Determination of Sulfate by Turbidimetric Method

Instructor's Notes

Time:
1 lab period

Goal:
To help students learn the theory of a spectrophotometer, and learn how to use it. In addition, students will graph their results and interpret them.

Techniques:
Spectrophotometry
Graphing

Theory Required:
Spectrophotometry

Reagents per student:
25.0ml conditioning reagent*
150ml of 1000ppm sulfate stock solution
50ml of distilled water
0.5- 10g of 20-30mesh $BaCl_2$

Equipment:
Graduated cylinder
250ml Erlenmeyer flask
Scale
Stirring rod
Spectrophotometer and cuvettes

Notes:
*The conditioning reagent is made as follows: mix 50ml glycerol with a solution containing 30ml concentrated HCl, 300ml of distilled water, 100ml of Isopropyl alcohol, and 75g of NaCl.