 

**Hydrofluoric Acid Neutralizer Use for Small Spills**

* The liquid Hydrofluoric acid (HF) neutralizer provided by OEHS, chemically transforms HF acid into an inorganic salt (**1:1 neutralization ratio**), making it safer to handle and dispose of.
* **DO NOT** use the HF neutralizer gel (calcium gluconate) provided to treat people exposed to HF.
* **Use only in response to small HF spills (<2 ml) of dilute HF (≤ 5% HF).** Contact OEHS (7-1200) to handle spills ≥ 2mL or of HF solutions with concentrations > 5%.
* Refer to lab specific SOP for safe handling of HF, for more information on HF spill response, and prior to responding to a HF spill.
* Keep track of the expiration date of the HF neutralizer provided by OEHS and contact OEHS for a replacement two months prior to the expiration date noted on the neutralizer bottle.

**If your skin, eyes, or airways have been exposed to HF, medical treatment is the priority.** Call WSU Police (313-577-2222) immediately for medical assistance and begin exposure response steps outlined in the HF SOP. Spill clean-up should then be left to another lab personnel familiar with safe HF spill clean-up procedures or the OEHS emergency response group.

**Instructions**

To clean up a small HF spill or release (<2 ml) of dilute HF (≤ 5% HF):

1. Alert personnel in the immediate area of spill and restrict access.
2. Locate the HF spill kit that has been assembled by the lab. This includes chemical resistant shoe covers, absorbent material (e.g., paper towels), HF neutralizer (provided by OEHS), pH test strips or a pH meter, polyethylene scoop or dustpan, and polyethylene or Teflon tongs.
3. Remove contaminated personal protective equipment (PPE) and place in hazardous chemical waste container. Put on fresh PPE and shoe covers prior to responding to the spill.
4. Protect floor drains, sinks or other potential avenues of environmental release as much as possible. Make a dike around the outside edges of the spill using absorbent materials.
5. To neutralize the spill:
   1. Gently pour the neutralizer onto the spilled acid, working from the outside inward.
   2. The liquid hydrofluoric acid neutralizer will change colors in the presence of hydrofluoric acid from its original beige color to red and then back to beige indicating the neutralization process is complete (handling risk has been reduced). NOTE: It is recommended to verify pH neutralization by using a pH meter or pH paper.
   3. Once the spilled acid has been neutralized, use absorbent materials (e.g., paper towels) to absorb it.
6. Collect spill cleanup materials using a polyethylene scoop/dustpan and tongs. Place spill cleanup materials in a tightly closed hazardous chemical waste container.
7. After all visible spill cleanup material is removed, decontaminate surfaces including non-disposable cleanup items (such as tongs and dustpan) following lab specific SOP guidelines mentioned under decontamination procedures for chemical fume hood interiors, equipment, and laboratory surfaces.
8. Place all disposable contaminated materials, including items such as gloves, in the hazardous chemical waste containers dedicated to collect HF waste.
9. Attach a completed hazardous waste tag to the waste container (both available from OEHS).
10. Submit an online [chemical waste pickup request](https://research.wayne.edu/oehs/hazardous/chemical-waste) to OEHS.
11. Report spill to supervisor or PI.
12. Replace/restock spill response kit. Contact OEHS to request additional neutralizer and waste containers.

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