

NEXTChem Process Analyzers, Inc.

On-Line Sulfate

Industry: Wastewater and Chemical

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.

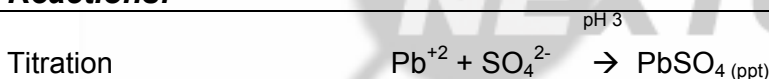
NEXTChem Analyzers can provide accuracy only matched by the most precise laboratory equipment. Our reagent precision pumps deliver titrants with ± 0.001 mL reproducibility. Potentiometric analyses are utilized thus eliminating errors caused by electrode drift.



Analysis of Sulfate

Sulfate is determined by a precipitation titration. The signal inflection analysis is used to determine the concentration of sulfate.

Reactions:



Reagents:

0.1 M lead perchlorate, methanol w/ 10% formaldehyde, 2 M nitric acid

Sensor:

Lead Ion Selective Electrode

Detection Limits / Interferences:

Dilution: 336,000 – 67 ppm
Non-Dilution: 640 – 0 ppm (lower detection limit 3 ppm)
Interferences: CO_3^{-2} , F^- , OH^- , PO_4^{-3}

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