



Date: 11/13/12
SOP Number: 0100

Effective: 1/01/13
Review Date: 11/13/13

Developed By: University Department of Environmental Health and Safety

Standard Operating Procedures For Thionyl Chloride Waste Handling

Purpose

The purpose of this document is to establish specific standard operating procedures for the handling of Thionyl Chloride waste produced during laboratory experimentation.

Applicability

This procedure applies to all research personnel in Bassone 520.

Procedure

1. The Thionyl Chloride/Tetrahydrofuran waste mixture created during the course of the chlorination reaction shall not be placed in the hazardous waste storage area within the lab until the reaction process is complete. A vented cap will be utilized on the waste bottle to release any pressurization that develops in the waste container from the reaction.
2. The waste container will be stored in the chemical fume hood for a period of 24 hours to ensure the reaction is complete. Storage in the chemical fume hood is imperative as Thionyl chloride reacts to moisture creating Hydrogen Chloride gas.
3. Once the 24-hour period passes, the waste container will be moved to a dedicated, ventilated flammable cabinet used only to store Thionyl Chloride waste products. No other stock or waste chemical will be allowed to be stored in the cabinet.
4. The lab will fill out a chemical pickup request when the Thionyl Chloride waste products are moved to the vented flammable storage cabinet.
5. Environmental Health and Safety will pick up the Thionyl Chloride waste products upon receipt of the request and transfer the material to the University's hazardous waste storage building.