NEXTChem Process Analyzers, Inc.

On-Line Fluoride

Industry: Drinking Water, Metal Plating / Finishing and Chemical

Sample Filtration is eliminated, in samples with high solids. For samples requiring dilution ≤2mm particles can easily be handled. For non-dilution samples ≤6mm 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 Fluoride

Fluoride is determined using an ion selective electrode. The measurement technique used is standard addition.

Reactions:

pH adjustment $HF \xrightarrow{(pH\ 5.0)} F^- + H^+$

Reagents:

6 M Acetate Buffer @ pH 5.0, 1000 ppm Fluoride Standard

Sensor:

Fluoride Ion Selective Electrode

Detection Limits / Interferences:

Dilution: 500,000 – 10 ppm
Non-Dilution: 25 – 0 ppm (lower detection limit 0.1 ppm)
Interferences: OH^-

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