

FERRIC FLUORIDE

FFX

CAUTIONARY RESPONSE INFORMATION

Common Synonyms Iron fluoride		Solid crystals Green
Sinks and mixes slowly with water.		
<p>Keep people away. Avoid contact with solid or dust. Avoid inhalation. Wear goggles, self-contained breathing apparatus, and rubber overclothing (including gloves). Notify local health and pollution control agencies. Protect water intakes.</p>		
Fire	Not flammable. POISONOUS GASES MAY BE PRODUCED WHEN HEATED. Wear goggles, self-contained breathing apparatus, and rubber overclothing (including gloves).	
Exposure	CALL FOR MEDICAL AID. DUST OR SOLID Irritating to eyes, nose, and throat. If swallowed, will cause lethargy, nausea, and vomiting. Move to fresh air. Flush affected areas with plenty of water. IF IN EYES, hold eyelids open and flush with plenty of water. IF SWALLOWED and victim is CONSCIOUS, have victim drink water or milk and have victim induce vomiting.	
Water Pollution	Dangerous to aquatic life in high concentrations. May be dangerous if it enters water intakes. Notify local health and pollution control officials. Notify operators of nearby water intakes.	

<p>1. CORRECTIVE RESPONSE ACTIONS</p> Dilute and disperse Stop discharge Do not burn	<p>2. CHEMICAL DESIGNATIONS</p> 2.1 CG Compatibility Group: Not listed. 2.2 Formula: FeF ₃ 2.3 IMO/UN Designation: Not listed 2.4 DOT ID No.: 9120 2.5 CAS Registry No.: 7783-50-8 2.6 NAERG Guide No.: 171 2.7 Standard Industrial Trade Classification: 52310
<p>3. HEALTH HAZARDS</p> 3.1 Personal Protective Equipment: Goggles, polyvinyl chloride or neoprene gloves, filter type respirator, chemical apron. 3.2 Symptoms Following Exposure: INHALATION: Inorganic fluorides are generally irritating. INGESTION: Ingestion of iron compounds can cause: lethargy, retching, vomiting, tarry stools, fast and weak pulse, low blood pressure, and coma. 3.3 Treatment of Exposure: EYES: Flush with plenty of water for at least 15 minutes. Get medical attention. SKIN: Flush with soap and water. INGESTION: Give water, milk, or activated charcoal and induce vomiting. Sodium sulfate catharsis. 3.4 TLV-TWA: Not listed. 3.5 TLV-STEL: Not listed. 3.6 TLV-Ceiling: Not listed. 3.7 Toxicity by Ingestion: Currently not available 3.8 Toxicity by Inhalation: Currently not available. 3.9 Chronic Toxicity: Currently not available 3.10 Vapor (Gas) Irritant Characteristics: Currently not available 3.11 Liquid or Solid Characteristics: Currently not available 3.12 Odor Threshold: Currently not available 3.13 IDLH Value: Not listed. 3.14 OSHA PEL-TWA: Not listed. 3.15 OSHA PEL-STEL: Not listed. 3.16 OSHA PEL-Ceiling: Not listed. 3.17 EPA AEGL: Not listed	

