Alkalinity

56I700140-2

0.025 - 6 % NaOH

Caustic and Carbonate Alkalinity

Material

Reagents	Packaging Unit	Part Number
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.

Accessories	Packaging Unit	Part Number
Syringe, plastic, 20 mL	1 pc.	56A006501
Titration jar with cap, plastic, 60 mL	1 pc.	56A006701

Application List

- Disinfection Control
- Food and Beverage

Notes

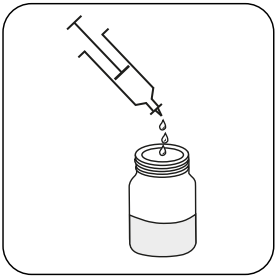
1. Colours may vary depending on sample and test conditions.

Sampling

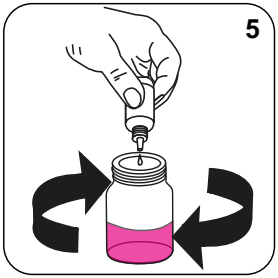
Select the sample volume from the table according to the expected measuring range and read off the factor to calculate the result.

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

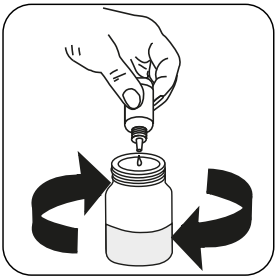


Attention! Select the appropriate sample volume according to the instructions in the chapter Sampling.

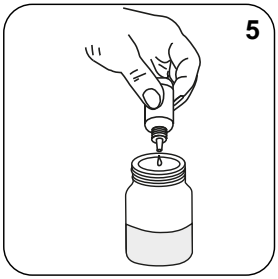


Add **5** drops of **Acidity / Alkalinity P Indicator PA1** to give a **pink** colour.

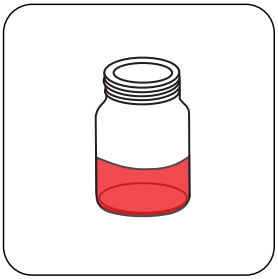
Attention! Record the number of drops that will be added. **(V1)**
Note: Make sure to swirl the jar after adding each drop!



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

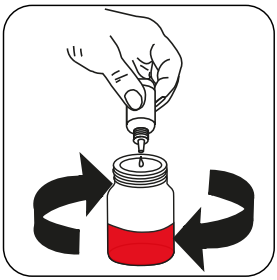


Add **5 drops Alkalinity Indicator Screened Methyl Orange**.



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