Safety: Wear the proper safety PPE when handling sulfuric acid

Purpose: Sulfuric Acid Identification

Procedure:

Background Information:

Because of its use in our process of manufacturing Epsom Salt, it is necessary to determine if the sulfuric acid obtained from suppliers tests positive for the presence of sulfuric acid

Scope:

An amount of sulfuric acid is added to a test vial and diluted with an amount of deionized water. A small amount of aqueous barium chloride solution is then added to the vial and the solution mixed. If a white precipitate forms this indicates a positive test for sulfuric acid in the original sample.

Equipment:

50 - 100-mL beaker
25-mL graduated cylinder
1-mL volumetric pipette
5-mL volumetric pipette
Barium Chloride 10 % (w/v) aqueous solution
De-ionized water

Procedure:

1. Approximately 25 mL of de-ionized water is added to a 50 or 100 mL beaker
2. Approximately 1mL of sulfuric acid is added to the solution, with a 1-mL volumetric pipette and mixed thoroughly.
3. Approximately 5 mL of barium chloride aqueous solution is added to the test mixture

The formation of a white precipitant is a positive test for Sulfuric Acid.

TRAINING DOCUMENTATION

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Revision Number	Revision Date	Revision Author	Revision Description
00	03/28/06	CM	New Document
01	06/29/09	SL	Procedure Revised: No Changes Procedure placed on new form