Acidity 561700110

0 - 7.5 % H<sub>2</sub>SO<sub>4</sub>

## Material

Reagents	Packaging Unit	Part Number
Acidity / Alkalinity P Indicator PA1	65 mL	56L013565
Acidity HR Titrant ACD2	65 mL	56L040865

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.
- 2. The P refers to phenolphthalein the indicator originally used for titrating P Alkalinity.
- 3. The color change occurs at pH 8.3.
- 4. Less hazardous alternatives are now used.
- 5. 1 % = 10,000 mg/L
- 1Samples of less than 20ml should be diluted to approximately 20 mL with distilled/ deionised water.
- To convert the result as H<sub>2</sub>SO<sub>4</sub> to other acids, multiply the result in %w/v by the relevant factor below:

Sulphamic Acid	2.0
Hydrochloric Acid	0.8
Citric Acid	1.5
Hydrofluoric Acid	0.5
Nitric Acid	1.3
Phosphoric Acid (Acidity to pH8.3)	1
Phosphoric Acid (Acidity to pH4.5)	2

## Sampling

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

<b>Expected Range</b>	Titrant used	Sample Size	Factor
0.10-0.375 %w/v	Acidity HR Titrant ACD2	40 mL	0.0125
0.25-0.75 %w/v	Acidity HR Titrant ACD2	20 mL	0.025
0.50-1.50 %w/v	Acidity HR Titrant ACD2	10 mL <sup>1</sup>	0.05
1.00-3.00 %w/v	Acidity HR Titrant ACD2	5 mL <sup>1</sup>	0.10
2.00-7.50 %w/v	Acidity HR Titrant ACD2	2 mL <sup>1</sup>	0.25



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



Add 3 drops of Acidity/Alkalinity P Indicator PA1 per 20 mL of sample.



If sample colour turns Pink, report the Acidity as zero.



Attention! Record the number of drops that will be Titrant ACD2 to give a added.

Note: Make sure to swirl the jar after adding each

drop!



Add drops of Acidity HR pink colour.

Calculate test result: Acidity (as H<sub>2</sub>SO<sub>4</sub>) % w/v = Number of drops x factor (see table)