## Standard Operating Procedure

# **Irritants and Sensitizers**

## Overview

**Irritants** are chemicals that, while not corrosive, can cause a reversible inflammatory effect on living tissue at the site of skin, eye, mucous membrane and respiratory tract contact.

**Sensitizers** are chemicals which induce an allergic reaction in a substantial portion of the population after repeated exposure. *In the most severe cases this can include life-threatening anaphylaxis.*

Although the mechanism of their toxicity varies, these materials are similar in that their effects are generally short-term and reversible, and occur from skin contact or inhalation. Therefore similar precautions are taken for both these classes of chemicals.

## Special Handling and Storage Concerns

**Personal Protective Equipment**

* Traditional white lab coat.
* Nitrile or neoprene gloves are adequate for possible incidental exposures. Reduce skin exposure by tucking lab coat sleeve into glove.
* ANSI Z87.1-compliant safety glasses. Safety googles if a large splash hazard is present.

**Engineering Controls**

Exposure to skin, eye, mucous membrane and respiratory tract must be kept to an absolute minimum. Therefore, *always* use a fume hood or a glove box, or other enclosure/isolation device. Consult EH&S for an assessment of the possible alternative approaches to ventilation/isolation.

**Special Handling Considerations**

If possible, weigh chemicals at a balance that is located in a fume hood or similar locally ventilated location.

## Waste Management

Standard procedures apply.

## First Aid and Emergencies

**Personnel Exposure**

Standard procedures apply. For sensitizers, be aware that sensitization requires repeated exposures, and therefore symptoms may appear for the first time or increase in severity compared to previous exposure incidents.

## Laboratory Specific Information

**Prior Approval Required**

[ ]  **NO**

[ ]  **YES (describe):**

**Designated Area**

[ ]  **Entire Laboratory Area**

[ ]  **Other (describe):**

**Experimental Conditions of Use**

**Temperature Range:**

**Pressure Range:**

**Scale Range:**

**Other Relevant Details:**