

Recommended Chemical Spill Control Materials

Spill kits should be readily accessible and all personnel working in the lab should know their location. Spill kits should also be checked regularly to make sure they are fully stocked and adequate for the work being done. You can find more information on the UW-Madison Environment, Health & Safety (EH&S) [Spill Information](#) webpage.

The general requirement is to protect yourself and others, while you absorb / neutralize the spilled material and then clean up the spill.

Personal Protective Equipment (PPE)

PPE appropriate for all chemicals used must be readily available, though not necessarily stored with a dedicated spill kit. At a minimum, the following PPE should be available for all chemical users:

- Compatible disposable gloves
- Appropriate lab coats
- Safety glasses and face shield and/or splash-resistant goggles

Note: Dust masks (for non-hazardous) and respirators (for hazardous compounds) may not necessarily provide proper protection from the specific materials you are working with. For more information on respirators, see UW-Madison EH&S, Environmental and Occupational Health (EOH) Occupational Medicine [Respirator Fit Testing Program](#).

Absorption Materials

Your laboratory or work area should have access to a sufficient quantity of absorbents or other types of materials to control any chemical spill that could potentially occur. Some examples are listed below.

- Absorbent pads
- Absorbent pillows
- Absorbent socks
- Granule absorbent such as Floor-dry, Oil-dry, or vermiculite
- Powder spill absorbent

Note: Absorbent materials generally fall into three categories: aqueous, for water or water-based solutions; oil, for oil or organic solvents; universal, for aqueous and organic liquids. Choose based on the materials present in the lab.

Neutralizing Materials

These are necessary if corrosives are present.

- Neutralizing agents for acids such as sodium bicarbonate or sodium carbonate
- Neutralizing agents for alkali (base) spills such as sodium bisulfate or citric acid

Specialized Materials:

- Hydrofluoric Acid (HF): Many bulk absorbents and spill pads are not compatible with hydrofluoric acid. See also UW-Madison Chemical Safety info sheet - [Safe Handling of Hydrogen Fluoride and Hydrofluoric Acid](#).
- Mercury: Specialized absorbents are needed if working with metallic mercury, Contact UW-Madison Chemical Safety for use of special mercury vacuum or assistance with handling the spill.

Clean-up Tools

- Broom or brush with polypropylene bristles
- Dustpan/scoop (preferably polypropylene)
- Disposable trash bags
- Tape to seal bags
- pH paper
- Polypropylene pails (e.g., 5-gallon)
- Stickers or labels (e.g., identify the material as Spill Debris involving XYZ Chemical, etc.)
- Warning signs – barricade tape, floor sign, &/or door sign - **DANGER Chemical Spill - Keep Away** (EHS also provides a variety of [downloadable signs](#) to help your unit communicate safety concerns).

Note: Polyethylene bags may be used for small spills. Five-gallon buckets or 20-gallon drums with polyethylene liners may be appropriate for larger quantities of saturated absorbent materials.

The above includes items that are generally recommended for chemical spill planning and preparation and should be modified according to lab-specific materials and work practices. Pre-packaged kits, along with spill cleanup materials are also available for purchase from many lab supply companies, such as through **ShopUW+** Essentials (<https://shopuwplus.wisc.edu/>).

For assistance in preparing for a spill or cleanup after a spill occurred, please contact the UW-Madison Office of Chemical Safety, 608-265-5700, email - ChemSafety@fpm.wisc.edu, or website - <https://ehs.wisc.edu/labs-research/chemical-safety/>.