

GENERAL WRITTEN SOP -- Chemicals of Moderate Chronic or High Acute Toxicity

The OSHA Laboratory Standard explicitly requires "standard operating procedures relevant to safety and health considerations to be followed when laboratory work involves the use of hazardous chemicals." If the general SOP in this section do not fulfill this requirement, you must amend and append in some manner so as to comply.

Special Precautions for Working with Chemicals of Moderate Chronic or High Acute Toxicity: See Appendix D of this manual for definition and discussion of the meanings of chronic and acute toxicity. Examples of chemicals of moderate chronic toxicity or high acute toxicity include diisopropylfluorophosphate, hydrofluoric acid, and hydrogen cyanide.

1. Consult one of the standard compilations that list toxic properties of known substances and learn what is known about the substance that will be used. Follow the specific precautions and procedures for the chemical.
 2. Use and store these substances only in designated (restricted access) areas placarded with appropriate warning signs.
 3. Use a hood or other containment device for procedures which may result in the generation of aerosols or vapors; trap released vapors to prevent their discharge with fume hood exhaust.
 4. Avoid skin contact by use of gloves and long sleeves and other protective apparel as appropriate.
 5. Maintain records of the amounts of materials on hand, amounts used, and the names of the workers involved.
 6. Be prepared for accidents and spills. At least two people should be present at all times in the laboratory if compounds in use are highly toxic or of unknown toxicity.
 7. Store breakable containers in chemically resistant trays; also work and mount apparatus above such trays or cover work and storage surfaces with removable, absorbent, plastic backed paper.
 8. If a major spill occurs outside the chemical fume hood, evacuate the area and call for assistance (See cover page).
 9. Thoroughly decontaminate or properly dispose of contaminated clothing or shoes (contact the Laboratory Safety Manager 953-1067 and EHS 953-4816). If possible, chemically decontaminate by chemical conversion to a less toxic product.
- Store contaminated waste in closed, suitably labeled, impervious containers.