






**S**pill clean-up procedures for common (and specific) hazardous materials, bio agents, and radioisotopes are provided below. **Wear appropriate personal protective equipment before attempting any clean up.** Refer to the [Hazardous Waste Disposal Fact Sheet](#) to select the appropriate waste container and for general information.

Symbol	Hazardous Material	Clean Up Procedure	PPE
	<b>Flammable/Combustible Liquids</b> (e.g., diethyl ether, acetone, tetrahydrofuran, ethanol, petroleum ether, and pentane)	<ol style="list-style-type: none"> <li>1. Remove ignition sources.</li> <li>2. Absorb spill with vermiculite, kitty litter, or commercial absorbent (pillows, berms, etc.).</li> <li>3. Collect absorbent with plastic brush and dust pan and deposit in a Ziploc bag or plastic container with lid.</li> <li>4. Complete and apply a waste label to bag or container.</li> </ol>	<ul style="list-style-type: none"> <li>• Splash goggles</li> <li>• Butyl or neoprene gloves</li> <li>• Flame resistant lab coat or apron</li> <li>• Closed-toe shoes</li> </ul>
	<b>Alkali Metals/Alkali Hydrides</b> (e.g., sodium metal, sodium hydride, potassium metal, and potassium hydride)	<ol style="list-style-type: none"> <li>1. Remove ignition sources.</li> <li>2. Quench spill with dry chemical extinguishing medium (e.g., dry sand, Class D fire extinguisher) regardless whether it is aflame or not.</li> <li>3. Sweep up treated spill with plastic brush and dust pan and deposit in a plastic container with lid. Add mineral oil to immerse the material.</li> <li>4. Complete and apply a waste label to bag or container.</li> </ol>	<ul style="list-style-type: none"> <li>• Splash goggles</li> <li>• Butyl, nitrile, or neoprene gloves</li> <li>• Flame resistant - Nomex lab coat or apron</li> <li>• Closed-toe shoes</li> </ul>
	<b>Corrosive Liquids</b> (e.g., inorganic acids - sulfuric and nitric acid and caustic bases - sodium and potassium hydroxide solutions)	<ol style="list-style-type: none"> <li>1. Neutralize acids/bases with materials such as sodium bisulfate (for alkalis), sodium carbonate or bicarbonate (for acids), or commercial neutralizer.</li> <li>2. Check pH with test strips; final pH between 6 and 10.</li> <li>3. Absorb spill with vermiculite, kitty litter, or commercial absorbent (pillows, berms, etc.). <b>NOTE:</b> Some commercial products combine neutralizers with absorbent material.</li> <li>4. Collect absorbent with plastic brush and dust pan and deposit in a Ziploc bag or plastic container with lid.</li> <li>5. Complete and apply a waste label to bag or container.</li> </ol>	<ul style="list-style-type: none"> <li>• Splash goggles (optional face shield)</li> <li>• Neoprene or polyvinyl chloride (PVC) gloves</li> <li>• Standard Cotton lab coat or apron</li> <li>• Closed-toe shoes</li> </ul>
	<b>Corrosive: Perchloric Acid/ Inorganic Perchlorates</b>	<ol style="list-style-type: none"> <li>1. Dilute perchloric acid with water to a conc. of &lt; 5%.</li> <li>2. Cover spill with sand or vermiculite (DO NOT use organic absorbents).</li> <li>3. Repeat Steps 4 through 6 for Corrosive Liquids.</li> </ol>	See Corrosive Liquids
	<b>Corrosive: Bromine</b>	<ol style="list-style-type: none"> <li>1. Small spills: Cover small spills with sodium thiosulfate.</li> <li>2. Repeat Steps 4 through 6 for Corrosive Liquids.</li> </ol>	See Corrosive Liquids

Symbol	Hazardous Material	Clean Up Procedure	PPE
	<b>Toxic Substances</b> (e.g., sodium azide, osmium tetroxide, potassium cyanide, and sodium cyanide)	<ol style="list-style-type: none"> <li>1. Collect spilled solid with plastic brush and dust pan and deposit in a Ziploc bag or plastic container with lid. Be careful not to create dust particulates.</li> <li>2. If spill is a toxic reagent, absorb spill with vermiculite, kitty litter, or commercial absorbent (pillows, berms, etc.). Repeat Step 1.</li> <li>3. Complete and apply a waste label to bag or container.</li> </ol>	<ul style="list-style-type: none"> <li>• Safety glasses</li> <li>• Neoprene or polyvinyl chloride (PVC) gloves</li> <li>• Standard Cotton lab coat or apron</li> <li>• Closed-toe shoes</li> </ul>
	<b>Toxic: Mercury</b>	<ol style="list-style-type: none"> <li>1. Collect bulk mercury spill with a vacuum hand pump.</li> <li>2. Collect remaining droplets by using a mercury sponge, OR covering the droplets with mercury absorbent powder.</li> <li>3. Complete and apply a waste label to bag or container.</li> </ol>	See Toxic Substances
	<b>Toxic: Radioactive Materials (RAM)</b> (e.g., <sup>125</sup> I, <sup>128</sup> I, <sup>32</sup> P, and <sup>35</sup> S)	<ol style="list-style-type: none"> <li>1. Cover spill with absorbent paper or pad only. DO NOT wipe with circular motion. This will only spread radioactive contamination.</li> <li>2. Once spill is completely absorbed, push outermost disposable paper towels or pads toward center of spill.</li> <li>3. Collect towels/pads and place in a Ziploc bag or appropriate radioactive waste container. Dispose of all other contaminated materials in a similar manner (such as disposable gloves).</li> <li>4. Check area around spill with a survey meter and demarcate with radiation tape.</li> <li>5. Place thick wood or Plexiglas board over spill if needed.</li> <li>6. Use survey meter to check hands, shoes, and clothing for any radioactive contamination.</li> <li>7. Complete and apply a waste label to bag or container.</li> </ol>	See Toxic Substances
	<b>Blood, Biohazardous Materials, or Other Potentially Infectious Materials (OPIM)</b>	<ol style="list-style-type: none"> <li>1. Pour liquid bleach into a spray applicator or apply directly to contaminated/spill area. Allow fifteen (15) to thirty (30) minutes for treatment.</li> <li>2. Clean spill with an absorbent pad.</li> <li>3. Place waste pads directly into an available biohazard red bag/container. Tie red bag with goose-neck wrapping technique if full.</li> </ol>	<ul style="list-style-type: none"> <li>• Safety glasses</li> <li>• Nitrile, PVC, or latex gloves</li> <li>• Standard Cotton or fluid resistant (barrier) lab coat</li> <li>• Closed-toe shoes</li> </ul>

- To remove hazardous waste from the lab, request a [hazardous waste pick-up](#) online.
- Contact EH&S for more information on proper waste management and disposal or requesting supplies: [hazmat@usc.edu](mailto:hazmat@usc.edu) or (213) 740-7215.
- For large hazardous materials spills, notify DPS immediately at (213) 740-4321.