



Total Alkalinity

SEAL Application ML-905

▶ SCOPE AND APPLICATION

This method covers the determination of alkalinity in wastewater, surface and drinking waters.

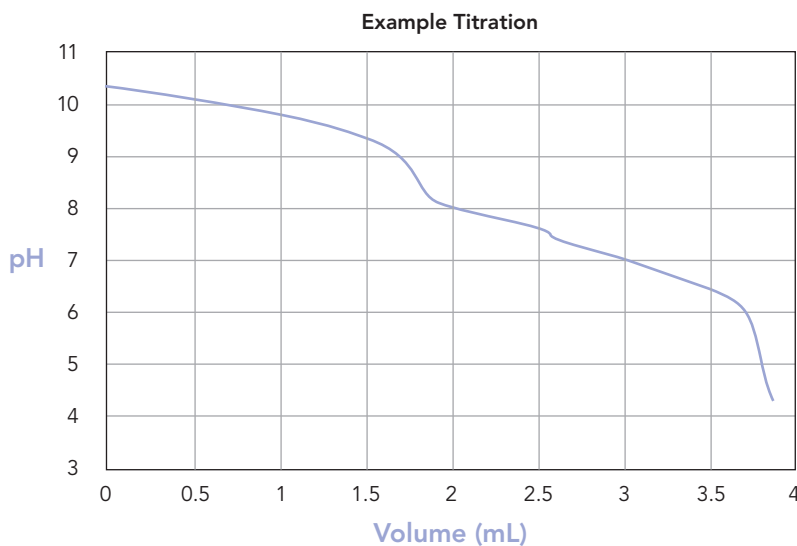
Applicable Range: 20 – 1000 mg/L as CaCO₃

This method is equivalent to Standard Method 2320 B, ASTM D 1067 and ISO 9963-2.

▶ METHOD DESCRIPTION

Hydroxyl ions present in a sample as a result of dissociation or hydrolysis of solutes react with additions of standard acid. Alkalinity determined based on the end-point pH used.

▶ METHOD PERFORMANCE



The titration solution used was 0.1 N hydrochloric acid.

Alkalinity Method Performance mg/L CaCO₃

20.7	201.7	493.7
19.3	198.9	495.6
20.0	198.6	496.5
20.5	201.5	499.1
20.5	200.6	493.7
19.3	197.2	504.6
19.2	196.3	511.7
19.4	201.0	496.9
19.3	193.0	497.3

True Value

20.0	200.0	500.0
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Average

19.7	198.8	498.8
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*Standard Deviation

0.5	2.7	5.5
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**Relative Standard Deviation

2.8%	1.4%	1.1%
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Recovery

98.8%	99.4%	99.8%
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* Standard deviation based on the entire population.

** Relative standard deviation calculated by dividing the standard deviation by the mean and multiplying by 100.