



Hydrofluoric Acid



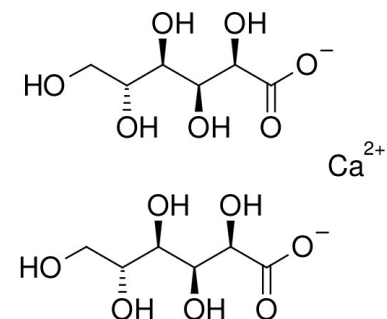
Any work involving HF should be performed inside functioning chemical fume hoods. These fume hoods should have polyethylene, polypropylene, or polycarbonate sashes.

First Aid kit required

- Calcium Gluconate gel (calgonate)*
- Container of antacid tablet (regular strength 0.5g CaCO₃)
- * Should be stored in refrigerator if possible- before use make sure it isn't past the due date
- Calcium gluconate slurry can be made by dissolving 2.5g of calcium gluconate in 100mL of water- soluble lubricant
- Eyewash and Safety shower should be nearby



First Aid for HF Treatment
Calcium gluconate solution for emergency eyewash
Calcium gluconate gel for protection of skin tissue and bone damage



Spill kit required

- DO NOT USE silica sand (HF will react with this to form SiF_4 gas)

Spill kits should include

- Thick (14 mil or thicker) chemically resistant gloves (2 pairs)
- Splash goggles (at least 1 pair)
- Polyethylene bags (4 bags 4 mil thick)



Personal Protective Equipment

- Safety goggles (not glasses)
- Thick nitrile gloves (14 mil or thicker) or full-length rubber sleeves
- Butyl rubber apron
- Face shield

When working:

- Thoroughly wash hands after handling HF bottles and reaction vessels
- **Hands-on training must be provided before researchers do this work**
- SOPs should be implemented with this work
- A rubber bottle carrier is minimum but a fully enclosed secondary container should be used when transporting (top right)
- The corrosive cabinet holding the HF should be labeled (bottom right)



WARNING!

Hydrofluoric acid in use
Do not disturb

Contact _____
For further information

In the event of skin or eye contact: immediately flush with water for 20 minutes. For skin, add calcium gluconate gel. Medical evaluation is necessary for any exposure.