

### Typical Laboratory Chemical Spill Kit

Items	Purpose / Details
Polypropylene or high-density polyethylene bucket with top (5-gallon size or larger)	To act as a receptacle for chemical resistant bag liners during a spill clean-up and as a storage container for the spill kit components.
Chemical resistant bags	All spill residue and spill clean-up material should be placed in a high density polyethylene or polypropylene bag. These bags should be made of strong construction: <ul style="list-style-type: none"> <li>• Leak proof</li> <li>• 4mil in thickness</li> </ul>
Personal protective equipment (PPE) At least: <ul style="list-style-type: none"> <li>• 2 pairs of chemical splash goggles</li> <li>• 2 pairs of disposable nitrile gloves</li> <li>• 2 pairs of heavy gauge, long cuff nitrile, Neoprene or butyl rubber gloves</li> <li>• 2 Tychem® coveralls (L or XL)</li> <li>• 2 pairs chemical resistant shoe covers</li> <li>• 2 disposable masks (N95)</li> </ul>	No gloves are totally chemical-proof; however, some are more resistant to chemicals than others. Latex gloves are not resistant to most laboratory chemicals and should not be in the spill kit.
Universal hazard absorbent pads	High Capacity Chemically inert Absorbs aggressive chemicals as well as non-aggressive compounds such as water Good for all chemicals: <ul style="list-style-type: none"> <li>• Acids</li> <li>• Bases</li> <li>• Flammable liquids</li> <li>• Formaldehyde</li> <li>• Organic peroxides</li> </ul>
Plastic clean-up tools (dust pan or scoop and brush, etc.)	For solid chemical spills. Should be chemical resistant and non-sparling (non-static). A variety of polypropylene tools are available.
EHS chemical waste labels	To properly identify spill waste.
Neutralizing and treatment materials (only if strong acids/bases are used)	Type and quantity are dependent on the laboratory's chemicals: <ul style="list-style-type: none"> <li>• Acid and/or base neutralizer</li> <li>• 1 roll of pH paper</li> </ul>
Mercury spill kit (optional)	Only if possibility of mercury spill in laboratory.
A copy of all applicable chemical spill procedures or SOP	

### Typical Laboratory Biological (Biohazardous) Spill Kit

Items	Purpose / Details
Autoclave bags	For collecting biologically contaminated materials during the cleanup.
Personal protective equipment (PPE) At least: <ul style="list-style-type: none"> <li>• 2 pairs of chemical splash goggles</li> <li>• 2 pairs of disposable gloves</li> <li>• 2 disposable gowns or lab coats (size L or XL)</li> <li>• 2 pairs chemical resistant shoe covers</li> <li>• 2 disposable masks (N95)</li> </ul>	Latex, vinyl or nitrile gloves should be available in multiple sizes. Disposable N95 masks protect from direct (splash) and indirect (accidental transfer via hands) contact with infectious material or toxins during spill cleanup. If fit-tested, N95 masks also provide protection from aerosols.
Absorbent materials	Absorbent materials can be: <ul style="list-style-type: none"> <li>• Paper towels or absorbent pads</li> <li>• High-absorbency paper towels (such as Wypalls)</li> <li>• Micro-encapsulation absorbent (e.g., BioSorb, SafeGuard Absorbent, Safetec EZ Cleans Kit, etc.)</li> </ul>
Plastic clean-up tools, for example: <ul style="list-style-type: none"> <li>• Polypropylene brush and dustpan or scoop</li> <li>• Tweezers or forceps</li> </ul>	<ul style="list-style-type: none"> <li>• Polypropylene plastic can be autoclaved</li> <li>• For collecting contaminated materials such as broken glass/sharps</li> </ul>
Effective concentrated chemical disinfectant	<ul style="list-style-type: none"> <li>• <i>Consult your SOP to find the proper procedure.</i></li> <li>• Dilute immediately before use, e.g., if chlorine bleach is appropriate, dilute household bleach (~5% sodium hypochlorite) to 1/10.</li> <li>• Replace yearly to ensure efficacy</li> </ul>
Sharps container	
A copy of all applicable biological spill procedures or SOP	

### Typical Laboratory Nuclear Substance Spill Kit

Items	Purpose / Details
Polypropylene or high-density polyethylene bucket with top (5-gallon size or larger)	To act as a receptacle for bag liners during a spill clean-up and as a storage container for the spill kit components. Thickness of pail can better block radiations than plastic bags solely.
Chemical resistant bags	All spill residue and spill clean-up material should be placed in a high density polyethylene or polypropylene bag. These bags should be made of strong construction: <ul style="list-style-type: none"> <li>• Leak proof</li> <li>• 4mil in thickness</li> </ul>
Chalk, wax pencil or tape	To clearly mark or delimitate radioactive spill area.
Personal protective equipment (PPE) At least: <ul style="list-style-type: none"> <li>• 2 pairs of chemical splash goggles</li> <li>• 2 pairs of disposable nitrile gloves</li> <li>• 2 disposable gowns or laboratories coats (L or XL)</li> <li>• 2 pairs chemical resistant shoe covers</li> <li>• 2 disposable masks (N95)</li> </ul>	No gloves are totally chemical-proof; however, some are more resistant to chemicals than others.
Universal hazard absorbent pads	High Capacity and chemically inert. Absorbs aggressive chemicals as well as non-aggressive compounds such as water.
Decontamination solution and scrub brush	General cleaner/detergents such as RadCon spray or similar foaming spray A scouring powder, scrub brush can also be used for a more aggressive decontamination.
Forceps or tongs	For safe handling of any sharps.
Radioactive waste labels	Label "Radiation – Danger – Rayonnement" with radiation logo to properly identify radioactive spill waste.
Wipe testing kit	Filter papers and liquid scintillation vials for wipe test.
Contaminationmeter	Mainly for gamma and energetic beta emitters (e.g. P <sup>32</sup> , Tc <sup>99m</sup> or F <sup>18</sup> )
A copy of all applicable radioactive spill procedures or SOP	