



# ENVIRONMENTAL HEALTH & SAFETY

A Safe and Healthful Campus Environment

ENVIRONMENTAL ▾

RESEARCH & LAB SAFETY ▾

GENERAL HEALTH & SAFETY ▾

TRAINING ▾

WASTE ▾

SAFETY ▾

## Hydrofluoric Acid Safety Program

Hydrofluoric acid has a number of chemical, physical and toxicological properties, which make handling this material especially hazardous. All forms, including the solution or the vapor, can cause severe burns to tissue and cause serious toxic systemic effects. Fluoride ions are both acutely and chronically toxic. Fluorides are easily absorbed through the skin, cause death of soft tissue and erode bone as well as cause cardiac arrhythmias or cardiac arrest. Acute effects of hydrofluoric acid exposure include extreme respiratory irritation, immediate and severe eye damage and pulmonary edema. Skin, eye, or lung exposure to concentrated (>50%) hydrofluoric acid solutions will cause immediate, severe, penetrating burns. Exposure to less concentrated solutions may have equally serious effects, but the appearance of symptoms can be delayed for up to 24 hours.

Principal Investigators requesting authorization to purchase and use hydrofluoric acid in their research must complete a Standard Operating Procedure/Authorization Form and submit to the Chemical Hygiene Committee for approval.

### Standard Operating Procedure/Authorization Form for Use of Hydrofluoric Acid

- [Microsoft Word Document](#)
- [PDF Format](#)

### Hydrofluoric Acid User Authorization Form

- [Microsoft Word Document](#)
- [PDF Format](#)

### Environmental Health & Safety Hydrofluoric Acid Spill and Splash Pamphlet

- [Version for Review on the Web](#)
- [Version for Print](#)

### [On-Line Hydrofluoric Acid Safety Refresher Training](#)

### [Honeywell Specialty Materials - Hydrofluoric Acid Resources](#)

Any questions or concerns related to safe use of hydrofluoric acid should be addressed to the Chemical Hygiene Officer at [dehsafety@udel.edu](mailto:dehsafety@udel.edu) or call 302-831-8475.

### More Information

[Chemical Hygiene Plan](#)

[Departmental Chemical Hygiene Officers](#)

[Templates \(SOP's / JHA's\)](#)

### Safety



### Related

[Chemical](#)

[Biological](#)

[Radiation](#)



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FORMS

HAZMA  
MANUA

## Office Information

[Staff Listing and Contacts](#)

[Letter from the Director](#)

[EHS Organizational Chart](#)

[Contact Environmental Health and Safety](#)

## Emergency Response

[Biological Emergency Procedures](#)

[Chemical Emergencies](#)

[Fire Emergencies](#)

[Radioactive Emergencies](#)

[Emergency Response Resources](#)

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