STANDARD OPERATING PROCEDURE

Spill Kit

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2030 SRTC, 5-4403

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Familiarize yourself with the location of the spill kits in each room. They are located next to or across from the fume hoods.

The spill kits are intended for use with small spills (<4 L); for larger spills, call 911.

Minimum Personal Protective Equipment Required: Skin and body protection (long pants, lab coat, closed toed shoes, appropriate gloves)

Risks: Chemical hazards and toxic substances pose a wide range of health hazards (such as irritation, sensitization, and carcinogenicity) and physical hazards (such as flammability, corrosion, and explosibility).

Special Handling:

- ✓ Viton-butyl gloves are in the spill kit. These gloves provide protection for both hydrocarbons and acids.

Protocol/Procedure:

1. In the case of a spill, alert nearby coworkers of the spill.
2. Prevent the spread of the spill using the all-purpose absorbent pads located under the spill kits. Place the pads around the edges of the spill to contain it.
3. Select the appropriate neutralization or adsorption agent from the kit
    a. Acids
        i. For a 2.5 L spill, you will need approximately 1-2 bottles of acid neutralizer
    b. Caustics/Bases
        i. For a 2.5 L spill, you will need approximately 2 bottles of caustic neutralizer
    c. Solvent
        i. For a 4 L spill, you will need approximately 2 bottles of Volatile Adsorbent Powder
    d. Additional bottles of each of these is located on the shelf above the sink in the liquid nitrogen room
4. Apply the neutralizing or absorbent powder to the spill.
5. Apply additional absorbent pads as needed.
6. Collect and contain the cleanup residues.

   a. The pads can be placed in the spill kit bucket or in the disposal bags
   b. The plastic scoops and scrappers in the kit can be used to transfer absorbed powder

7. For solvent spills, apply a waste label to the material and dispose of as hazardous waste
8. Spills of most liquid acids or bases, once neutralized, can be mopped up and rinsed down the drain.
   a. Use pH paper to determine when acid or base spills have been neutralized.
9. Decontaminate the area and any affected equipment. A large sponge is contained in the spill kit for aid in clean-up
10. For most spills, conventional cleaning products, applied with a mop or sponge, will provide adequate decontamination.
11. Report the incident to lab manager