HYDROFLUORIC ACID

SYNONYMS
HF
HF acid
fluoric 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... \( \text{C}_3\text{D}_2 \)

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).

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

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).

Inhalation - move to fresh air, seek medical attention.

Reviewed 2016