

Chemical Spill Kit Selection Guide & Resources

Every laboratory that uses chemicals must have access to a spill kit. The keys to an effective spill kit are location and content. Spill kits should be strategically located around work areas in fixed locations so they are easily accessible. Although most spill kit contents are common items that may be found throughout the lab, they must be consolidated into a kit for quick access in the event of an emergency.

Spill kits can be purchased through most supply vendors that sell chemicals or safety supplies. The following is a list of recommended items to be contained in a chemical spill kit; however, it is important that spill kits be tailored to meet the specific spill control needs of each laboratory. Spill kits must be checked periodically and restocked after each use.

Each spill kit should have at least enough material to handle a 1-liter spill of liquid or 1 kg of dry chemical. Labs with floor drains should stock spill socks, pillows, pads or enough bulk absorbent to contain the spilled material away from the drain.

Safety Data Sheets (SDS) procedures for the spilled chemical take precedence over these procedures in the event they differ.

For a list of recommended items, spill kit recommendations, or any questions about appropriate spill kit contents, please contact the Chemical Hygiene Officer.

If there are any general questions or concerns, please contact the OEHS department at OEHS@uah.edu

Personal Protective Equipment (PPE) (should be in a sealed container):

- goggles and face shield
- heavy neoprene or nitrile gloves
- disposable lab coat and corrosives apron
- plastic vinyl booties
- masks (when applicable)

Absorbents:

- spill socks, pillows, or pads in sufficient quantity to contain a spill and keep it away from any floor drains.
- universal spill absorbent
- acid spill neutralizer - sodium bicarbonate, sodium carbonate, or calcium carbonate, or a commercially available acid spill kit.
- alkali (base) spill neutralizer - sodium bisulfate or a commercially available caustic spill kit.
- solvents/organic liquid absorbent - inert absorbents such as vermiculite, clay, sand, or a commercially available solvent spill kit.
- Hydrofluoric acid treatment– Labs that use/store HF must abide by the guidelines in the HF use guidelines on the OEHS website.

Clean-Up Material:

- broom, plastic dust pan, and scoop
- plastic bags for contaminated PPE
- one plastic bucket (5-gallon polyethylene) with lid for spill and absorbent residues
- hazmat bags (chemical, biological, and/or radiological (as appropriate))

Other:

- Hydrofluoric acid antidote gel - calcium gluconate (if hydrofluoric acid is used in the lab)

- mercury spill kit
- alkali metals - dry sand or a Class "D" fire extinguisher
- acid chlorides
- pH paper
- tongs