

JOB SAFETY ANALYSIS

Safety Information for the University of California, Berkeley

ENVIRONMENT, HEALTH & SAFETY – EMERGENCY RESPONSE RESPONDING TO A KNOWN CONTACT HAZARD

TASK	HAZARDS	CONTROLS
1. Determining the amount of the material, the area, the equipment, and other surfaces that are contaminated.	Contact with the material leading to injury or exposure.	Wear PPE that protects from contacting hazards such as HF or other compounds.
2. Selecting and performing the appropriate PPE.		
3. Monitoring the atmosphere based on Task 1 and using the appropriate equipment or method.		
4. Modifying (downgrade or upgrade) and doing (if necessary) PPE based on results of the previous monitoring step.		
5. Searching for spill location and contaminated equipment and furniture.		PPE should not impair vision. Ensure that enough light is provided to the spill area to see small quantities such as splash droplets on surfaces above the spill area.
6. Applying neutralizer or cleaning up as appropriate.		Conduct a pilot application in a small area of the spill.

		Contact with the HF.	As part of the clean-up plan from Task 1, void contact by systematically applying the neutralizer and collecting the resultant materials. Sprinkle the neutralizer on the spill area. Do not "work it in." Ensure that sufficient neutralizer is within reach. Avoid touching your bare skin, such as your neck.
		Contact with unforeseen chemicals.	Avoid contact with open containers, such as pans or petri dishes. Use a buddy system so two people can monitor the area at a time.
	7. Decontaminating (search for other contaminated locations).	Contact with HF and other chemicals.	Search for other areas of contamination, such as under furniture and other lab equipment.
		Electrical hazards.	Disconnect or turn off equipment prior to handling. Avoid contact with heat sources.
		Other physical hazards.	Use tongs to pick up broken glass and other small items contaminated with HF or other chemicals. Move decontaminated items out of the spill area. Properly dispose of expendables (towels, neutralizers, etc) in a poly-bag.
	8. Check the pH of the surfaces (search for other contaminated locations).	Exposure to hazardous pH level.	Use tongs with the pH strips.
	9. Collect and bag the waste (search for other contaminated areas).	Body injury, lifting, twisting, and bending.	Use proper lifting techniques.
		Sharps.	Deposit sharps in solid-lidded containers, such as tin cans or polypropylene containers.
		Slipping and falling.	Be sure footing is secure while moving equipment and supplies.

	10. Final cleanup.	May find un-neutralized contaminant or hazardous material.	Begin with Task 4 in discovered locations. Keep PPE on (be aware that cartridges have saturation points and indicators).
		Slipping and falling.	Be sure footing is secure while moving equipment and supplies.
	11. Transportation of wastes.	Inadequate controls.	Refer to SOP for transportation of hazardous materials.
	Required Training: 1. Training 1 2. Training 2 3. Training 3	Required Personal Protective Equipment (PPE):	
Other Information: Contributors: Environment, Health & Safety Created: June 2005 JSA Library Number: EHS-ER-08	For more information about this JSA, contact the <i>Office of Environment, Health and Safety</i> at UC Berkeley, 317 University Hall #1150, Berkeley, CA 94720-1150 (510) 642-3073 • http://www.ehs.berkeley.edu		