

Principal Investigator: _____

Date Approved: _____

This document covers basic chemical safety information for oxidizing carcinogens and reproductive toxicants. The use of any oxidizing carcinogen or reproductive toxicant is subject to pre-approval by the Principal Investigator (PI) and/or Supervisor. PI and/or Supervisor may use the sheet attached to this SOP to document any lab specific training for Oxidizing Carcinogens and Reproductive Toxicants. **DO NOT USE OXIDIZING CARCINOGENS OR REPRODUCTIVE TOXICANTS UNTIL YOU HAVE OBTAINED THE NECESSARY PRE-APPROVAL.**

Oxidizing Carcinogens & Reproductive Toxicants

Oxidizing carcinogens are materials that can contribute to combustion by acting as an oxygen source, may spontaneously give off oxygen at room temperature or with slight heating, or are capable of forming explosive mixtures when mixed with combustible, organic or easily oxidized materials, and which have the potential to cause cancer as the result of prolonged or repeated exposures.

Oxidizing reproductive toxicants are materials that can contribute to combustion by acting as an oxygen source, may spontaneously give off oxygen at room temperature or with slight heating, or are capable of forming explosive mixtures when mixed with combustible, organic or easily oxidized materials, and which have the potential to interfere with fertility, fetal development, and/or lactation as the result of prolonged or repeated exposures.

Oxidizing mutagens are materials that can contribute to combustion by acting as an oxygen source, may spontaneously give off oxygen at room temperature or with slight heating, or are capable of forming explosive mixtures when mixed with combustible, organic or easily oxidized materials, and which can cause genetic mutations as the result of exposures. Such mutations can often lead to cancer or reproductive toxicity.

Personal Protective Equipment & Personnel Monitoring		
 Lab Coat	 Gloves	 Eye Protection
Flame resistant lab coat.	Neoprene or butyl rubber gloves typically provide adequate protection against minor splashes.	ANSI Z87.1-compliant safety glasses or safety goggles if a splash hazard is present.

Labeling & Storage

Store in secondary containment away from organics, flammables, reducing agents and any other materials that may be chemically incompatible. **DO NOT** store oxidizers in untreated wooden cabinets. Primary containers should be labeled according to the UNC Charlotte Chemical Hygiene Plan. The secondary container's label must contain the chemical name and corresponding hazards. Containers of these materials must be stored in leak-proof secondary

containment within a Designated Area. Also, if not plainly visible (e.g. through a cabinet window), labeling must be applied to storage locations where these are stored to avoid an inadvertent encounter.

Engineering Controls, Equipment & Materials

Fume Hood

It is advisable to use a fume hood when working with materials which are carcinogenic or reproductive toxicants. If your protocol does not permit the handling of such materials in a fume hood, contact EHS to determine whether additional respiratory protection is warranted.

Housekeeping

Spills

Notify others in the area of the spill, including your supervisor. Evacuate the location where the spill occurred. Call 911 from any campus phone (or 704-687-2200 from a cell phone). Report any exposure to EHS at 704-687-1111. Remain on-site (at a safe distance) to provide detailed information to first responders.

Decontamination

Decontamination methods will vary based on the materials handled and equipment being used. Please review the chemical Safety Data Sheet for guidance on cleaning materials.

Waste

Refer to the UNC Charlotte Chemical Hygiene Plan for details. Please note that some carcinogens may be considered 'acutely hazardous' when disposed as waste.

First Aid & Emergencies

Skin or Eye Contact

Remove contaminated clothing and accessories; flush affected area with water. If symptoms persist, get medical attention.

Inhalation

Move person into fresh air. If symptoms persist, get medical attention

Ingestion

Rinse mouth with water. If symptoms persist, get medical attention.

