



ECKERD COLLEGE

Safe Operating Procedure

(12/03)

GENERAL GUIDANCE FOR CHEMICAL STORAGE

Due to the diverse individual properties of chemicals that may be located in a chemical use area, proper storage may be complicated. General considerations for chemical storage are provided below. Specific instructions on chemical storage may be obtained from the MSDS, container label, Natural Sciences SOPs that are specific to the class of chemical or by contacting Fawn Crotty (x8447).

- Ensure that all containers are in good condition, properly capped, and labeled. Refer to the NAS SOP, **Chemical Container Labeling**, for specific labeling requirements.
- Store temperature sensitive chemicals in freezers or refrigerators that are set at the appropriate storage temperature, as determined by the chemical manufacturer. The freezer or refrigerator should be labeled to indicate “Not for storage of food for human consumption.” In addition, the refrigerator or freezer must be specifically designed for the storage of flammable materials if the chemical(s) stored within possess this property.
- Observe other special storage considerations, such as protecting water reactive materials by following NAS SOP **Water Reactive Chemicals** for storage instructions. Protect pyrophoric or other air-sensitive materials from contact with air. Store flammable liquids that do not require refrigeration in manufactured flammable liquids cabinets and away from ignition sources. See the NAS SOP, **Storage and Use of Flammable Chemicals**, for specific storage information pertaining to flammable materials.
- Segregate and store chemicals according to hazard class. For example, provide physical segregation between acids and bases, as well as oxidizers and flammables.
- Ensure that storage areas are dry, adequately ventilated, and away from heat and direct sunlight.
- Avoid storing chemicals above eye level. Select low shelves or cabinets for heavy containers. Never store chemicals or any other item closer than 18” to the ceiling.

- Do not store chemicals on the floor. Chemical containers could present a tripping hazard or could be knocked over causing a spill.
- Storage shelves are safer when equipped with doors or lips to prevent containers from accidentally falling from the unit.
- Ventilated cabinets or fume hoods may be necessary for the storage of malodorous, lachrymators, or other chemicals with similar properties. Venting of flammable liquids cabinets is not generally recommended. If the cabinet must be vented, specific venting requirements may apply. Contact Facilities Maintenance for advice.
- Secure gas cylinders away from heat sources.
- Routinely inspect chemical storage areas and cabinets for hazardous situations (i.e., leaked or spilled chemicals, misplaced chemicals that could create a hazard from an incompatibility, integrity of the containers and secondary containment devices, faded labels, etc.).