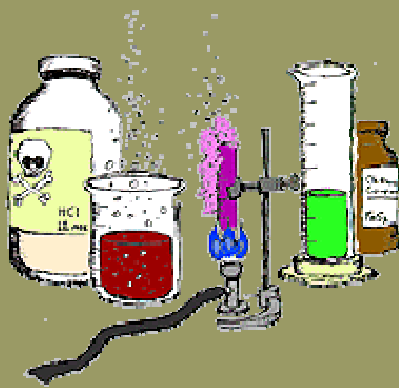


Waste Management & Disposal – Chemical



EH&S Fact Sheet
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ENVIRONMENTAL
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Chemicals are classified as hazardous waste when they are no longer needed or wanted by the user. They have the potential to be harmful to human health or the environment if they are not managed or disposed of properly.

Chemical waste is normally segregated into the following waste streams:

1. Flammable/combustible solvents e.g. acetone, xylene, methanol;
2. Halogenated solvents e.g. chloroform, methylene chloride;
3. Nitrogenous hydrocarbon e.g. trimethylamine, diisopropylamine;
4. Sulfurous hydrocarbon e.g. dimethylsulfoxide, dimethylsulfate;
5. Corrosives. A separate stream must be started for each of the following:
 - a. Mineral acids e.g. hydrochloric acid, sulfuric acid
 - b. Organic acids e.g. trichloroacetic acid, formic acid
 - c. Bases e.g. calcium oxide, sodium hydroxide
6. Aqueous solutions e.g. metal salts, ethidium bromide; and Oils e.g. vacuum pump oil, motor oil.

Do not mix dissimilar chemical wastes or waste streams.

Selecting the Appropriate Container

Waste is to be collected in a container that does not leak and is compatible with the waste. The following may be used to select the appropriate container:

Flammable Liquids

Glass bottles, steel cans, high density plastic containers (EH&S will provide a safety can for the recycling of flammable and halogenated solvents.)

Concentrated Acids and Bases

2.5 Liter corrosive glass bottle (Note: one gallon glass bottles are not acceptable for acids and bases since the high specific gravity of the material and the thinness of the one gallon container increases the likelihood of breakage.) Never mix acids and bases in the same container.

Aqueous Solutions

Glass bottles, plastic bottles, plastic cans

Broken Mercury Thermometers

No Free Flowing Hg: Double-bagged. Free Flowing Hg: Contained in a sealed glass or plastic bottle.

Management and Disposal

The lid should be a screw-on cap and compatible with the waste; corks, stoppers, and parafilm are not acceptable. "Headspace" should be no less than 1.5 inch from the top of the container to the top of the waste material. Liquid containers should not be filled to more than 80% capacity.

Keep containers capped and stored in a safe location. The use of secondary containment is recommended to prevent spillage and ensure a secured storage until disposal.

Collection containers must be submitted for disposal within 90 days of the label start date regardless of whether or not they have been filled to capacity. Complete the hazardous waste label and chemical waste disposal form before container is picked up for disposal. Waste labels are available at the EH&S office; the chemical waste disposal form at: <http://capsnet.usc.edu/EHS/documents/chemwastedispform.pdf>

Go to <http://capsnet.usc.edu/EHS/HazWastePickUpForm.cfm> to request a hazmat pickup.

If you have any questions you can contact Chemical Safety at (323) 442-2200

EH&S Fact Sheets are intended for facilitating team discussions in your department. Post the monthly topic on your departmental bulletin board.