

UE Department of Chemistry Emergency Action Plan

Spill Response

Introduction

The following procedure refers to the cleanup of general laboratory spills in non life-threatening situations. Any spills involving serious injury, fire, or large quantities of hazardous materials (greater than 4L) require the assistance of Campus Police - evacuate the area and call 911.

It is assumed that all persons working with chemicals (professors, lab instructors, stockroom attendant, laboratory assistants and research students) have read the SDSs (located in KC 333, or in the respective research labs) prior to each lab and are familiar with the hazardous properties of the chemicals being used. This information is vital when responding to a spill. If necessary, refer to the SDS before cleaning up the spill. Do not hesitate to call the stockroom attendant or any member of the safety committee (Dr. Tod 2415, Dr. Slade 2056, or Dr. Batema 2795) for assistance.

Emergency Spill Response

Equipment

- Personal Protection Equipment (PPE) as needed.
- A spill kit for non-Mercury spills containing:
 - safety goggles,
 - nitrile gloves,
 - an absorbent, such as kitty litter, for use with all chemicals (except ???),
 - non-sparking scoop for collecting spill,
 - plastic bag for collection of waste,
 - HazMat label for identifying contents of waste bag.
- Mercury Spill Kit:
 - A commercial spill response kit for cleanup of mercury spills, OR
 - A department prepared mercury spill kit containing,
 - flowers of sulfur powder in shaker container,
 - plastic dust pan and brush,
 - plastic Tupperware container for collection of waste.

Location of Equipment:

- Mercury spill kits are located in the stockroom, KC 333
- Non-mercury spill kits are located in the following teaching and research labs: KC 335, KC 337, KC 338, KC 340, KC 341, KC 301, KC 303

Response Procedure:

- Assist contaminated persons - see Emergency Action Plan, Personal Injury.
- Evacuate the area and assess the situation.
- For flammable materials, remove all sources of ignition.
- Obtain appropriate spill response equipment.
- Put on appropriate personal protection equipment.
- Clean up as follows:
 - Liquid Spills - Dike and cover the spill with the kitty litter. - After ALL liquid is absorbed, place litter in plastic waste bag and seal. -Wipe down spill area using water and paper towels - dry with paper towels. If this is a hazardous material, then fill out HazMat label, place on waste bag, place bag in the storage room for hazardous waste pick-up, KC 184.
 - Chemical Splash in your face, goggles ON – If goggles have protected your eyes, do not take your goggles off. Call for help and go to the eye wash station and rinse your face quickly and thoroughly with your goggles on. Then remove your goggles and rinse your face thoroughly again.
 - Chemical Splash in your face, goggles OFF – If this sort of accident happens, you may not be able to see well enough to go to the eyewash station on your own. Call for assistance and follow the instructions of the person giving aid.
 - Solid Spills - Using paper towels or dust broom, push solid into plastic scoop. DO NOT RAISE DUST. - Deposit in plastic waste bag and seal. - Fill out HazMat label, place on waste bag, place bag in the room with the spill kit. - Wipe down spill area using water and paper towels - dry with paper towels.
 - Broken Glass – Do not pick up broken glass with your fingers. Get a broom and dust pan and sweep up the broken glass and dump into the specially marked broken glass container.
 - Mercury Spills - Clean up with Mercury Spill Kit **ONLY** - Sprinkle entire spill area lightly with flowers of sulfur. - Using brush from Mercury Spill Kit, push spilled material (and broken glass in the case of a broken thermometer) into the Mercury Spill Kit dust pan. - Dump dustpan contents into the Mercury Waste container.

Reporting

After clean up of spill, determine the cause of the spill and identify measures to prevent future spills. If warranted, complete a Spill Response Form. The completed form should be emailed to Jan Schrader (js652@evansville.edu), the manager of Environmental Management with a copy filed with the chairman (tt92@evansville.edu) of the UE Chemistry Safety Committee. Review the section describing how the spill occurred and ask the persons involved to identify ways in which such spills can be prevented in the future. Use this opportunity to review safety procedures with students, lab assistants, and faculty.