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**1. PRODUCT AND COMPANY IDENTIFICATION**

Product name	Hydrofluoric Acid
Grade	ACS, HPLC, Pesticide, Anapremium, Dehydrous, LCMS, UPLC, Trace metal, Trace metal Plus
Company	Anaqua Chemicals Supply 1510 Eldridge Parkway, Suite 110-268 Houston, TX 77077, USA
Telephone	(281) 668-0032
Fax	(281) 668-0033

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**2. COMPOSITION/ INFORMATION ON INGREDIENTS**

Formula	HF
CAS-No.	7664-39-3
Index-No.	009-003-00-1
Ec-No.	231-634-8

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**3. HAZARDS IDENTIFICATION****GHS Classification**

Acute toxicity, Oral	Category 2
Acute toxicity, Inhalation	Category 2
Acute toxicity, Dermal	Category 1
Skin corrosion	Category 1A

**Classification according to EU Directives 67/548/EEC or 1999/45/EC**

Very toxic by inhalation, in contact with skin and if swallowed. Causes severe burns...

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**4. FIRST AID MEASURES****General advice**

Hydrofluoric (HF) acid burns require immediate and specialized first aid and medical treatment. Symptoms may be delayed up to 24 hours depending on the concentration of HF. After decontamination with water, further damage can occur due to penetration/absorption of the fluoride ion. Treatment should be directed toward binding the fluoride ion as well as the effects of exposure. Skin exposures can be treated with a 2.5% calcium gluconate gel repeated until burning ceases. More serious skin exposures may require subcutaneous calcium gluconate except for digital areas unless the physician is experienced in this technique, due to the potential for tissue injury from increased pressure. Absorption can readily occur through the subungual areas and should be considered when undergoing decontamination. Prevention of absorption of the fluoride ion in cases of ingestion can be obtained by giving milk, chewable calcium carbonate tablets or Milk of Magnesia to conscious victims. Conditions such as hypocalcemia, hypomagnesemia and cardiac arrhythmias should be monitored for, since they can occur after exposure. Consult a physician. Show this safety data sheet to the doctor in attendance.

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Inhalation	If breathed in, move to fresh air. If not breathing, give artificial respiration. Consult a physician.
Ingestion	Rinse mouth with water. Consult a physician immediately.
Skin Contact	Immediately wash off with plenty of water for at least 15 minutes. Consult a physician.
Eye Contact	Rinse through with plenty of water for at least 15 minutes. Consult a physician.
Note to Physician	Treat symptomatically

**Most important symptoms and effects, both acute and delayed**

Fluoride ion can reduce serum calcium levels possibly causing fatal hypocalcemia., Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., necrosis of the skin

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**5. FIRE-FIGHTING MEASURES**

Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide
Special protective equipment for fire-fighters	Hydrogen fluoride. Wear self contained breathing apparatus for fighting if necessary.

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**6. ACCIDENTAL RELEASE MEASURES**

Personal precautions	Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not let product enter drains
Methods for cleaning up	Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

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**7. HANDLING AND STORAGE**

Handling	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.
Storage	Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

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**8. EXPOSURE CONTROLS/ PERSONAL PROTECTION**

**Occupational exposure controls**

Engineering Measures	Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.
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**Personal protective Equipment**

Respiratory protection	Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup
Hand protection	Wear appropriate protective gloves.
Eye protection	Tightly fitting safety glasses.

Skin and body protection	Complete suit protecting against chemicals. Protective clothes should be selected specifically for work place according to concentration and quantity of chemical handled.
Hygiene Measures	Handle in accordance with good industrial hygiene and safety practice. Wash hands and face before breaks and at the end of working day.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

Form	Liquid
Color	Colourless
pH	No data available
Oxidizing properties	No data available
Melting point	No data available
Boiling point	No data available
Flash point	No data available
Lower explosion limit	No data available
Upper explosion limit	No data available
Density	No data available
Water solubility	Completely soluble
Relative density	1.16 g/cm <sup>3</sup> at 20 °C

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## 10. STABILITY AND REACTIVITY

Storage stability	No information available
Conditions to avoid	No information available
Materials to avoid	Metals, Alkali metals, Strong bases
Hazardous decomposition products	No information available

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## 11. TOXICOLOGICAL INFORMATION

Acute toxicity	No information available
Skin irritation	No information available
Carcinogenicity	IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans
Potential health effects	<p><b>Inhalation</b> May be fatal if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.</p> <p><b>Ingestion</b> May be fatal if swallowed. Causes burns.</p> <p><b>Skin</b> May be fatal if absorbed through skin. Causes skin burns.</p> <p><b>Eyes</b> Causes eye burns.</p>
Symptoms of Exposure	Fluoride ion can reduce serum calcium levels possibly causing fatal hypocalcemia., Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., necrosis of the skin
Additional Information	RTECS: Not available

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## 12. ECOLOGICAL INFORMATION

Persistence and degradability	No information available
Ecotoxicity	No information available
Toxicity to fish	No information available
Bioaccumulative potential	No information available
Other adverse effects	No information available

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## 13. DISPOSAL CONSIDERATIONS

Product	Offer surplus and non-recyclable solutions to a licensed disposal company.
Packaging	Dispose of as unused product.

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## 14. TRANSPORT INFORMATION

### IATA

UN-Number: 1790 Class: 8 (6.1) Packing group: II

Proper shipping name: Hydrofluoric acid

### IMDG

UN-Number: 1790 Class: 8 (6.1) Packing group: II

Proper shipping name: Hydrofluoric acid

### DOT (US)

UN-Number: 1790 Class: 8 (6.1) Packing group: II

Proper shipping name: Hydrofluoric acid

Marine pollution: No

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## 15. REGULATORY INFORMATION

### Hazard statements

H300: Fatal if swallowed.

H310: Fatal in contact with skin.

H314: Causes severe skin burns and eye damage.

H330: Fatal if inhaled.

### Precautionary statements

P260: Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.

P264: Wash hands thoroughly after handling.

P280: Wear protective gloves/ protective clothing/ eye protection/ face protection.

P284: Wear respiratory protection.

P301 + P310: IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.

P302 + P350: IF ON SKIN: Gently wash with plenty of soap and water.

### GHS-Labeling

Pictogram



Signal word *Danger*

R-phrase(s): 26/27/28-35

Very toxic by inhalation, in contact with skin and if swallowed. Causes severe burns.

S-phrase(s): 7/9-26-45-36/37

Keep container tightly closed and in a well-ventilated place. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing and gloves. In case of accident or if you feel unwell, seek medical advice immediately

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## 16. OTHER INFORMATION

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