

# HYDROFLUORIC ACID

## SYNONYMS

HF                                      fluoric acid  
HF acid                               hydrogen fluoride

## USES

Etching materials such as metal and glass, manufacturing and gas production

## HAZARDS

**Highly corrosive; causes severe and deep tissue burns**

Symptoms of exposure, such as pain, burns and blisters, may be delayed up to 24 hours depending on the concentration of HF.



### Acutely Toxic

Fluoride binds with calcium in the body possibly leading to hypocalcemia, which can be fatal.

Deep tissue destruction and calcium binding may continue after rinsing with water if neutralization is not provided.



## REDUCE RISKS



All users must understand the hazards and protective measures.



Work in a chemical fume hood.



Avoid placing HF acid in glass or metal containers.



Work with a lab partner.



Wear a laboratory coat, an acid-resistant apron, and fully enclosed fluid-resistant shoes.



Use a face shield and splash goggles.



Choose gloves appropriate to the hazard using...**C<sub>3</sub>D<sub>2</sub>**

Chemicals                      Duration  
Concentration                Dexterity  
Contact Type

## IN CASE OF EXPOSURE

(For all exposures, seek immediate medical attention)



**Keep calcium gluconate** in the work area (contact Occupational Medicine at 515-294-2056 to obtain calcium gluconate).



**Skin Contact** - rinse with water for 5 minutes, then apply calcium gluconate continuously until medical help arrives (wear double layer of nitrile gloves to provide first aid).



**Eye Contact** - rinse with water and seek immediate medical attention. Do not treat eyes with calcium gluconate gel.



**Inhalation** - move to fresh air, seek medical attention.

Reviewed 2017