

Hydrofluoric Acid (HF) Safety Information Sheet

Personal Protective Equipment (PPE)

Due to the high health hazards associated with HF, proper PPE should be worn at all times in addition to working in a chemical fume hood (or well ventilated area if a fume hood is not available).

- Chemical Splash Goggles
- Full Face Shield
- Laboratory Coat
- Chemical Resistant Apron (made of natural rubber, neoprene, or viton)
- 2 pairs of gloves
 - Pair 1: Standard laboratory nitrile or neoprene gloves
 - Pair 2: Medium or heavyweight viton, nitrile, neoprene, or viton gloves that are 22 mil thick OR other HF resistant gloves (see manufacturer selection guide)
 - When working with diluted solutions of HF for brief use, 2 pairs of nitrile or neoprene laboratory gloves may be worn with the above PPE

Hydrofluoric Acid Exposure

When working with concentrations of HF below 50%, the symptoms of exposure can be delayed between 8 and 24 hours (depending on concentration). It is important to apply the HF antidote (calcium gluconate) to all skin exposures immediately after rinsing and then to seek medical attention. Persons that have had an HF exposure to the eyes, ingestion, or inhalation should seek medical attention immediately.

Calcium Gluconate Information and Purchasing Information

Calcium gluconate works by combining with HF to form insoluble calcium fluoride, thus preventing the extraction of calcium from tissues and bones.

Calcium gluconate does have a shelf life, so it is important to frequently check the expiration date and to properly store it.