<p>4. FIRE HAZARDS</p> 4.1 Flash Point: Not pertinent 4.2 Flammable Limits in Air: Not flammable 4.3 Fire Extinguishing Agents: Not pertinent 4.4 Fire Extinguishing Agents Not to Be Used: Not pertinent 4.5 Special Hazards of Combustion Products: Not pertinent 4.6 Behavior in Fire: May give off fumes or vapors of fluorides; hydrofluoric acid. 4.7 Auto Ignition Temperature: Not flammable 4.8 Electrical Hazards: Not pertinent 4.9 Burning Rate: Not pertinent 4.10 Adiabatic Flame Temperature: Currently not available 4.11 Stoichiometric Air to Fuel Ratio: Not pertinent 4.12 Flame Temperature: Currently not available 4.13 Combustion Molar Ratio (Reactant to Product): Not pertinent 4.14 Minimum Oxygen Concentration for Combustion (MOCC): Not listed	<p>7. SHIPPING INFORMATION</p> 7.1 Grades of Purity: Currently not available 7.2 Storage Temperature: Currently not available 7.3 Inert Atmosphere: Currently not available 7.4 Venting: Currently not available 7.5 IMO Pollution Category: Currently not available 7.6 Ship Type: Currently not available 7.7 Barge Hull Type: Currently not available
<p>5. CHEMICAL REACTIVITY</p> 5.1 Reactivity with Water: No reaction 5.2 Reactivity with Common Materials: No reaction 5.3 Stability During Transport: Stable 5.4 Neutralizing Agents for Acids and Caustics: Currently not available 5.5 Polymerization: Not pertinent 5.6 Inhibitor of Polymerization: Not pertinent	<p>8. HAZARD CLASSIFICATIONS</p> 8.1 49 CFR Category: Not listed. 8.2 49 CFR Class: Not pertinent 8.3 49 CFR Package Group: Not listed. 8.4 Marine Pollutant: No 8.5 NFPA Hazard Classification: Not listed 8.6 EPA Reportable Quantity: 100 pounds 8.7 EPA Pollution Category: B 8.8 RCRA Waste Number: Not listed 8.9 EPA FWPCA List: Yes
<p>6. WATER POLLUTION</p> 6.1 Aquatic Toxicity: 419 mg(F)/96-hour/TL _m /Mosquito fish 120 mg(F)/14 days/lethal concentration/goldfish 6.2 Waterfowl Toxicity: Currently not available 6.3 Biological Oxygen Demand (BOD): Currently not available 6.4 Food Chain Concentration Potential: Currently not available 6.5 GESAMP Hazard Profile: Not listed	<p>9. PHYSICAL & CHEMICAL PROPERTIES</p> 9.1 Physical State at 15° C and 1 atm: Solid 9.2 Molecular Weight: 112.85 9.3 Boiling Point at 1 atm: Sublimes >1000°C 9.4 Freezing Point: >1832°F = >1000° = 1273.2°K 9.5 Critical Temperature: Currently not available 9.6 Critical Pressure: Currently not available 9.7 Specific Gravity: 3.87 at room temperature 9.8 Liquid Surface Tension: Not pertinent 9.9 Liquid Water Interfacial Tension: Not pertinent 9.10 Vapor (Gas) Specific Gravity: Currently not available 9.11 Ratio of Specific Heats of Vapor (Gas): Currently not available 9.12 Latent Heat of Vaporization: Currently not available 9.13 Heat of Combustion: Not pertinent 9.14 Heat of Decomposition: Currently not available 9.15 Heat of Solution: 159.5 Btu/lb = 88.6 cal/g = 3.7 X 10 ⁵ J/kg 9.16 Heat of Polymerization: Not pertinent 9.17 Heat of Fusion: Currently not available 9.18 Limiting Value: Currently not available 9.19 Reid Vapor Pressure: Currently not available

NOTES

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9.20 SATURATED LIQUID DENSITY		9.21 LIQUID HEAT CAPACITY		9.22 LIQUID THERMAL CONDUCTIVITY		9.23 LIQUID VISCOSITY	
Temperature (degrees F)	Pounds per cubic foot	Temperature (degrees F)	British thermal unit per pound-F	Temperature (degrees F)	British thermal unit inch per hour-square foot-F	Temperature (degrees F)	Centipoise
	N O T P E R T I N E N T		N O T P E R T I N E N T		N O T P E R T I N E N T		N O T P E R T I N E N T

9.24 SOLUBILITY IN WATER		9.25 SATURATED VAPOR PRESSURE		9.26 SATURATED VAPOR DENSITY		9.27 IDEAL GAS HEAT CAPACITY	
Temperature (degrees F)	Pounds per 100 pounds of water	Temperature (degrees F)	Pounds per square inch	Temperature (degrees F)	Pounds per cubic foot	Temperature (degrees F)	British thermal unit per pound-F
77	0.091		N O T P E R T I N E N T		N O T P E R T I N E N T		C U R R E N T L Y N O T A V A I L A B L E