

## Management of Empty Chemical Containers

Chemical users at Marshall University are responsible for their proper use, storage, and disposal. The proper disposal of empty chemical containers is more important for hazardous chemicals, but these guidelines are useful for non-hazardous chemicals also.

Ensure that the container is completely empty. Containers that are not empty of all contents will not be discarded. There can be no more than 1 inch of material left in the container, nor more than 3% by weight of the container's capacity.

Empty containers that contained hazardous chemicals on the [EPA's "P" and "U" lists](#) must be triple rinsed. The rinsate must be collected and used, or handled as hazardous waste. If the rinsate cannot be used, small volumes of rinse water (or other appropriate rinsing agent) are recommended. Alternatively, empty containers that contained hazardous chemicals can be disposed as hazardous waste.

**CAUTION:** Containers of water reactive chemicals cannot be rinsed with water. Request the container be picked up by emailing a completed [Unwanted Chemical Pickup Request](#) to Safety and Health at [safety@marshall.edu](mailto:safety@marshall.edu). The form is available on the Safety and Health web site: <http://www.marshall.edu/safety/chemical>.

When the residue in a container of a hazardous chemical cannot be removed by triple rinsing, the entire container must be disposed of as a hazardous waste. Request the container be picked up through Safety and Health as above.

Empty containers that contained solvents or other volatile liquids are to be placed into an operating fume hood overnight without the cap to allow the vapors to disperse. **Note: It is not permissible to empty the contents of any container of volatile liquids by evaporation.**

Empty compressed gas cylinders should be returned to the vendor. If the vendor will not accept the cylinder, contact Safety and Health at 696-3461, or email [safety@marshall.edu](mailto:safety@marshall.edu).

Prior to disposing empty chemical containers, the label must be fully defaced either by removal (preferred), or by placing an "X" across the label.

Remove the lids on containers before disposing them.

Empty, decontaminated plastic and metal containers can be discarded directly into the general trash. Glass containers to be disposed must be collected and handled in a manner that prevents cuts to users and housekeeping personnel.

Place all empty, decontaminated glass into a rigid container (cardboard box) lined with a leak-resistant liner. It is recommended to use small boxes to prevent lifting hazards due to heavy boxes. When packed in this manner, glass may be disposed of with the regular trash.

All glass disposal containers must be clearly marked as "BROKEN GLASS," and must be taped shut before disposal.

Broken glass that cannot be decontaminated must be collected as hazardous waste. Follow the hazardous waste labeling guidelines provided below.

Housekeeping personnel will not collect trash bags that have containers which are not properly emptied or decontaminated. The bag will be left in the location until properly emptied or decontaminated.

If properly packaged broken glass containers are too heavy or bulky, Custodial Services personnel should ensure that two persons are used to transport the container to the dumpster.

Empty containers can be used to collect chemical wastes generated at the University, but no empty containers can be taken home by researchers, students or staff. Containers used to collect hazardous wastes must be labeled with:

- The words "Chemical Waste"
- Generator's name
- Date collection began
- Building and Room number
- Contents of container (approximately percentage of hazardous substances for mixtures)

A [Chemical Waste label template](#) is available on the Safety and Health web site.

Common Glass Disposal Containers:

1. Table Model 8" x 8" x 10", with cover. Fisher Catalogue No. 12-009-7B
2. Floor Model 12" x 12" x 27", with cover. Fisher Catalogue No. 12-009-7A

These items are available for purchase through Fisher Scientific. They can be used for the collection and disposal of biohazard glass also (provided a biohazard bag is used to line them).

Biohazard contaminated glass must be disposed of in accordance with the University's [Infectious Medical Waste Management Plan](#). Contact Safety and Health with questions.