

NEXTChem Process Analyzers, Inc.

On-Line Sugar Alkalinity

Industry: Sugar

Sample Filtration is eliminated, in samples with high solids. For samples requiring dilution ≤ 2 mm particles can easily be handled. For non-dilution samples ≤ 6 mm particles pose no problem. No other system can match this rugged design.

NEXTChem Analyzers can provide accuracy only matched by the most precise laboratory equipment. Our reagent precision pumps deliver titrants with ± 0.001 mL reproducibility. Potentiometric analyses are utilized thus eliminating errors caused by electrode drift.



Analysis of Sugar Alkalinity

Sugar Alkalinity is determined by standard addition. The pH electrode is used as an OH⁻ ion selective electrode, and the standard used is sodium hydroxide.

Reactions:

pH adjustment OH⁻ $\xrightarrow{\text{pH } 12}$ OH⁻

Reagents:

2.0 N Sodium Hydroxide, 1N Sulfuric Acid (cleaning agent)

Sensor:

Glass pH Electrode 120 mm

Detection Limits / Interferences:

Dilution: 59,500 – 11 ppm
Non-Dilution: 113 – 0 ppm (lower detection limit 1 ppm)
Interferences: Other Bases

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