**Calculate test result: % w/w (Caustic) = (V2-V1) x factor (see table)**

**Calculate test result: % w/w (Carbonate) = (2V1-V2) x factor (see table) x 2.65**