

Principal Investigator: _____

Date Approved: _____

This document covers basic chemical safety information for carcinogens and reproductive toxicants and supplements the laboratory Chemical Hygiene Plan as appropriate. Additional lab-specific safety operating procedures for the use of any carcinogen or reproductive toxicant are subject to pre-approval by the Principal Investigator (PI) and/or or the designated Laboratory Responsible Safety Person. DO NOT USE CARCINOGENS OR REPRODUCTIVE TOXICANTS UNTIL YOU HAVE OBTAINED THE NECESSARY PRE-APPROVAL.

Carcinogens and Reproductive Toxicants

Carcinogens are materials that have the potential to cause cancer.

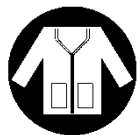
Reproductive toxicants are materials that have the potential to interfere with fertility, fetal development, and/or lactation.

Mutagens are materials which can cause genetic mutations. Such mutations can often lead to cancer or reproductive toxicity.

Please note that the use of Listed Carcinogens, halogenated liquids, ethidium bromide, and formaldehyde is not covered by this general SOP.



Personal Protective Equipment & Personnel Monitoring



Lab Coat

Traditional lab coat or flame-resistant lab coat when working with flammable materials.



Gloves

Nitrile or neoprene gloves typically provide adequate protection against minor splashes. Consult with your PI or supervisor to determine whether any materials involved in your process require alternative hand protection.



Eye Protection

ANSI Z87.1-compliant safety glasses or safety goggles if a splash hazard is present.

Labeling & Storage

Store away or be able to clearly differentiate from other materials that are not particularly hazardous, or which may be chemically incompatible. Each container's label must include an appropriate pictogram and identify the material as a reproductive toxicant, carcinogen, or mutagen. Containers of these materials must be stored in leak-proof secondary containment within a Designated Area. The secondary container's label must include an appropriate pictogram and identify the material as a reproductive toxicant, carcinogen, or mutagen. 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 these materials. If your protocol does not permit the handling of such materials in a fume hood, contact the

Department of Environmental Health, Safety and Sustainability (EHSS) to determine whether additional respiratory protection is warranted.

Housekeeping

Spills

Notify others in the area of the spill, including your PI/Responsible Safety Person. If it is a small spill that you can easily handle, use the contents of your lab spill kit to clean it up. If it is a large spill, then evacuate the area where the spill occurred. Call Vanderbilt University Public Safety (VUPS) at 615-421-1911 or use the VandySafe app on your smart phone. Report any exposure through Risk and Insurance Management's Origami portal and mark that it occurred in research when prompted. Both VUPS and the Origami system will notify EHSS of the incident. 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. Dispose of contaminated absorbent materials, such as paper towels, as solid hazardous waste.

Waste

Refer to the laboratory *Chemical Hygiene Plan* (Section 6.7) for information on proper chemical waste disposal procedures. Please note that some reproductive toxicant, carcinogen, and mutagens waste may be considered '**extremely hazardous**'.

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.

