

# HYDROFLUORIC ACID (HF) SAFETY



## Health Hazards

- Exposure can be fatal.
- HF penetrates the skin and mucous membranes causing deep tissue destruction and possible fluoride poisoning.
- Internal damage may not be immediately visible or painful.
- Inhaling HF vapor can seriously damage the lungs.

## Work Procedures

- **Never work alone with HF.**
- Make sure you are trained to work with HF.
- Review lab specific Standard Operating Procedure (SOP) for HF work.
- Wear the following Personal Protective Equipment (PPE):
  - \* Medium or heavyweight acid gloves. HF may degrade nitrile, vinyl & latex. Consult the manufacturer's glove selection guide when selecting a glove.
  - \* Cotton lab coat with a chemical splash apron resistant to acids.
  - \* Chemical goggles
  - \* Pants and close-toed shoes with acid covers. No shorts or sandals.
- All work must be conducted in a chemical fume hood.
- Use care to avoid spills or splashes of HF.



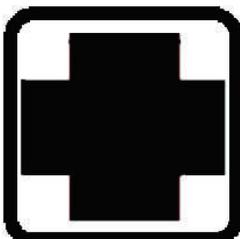
## Emergency Equipment

- Eyewash — Test weekly
- Emergency shower and scissors to remove clothing
- Calcium gluconate gel – a topical antidote for HF skin exposure. Check expiration date.
- MSDS for all workers including emergency responders



## First Aid

- For known HF skin exposure, quickly remove all contaminated clothing while in the safety shower. Cut clothing, if needed, to avoid pulling contaminated clothing over the head. Rinse for 5 minutes.
- Massage calcium gluconate to the affected area using gloves. Calcium gluconate should NOT be used in the eyes. Reapply calcium gluconate every 15 minutes until medical treatment is sought.
- If calcium gluconate is not available or if unknown chemical exposure or HF eye exposure, rinse with water for 15 minutes then seek medical treatment.
- Unless the exposure is a very minor skin exposure, have someone call 911. Exposures under the nails, on the face or in the eyes, regardless of HF strength, require advanced medical treatment.
- If a minor skin exposure, after following steps above call **HealthPoint at NOA 3.302, (512) 471-4647.**



**ALL EXPOSURES TO HYDROFLUORIC ACID REQUIRE IMMEDIATE  
FIRST AID RESPONSE AND PROMPT MEDICAL TREATMENT.**