



Instructions for handling glass bottles of sulfur trioxide, stabilized

Sulfur trioxide, stabilized (Sulfan[®], sulfuric anhydride) is a powerful sulfuring agent, very strong oxidizer, and strongly acidic.

The following characteristics are common to sulfur trioxide, stabilized:

- *A fire may result if this material comes in contact with combustible materials.*
- *Liquid and vapor are corrosive to eyes, skin, mucous membranes and respiratory tract.*
- *Reacts violently with water.*
- *Fumes profusely in air.*

READ THE FOLLOWING INSTRUCTIONS BEFORE OPENING THE METAL CAN!!!

WARNING: Due to its hazardous nature, sulfur trioxide, stabilized, should be used only by technically qualified personnel in the presence of a laboratory assistant. All work should be performed in a well-ventilated chemical fume-hood. Personnel handling this material should use adequate protective clothing and equipment (e.g., face shield and rubber gloves, preferably of Viton[®]).

Any spillage on protective wear or equipment must be rinsed immediately with water. Contaminated clothing must be removed promptly.

Sulfur trioxide, stabilized, is supplied in a screw-capped glass bottle, packed in vermiculite inside a metal can. The stabilizer is present to facilitate melting, not to prevent polymerization.

THE FOLLOWING INSTRUCTIONS MUST BE FOLLOWED FOR SAFE USE OF PRODUCT!!!

1. Upon receipt, open the metal can in an efficient fume hood. Remove bottle carefully.
2. If material is not completely liquid (*it may contain low-melting solid polymer*), place bottle in a glass beaker or metal pail and warm under heat lamp or in oven at 35°C (95°F). **DO NOT OVERHEAT!!** Sulfur trioxide, stabilized, boils at 44.7°C (112.6°F). Melting may take up to one week. When the material is liquid, it is ready for use. Traces of non-melting polymer should not interfere with the performance of the liquid material.
3. Weigh samples in a stoppered flask or covered beaker to minimize fuming and absorption of atmospheric moisture.
4. **DO NOT** attempt to rinse out bottle (or any flask or beaker containing residual product) with water. Allow it to stand uncovered at the back of the hood for atmospheric decomposition to sulfuric acid.
5. For disposal of sulfur trioxide, stabilized, please contact the Technical Services Department. Be sure to mention the name, catalog number and quantity of material.

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