

BUFFALO STATE COLLEGE

DIRECTORY OF POLICY STATEMENTS

Policy Number: IX:07:00

Date: June 1980

SUBJECT: **Handling and Storage of Flammable and Combustibles Liquid**

This policy provides for the storage and handling of liquids that are, by definition, FLAMMABLE or COMBUSTIBLE. Ignition may occur directly at the exposed surface of the liquid; vapors immediately above the liquid; as flash back of vapors escaping from a contained liquid or ignition may be spontaneous as a result of deliberate or accidental heating to critical temperatures. FLAMMABLE and COMBUSTIBLE liquids present a serious fire and explosion hazard as they are easily ignited, burn with great rapidity and are difficult to extinguish. Vapors from these liquids are usually heavier than air and tend to “creep”, undetected, at floor or bench level from one area to another.

The intent of this policy is to provide guidelines to protect persons and property from fire or explosion or the chemical by-products of fire which may be toxic or corrosive.

The terms used and definitive descriptions are set forth in Appendix I, “Nomenclature and Definition of Terms.” A laboratory guide for examples of solvents of various classes and container capacities is set forth in Appendix II.

Laboratory Areas:

1. FLAMMABLE and COMBUSTIBLE liquids, in laboratories, shall be stored in approved containers and quantities as outlined in Appendix II.
2. When extraordinary chemical purity must be maintained, storage in “safe” glass or plastic containers is permissible in quantities of **one** gallon or less. (“Safe” containers currently are polyvinyl covered glass or glass enclosed in metal.)
3. When transporting approved glass containers of flammable liquids through hallways, stairways and elevators, use a non-breakable container large enough to retain the contents of the reagent container in case breakage occurs.
4. Clearly identify all flammable liquid containers as to content. Do not use trade names.
5. The amount of Class I and Class II liquid **combined**, which may be stored in a laboratory outside a storage cabinet or storage room and **not in safety cans** shall not exceed 10 gallons. Refer to Appendix II for maximum-sized containers for specific liquids.
6. Not more than 25 gallons of Class I and Class II liquids combined shall be stored in safety cans outside a storage room or storage cabinet. Refer to Appendix II for container capacity.

7. Not more than 60 gallons of COMBUSTIBLE liquids only shall be stored outside of a storage room or storage cabinet. Quantities shall not exceed 5 gallons per container.
8. Questions of FLAMMABLE and COMBUSTIBLE liquids in excess of those mentioned above shall be stored in storage room or storage cabinets approved by the Department of Environmental Health and Safety.
9. Adequate gravity or mechanical ventilation must be provided for storage cabinets and storage rooms.
10. Use FLAMMABLE liquids in a laboratory exhaust hood or in a well ventilated area.
11. FLAMMABLE liquids should never be heated over an open flame, hot plate or uninsulated resistance heaters. Use a heating mantle, steam bath or hot water bath.

Storage and Dispensing Areas:

Drums used as a dispensing vessel shall be connected to an approved electrical ground.

The FLAMMABLE liquid dispensing and receiving containers must be bonded together before pouring to prevent the accumulation of static electrical charges.

General:

Laboratory supervisors shall be informed of this policy and shall issue instructions to all laboratory personnel using FLAMMABLE and COMBUSTIBLE liquids.

Hazardous areas shall be properly identified and “No Smoking” or “No Open Flame” signs posted.

Adequate fire extinguishers shall be provided and laboratory personnel instructed as to operation and use of the various types of extinguishers.

If it is necessary to store FLAMMABLE liquids in a refrigerator, the unit shall be of explosion-proof type.

Source of Information: Department of Public Safety, June 18, 1980

See: <http://police.buffalostate.edu/hazardous-materials-procedures>

General Information

If you witness a hazardous material spill, evacuate the spill site and warn others to stay away. Call University Police at 878-6333 if you believe the spill may be life threatening. If you can determine that the spill is not life threatening, follow the procedures outlined below.

If you are a hazardous material user, you should be trained by your supervisor on proper use and storage of hazardous materials. This training should include hazard information, proper procedures for preventing spills, and emergency procedures when a spill happens.

If You Spill A Hazardous Material or Materials:

- Leave the area of the spill first and proceed to a safe location nearby. Then assess if you have the proper training and protective gear to clean up the spill.
- If you are able to clean up the spill, follow proper cleanup procedures and use proper personal protection. Manage the generated waste as appropriate. Consult your supervisor if necessary.
- Isolate the spill area to keep everyone away, and post signs as necessary.
- If you require assistance to clean up the spill:
- Call University Police at 878-6333. University Police will call Environmental Health & Safety (EH&S).
- If you suspect or witness a release of a hazardous material to the environment (air, water, ground) call University Police at 878-6333.