

# Appendix BASE: Caustic Chemical Spill Response Guide

In the event of a caustic chemical spill, follow: **RESCUE, CONTAIN, REPORT, SECURE, CLEAN UP**

## RESCUE

- Alert others in the area of an ongoing chemical spill and keep others away from the spill area.
- Help others evacuate by providing assistance. Help remove any victims from the spill area to fresh air but do not endanger yourself by entering a potentially toxic atmosphere or failing to wear appropriate personal protective equipment (PPE).
- Before exiting the room or area, inspect your clothing and shoe bottoms for signs of contamination, such as saturation or powder. Remove contaminated clothing and place in plastic bags, if possible, and leave the clothing or bag of clothing near or inside the spill area or room.
- If **caustic chemical contacted the skin**, wash contaminated skin with soap + water/use safety shower for 15 min.
- If **caustic chemicals are in the eye**, immediately use a safety eyewash to flush eyes for 15 minutes or more.
- If **caustic chemical is inhaled**, immediately go to an area with fresh air and breathe fresh air until help arrives.
- Immediately get medical assistance for the victims by calling University Police Department (UPD) at **911** from a SJSU phone OR **408-924-2222** from all other telephones. Inform UPD about any injured person and the chemical involved with the spill. Never return to an area of a chemical spill once you have vacated the contaminated area.

## CONTAIN

- Contain the spill to an area or room, if possible, so that an emergency response may be planned.
- If can be done safely, put down universal absorbent pads to stop or slow the spread of an ongoing release.
- This helps to minimize the spill area by preventing chemicals from spreading to floor drains or sinks, cracks or crevices, onto sloped or porous surfaces, or any other inaccessible or hard-to-access areas.
- Do not allow chemicals to go down sink or floor drains by plugging sinks/drains, if can be done safely. If the spill is no longer actively spreading, simply isolate the area by closing the chemical fume hood, closing interior room doors, or closing hallway and/or exterior doors to prevent the spread of hazardous fumes and vapors.

## REPORT

- For small spills (<1 gallon), contact your Department Safety Officer or Leadership to report the spill and request additional assistance.
- Provide important information, such as your name, telephone number, physical location from which you are reporting, physical location of the incident/spill (e.g. building and room number), time and type of incident (e.g. chemical spill with or without injury), quantity of chemical involved (if known), the extent and severity of any injuries, presence of additional hazards in the area, and the safest route to approach spill area.

## SECURE

- If can be done safely, work with your coworkers to block entrances to the spill area in order to prevent others from entering until emergency responders arrive or the spill can be cleaned up.
- Caution tape and signs can serve as useful tools in preventing others from entering the contaminated spill area.

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## CLEAN UP

For small chemical spills under 1 gallon, do not involve high hazard chemicals, and are not actively spreading, as determined by your professional judgment in conjunction with Department Safety Officer or Leadership, proceed to clean up the spill by doing the following:

- Locate the chemical spill kit located in the area to obtain necessary spill response supplies and PPE.
- Put on nitrile gloves, a lab coat or other additional layer of body protection, and eye protection, such as goggles.
- Put on shoe covers or cover your shoes with a plastic bag while considering that this can create a slipping hazard.
- Never walk around a spill area without shoe covers and never walk inside or through the contaminated spill area.
- Apply Spill X-C, Sodium Bicarbonate, or other caustic neutralizing agents. If safe to do so, follow package directions. Remember to always work from the outside of a spill area to the center of the spill to avoid spreading contamination.
- If broken glass is present, carefully collect using thick pieces of paper, tongs, tweezers, other tool to prevent injury. Tape jagged broken glass shards and pieces and place inside same bag or container with other spill materials.
- Sweep up absorbent materials and debris and place in a plastic bag or other waste container.
- Wipe down surfaces with damp sponge or paper towels and place in waste bag or container.
- While wearing protective gloves, remove shoe covers and other PPE then combine with other waste debris.
- Before exiting the room or area, inspect your clothing and shoe bottoms for signs of contamination. Remove any contaminated clothing and place in a separate bag from the waste debris and leave near the spill area. Leave bag of clothing near or inside the spill area or room then thoroughly wash your hands.
- Department Safety Officer/EHS will assist in determining if spill area is clean enough to resume normal activities.
- Label bags of spill debris and contaminated clothing with SJSU Hazardous Waste Label. Identify waste by listing “Caustic Spill Debris” as the General Description, the type of acid under Contents, and write the date of spill as the accumulation start date.
- Report the spill to EHS immediately if air monitoring is needed and ensure access to the spill area is restricted.
- If air monitoring is not needed, report spill to EHS within 48 hours and to coordinate pick-up of labeled spill debris.

## Larger Spills

Immediately contact UPD/EHS for larger spills. An outside chemical spill response contractor may be needed to complete the final clean-up and decontamination of the area.

## Chemical Spill Kit Recommended Contents – Areas with Caustic Chemicals

- Nitrile Gloves – 10 pairs (Sizes XL and M)
- Butyl Rubber Gloves with Gauntlet – 2 pairs
- Spill X-C or other acid neutralizing agents – 1 lb.
- Sodium Bicarbonate – 1 lb.
- Universal Absorbent Pads – 1 box or 20 squares
- Dustpan and Brush Set – 1 set
- Plastic Bags (5-gallon or 30-gallon size) – 2 each
- Plastic Scoop – 1 each
- Splash Resistant Goggles – 1 each



*Butyl Rubber Gloves with Gauntlet*



*Universal Absorbent Pads*

## Need Help?

- Ask the primary investigator or instructor
- Ask the department/college safety staff
- Ask SJSU Environmental Health & Safety
  - Environmental Compliance Specialist: david.griffith@sjsu.edu
  - Director: ehs@sjsu.edu; 408-924-1969