

**Alkalinity****561700140-1****0.025 - 6 % NaOH****CIP-Products**

## 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 Dechlorination reagent CL3	65 mL	56L042565

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

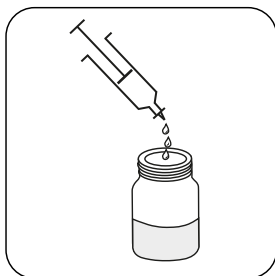
1. **Alkalinity Hi/Low CIP Products:** The test is designed to measure caustic products used in the chemical cleaning industry.
2. To express result as % (or mg/L) of a product instead of % (or mg/L) NaOH, a conversion factor is required. The factor can be determined by titration of sample with a known product concentration according to the procedure. The factor is then calculated by dividing the product concentration in % (mg/L) by the measured concentration in % (mg/L) NaOH.
3. Colours may vary depending on sample and test conditions.

## Sampling

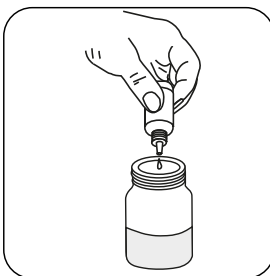
Select the sample volume from the table according to the expected measuring range and read off the factor to calculate the result.

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
Blank Table			
Product X	Alkalinity Reagent ALK3	20 mL	0.1

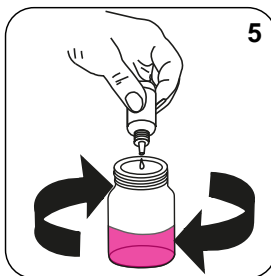
## Determination of Alkalinity Hi/Low CIP Products



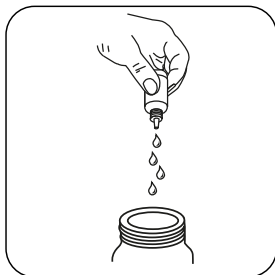
**Attention!** Select the appropriate sample volume according to the instructions in the chapter Sampling.



When using chlorinated products add 5 drops of Alkalinity Dechloration Reagent CL3 per 20 mL of sample.

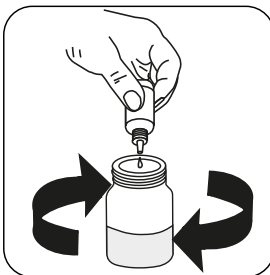


Add 5 drops of **Acidity / Alkalinity P Indicator PA1** to give a **pink** colour.



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

**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**.

**Calculate test result: Product (as NaOH) % w/v = Number of drops x factor (see table)**