

SODIUM FLUORIDE

SDF

CAUTIONARY RESPONSE INFORMATION

Common Synonyms	Solid crystals or powder	White or tinted blue	Odorless
	Sinks in water.		
Notify local health and pollution control agencies. Protect water intakes.			
Fire	Not flammable.		
Exposure	CALL FOR MEDICAL AID. SOLID Poisonous if swallowed. IF SWALLOWED and victim is CONSCIOUS, have victim drink water or milk.		
Water Pollution	Dangerous to aquatic life in high concentrations. May be dangerous if it enters water intakes. Notify local health and wildlife officials. Notify operators of nearby water intakes.		

<p>1. CORRECTIVE RESPONSE ACTIONS Dilute and disperse Stop discharge Collection Systems: Dredge</p>	<p>2. CHEMICAL DESIGNATIONS 2.1 CG Compatibility Group: Not listed. 2.2 Formula: NaF 2.3 IMO/UN Designation: 6.1/1690 2.4 DOT ID No.: 1690 2.5 CAS Registry No.: 7681-49-4 2.6 NAERG Guide No.: 154 2.7 Standard Industrial Trade Classification: 52310</p>
<p>3. HEALTH HAZARDS 3.1 Personal Protective Equipment: Goggles or face shield. 3.2 Symptoms Following Exposure: Ingestion may cause vomiting, abdominal pain, diarrhea, convulsions, collapse, thirst, disturbed color vision, acute toxic nephritis. 3.3 Treatment of Exposure: INGESTION: promptly administer gastric lavage with lime water or 1% calcium chloride solution; support respiration; call a physician. 3.4 TLV-TWA: Not listed. 3.5 TLV-STEL: Not listed. 3.6 TLV-Ceiling: Not listed. 3.7 Toxicity by Ingestion: Grade 3; LD₅₀ = 50 to 500 mg/kg (rabbit, rat) 3.8 Toxicity by Inhalation: Currently not available. 3.9 Chronic Toxicity: Currently not available 3.10 Vapor (Gas) Irritant Characteristics: Non-volatile. 3.11 Liquid or Solid Characteristics: None 3.12 Odor Threshold: Odorless 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>	

<p>4. FIRE HAZARDS 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: Not pertinent 4.6 Behavior in Fire: Not pertinent 4.7 Auto Ignition Temperature: Not flammable 4.8 Electrical Hazards: Not pertinent 4.9 Burning Rate: Not flammable 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>	<p>7. SHIPPING INFORMATION 7.1 Grades of Purity: 97.5+% 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</p> <p>8. HAZARD CLASSIFICATIONS 8.1 49 CFR Category: Keep Away From Food 8.2 49 CFR Class: 6.1 8.3 49 CFR Package Group: III 8.4 Marine Pollutant: No 8.5 NFPA Hazard Classification: <table border="0"> <tr> <td>Category</td> <td>Classification</td> </tr> <tr> <td>Health Hazard (Blue).....</td> <td>2</td> </tr> <tr> <td>Flammability (Red).....</td> <td>0</td> </tr> <tr> <td>Instability (Yellow).....</td> <td>0</td> </tr> </table> 8.6 EPA Reportable Quantity: 1000 pounds 8.7 EPA Pollution Category: C 8.8 RCRA Waste Number: Not listed 8.9 EPA FWPCA List: Yes</p>	Category	Classification	Health Hazard (Blue).....	2	Flammability (Red).....	0	Instability (Yellow).....	0
Category	Classification								
Health Hazard (Blue).....	2								
Flammability (Red).....	0								
Instability (Yellow).....	0								
<p>5. CHEMICAL REACTIVITY 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: Not pertinent 5.5 Polymerization: Not pertinent 5.6 Inhibitor of Polymerization: Not pertinent</p>	<p>9. PHYSICAL & CHEMICAL PROPERTIES 9.1 Physical State at 15° C and 1 atm: Solid 9.2 Molecular Weight: 41.99 9.3 Boiling Point at 1 atm: Very high 9.4 Freezing Point: Not pertinent 9.5 Critical Temperature: Not pertinent 9.6 Critical Pressure: Not pertinent 9.7 Specific Gravity: 2.79 at 20°C (solid) 9.8 Liquid Surface Tension: Not pertinent 9.9 Liquid Water Interfacial Tension: Not pertinent 9.10 Vapor (Gas) Specific Gravity: Not pertinent 9.11 Ratio of Specific Heats of Vapor (Gas): Not pertinent 9.12 Latent Heat of Vaporization: Not pertinent 9.13 Heat of Combustion: Not pertinent 9.14 Heat of Decomposition: Not pertinent 9.15 Heat of Solution: Not pertinent 9.16 Heat of Polymerization: Not pertinent 9.17 Heat of Fusion: 166.7 cal/g 9.18 Limiting Value: Currently not available 9.19 Reid Vapor Pressure: Currently not available</p>								
<p>6. WATER POLLUTION 6.1 Aquatic Toxicity: 419 ppm/96 hr/mosquito fish/TL_m/fresh water >300 ppm/48 hr/shrimp/LC₅₀/salt water 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: 1 Human Oral hazard: 2 Human Contact hazard: 1 Reduction of amenities: XX</p>									
<p>NOTES</p>									

SODIUM FLUORIDE

SDF

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
34	3.682		N O T		N O T		N O T
36	3.704		P E R T I N E N T		P E R T I N E N T		P E R T I N E N T
38	3.726						
40	3.749						
42	3.771						
44	3.793						
46	3.815						
48	3.838						
50	3.860						
52	3.882						
54	3.904						
56	3.926						
58	3.949						
60	3.971						
62	3.993						
64	4.015						
66	4.038						
68	4.060						
70	4.082						
72	4.104						
74	4.126						
76	4.149						
78	4.171						
80	4.193						
82	4.215						
84	4.238						