

FLUOSILICIC ACID

FSL

CAUTIONARY RESPONSE INFORMATION				4. FIRE HAZARDS	7. SHIPPING INFORMATION				
Common Synonyms Fluosilic acid Hexafluosilic acid Hydrofluosilic acid Hydrogen hexafluorosilicate Sand acid Silicofluoric acid	Liquid	Colorless	Sharp unpleasant odor	4.1 Flash Point: Not flammable 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: Irritating fumes of hydrogen fluoride may form in fire. 4.6 Behavior in Fire: Not pertinent 4.7 Auto Ignition Temperature: Not pertinent 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	7.1 Grades of Purity: 22-30% solutions in water 7.2 Storage Temperature: Ambient 7.3 Inert Atmosphere: No requirement 7.4 Venting: Open 7.5 IMO Pollution Category: Currently not available 7.6 Ship Type: Currently not available 7.7 Barge Hull Type: Currently not available				
Keep people away. Avoid contact with liquid and vapor. Avoid inhalation. Notify local health and pollution control agencies. Protect water intakes.									
Fire	Not Flammable. Irritating gases may be produced when heated.								
Exposure	CALL FOR MEDICAL AID. VAPOR Irritating to eyes, nose and throat. If inhaled will cause coughing or difficult breathing. If in eyes, hold eyelids open and flush with plenty of water. If breathing has stopped, give artificial respiration. If breathing is difficult, give oxygen. LIQUID Will burn skin and eyes. If swallowed will cause nausea. Remove contaminated clothing and shoes. 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. IF SWALLOWED and victim is UNCONSCIOUS OR HAVING CONVULSIONS, do nothing except keep victim warm.								
Water Pollution	Effect of low concentrations on aquatic life is unknown. May be dangerous if it enters water intakes. Notify local health and wildlife officials. Notify operators of nearby water intakes.								
1. CORRECTIVE RESPONSE ACTIONS		2. CHEMICAL DESIGNATIONS							
Dilute and disperse Stop discharge Chemical and Physical Treatment: Neutralize		2.1 CG Compatibility Group: Not listed. 2.2 Formula: $H_2SiF_6 \cdot H_2O$ 2.3 IMO/UN Designation: 8/1778 2.4 DOT ID No.: 1778 2.5 CAS Registry No.: 1309-45-1 2.6 NAERG Guide No.: 154 2.7 Standard Industrial Trade Classification: 52236							
3. HEALTH HAZARDS									
3.1 Personal Protective Equipment: Rubber gloves; safety glasses; protective clothing 3.2 Symptoms Following Exposure: Inhalation of vapor produces severe corrosive effect on mucous membrane. Ingestion causes severe burns of mouth and stomach. Contact with liquid or vapor causes severe burns of eyes and skin. 3.3 Treatment of Exposure: INHALATION: remove victim to fresh air; get medical attention. INGESTION: give large amounts of water; DO NOT induce vomiting. EYES: immediately wash with water for 15 min.; call a physician. SKIN: wash affected parts with water; treat as for hydrogen fluoride burn with iced benzalkonium chloride soaks. 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									
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5. CHEMICAL REACTIVITY									
5.1 Reactivity with Water: No reaction 5.2 Reactivity with Common Materials: Will corrode most metals, producing flammable hydrogen gas, which may collect in enclosed spaces. 5.3 Stability During Transport: Stable 5.4 Neutralizing Agents for Acids and Caustics: Flush with water, rinse with dilute solution of sodium carbonate or soda ash. 5.5 Polymerization: Not pertinent 5.6 Inhibitor of Polymerization: Not pertinent									
6. WATER POLLUTION									
6.1 Aquatic Toxicity: Currently not available 6.2 Waterfowl Toxicity: Currently not available 6.3 Biological Oxygen Demand (BOD): None 6.4 Food Chain Concentration Potential: None 6.5 GESAMP Hazard Profile: Bioaccumulation: 0 Damage to living resources: 2 Human Oral hazard: 2 Human Contact hazard: II Reduction of amenities: XXX									
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
77	81.150		NOT PERTINENT		NOT PERTINENT		NOT PERTINENT

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
	MISCELLANEOUS		NOT PERTINENT		NOT PERTINENT		NOT PERTINENT