

ZINC CHLORIDE

ZCL

CAUTIONARY RESPONSE INFORMATION				7. SHIPPING INFORMATION									
Common Synonyms		Solid	White solid	4. FIRE HAZARDS									
Solid sinks and mixes with water.			<p>4.1 Flash Point: Not flammable</p> <p>4.2 Flammable Limits in Air: Not flammable</p> <p>4.3 Fire Extinguishing Agents: Not pertinent</p> <p>4.4 Fire Extinguishing Agents Not to Be Used: Not pertinent</p> <p>4.5 Special Hazards of Combustion Products: Not pertinent</p> <p>4.6 Behavior in Fire: Not pertinent</p> <p>4.7 Auto Ignition Temperature: Not flammable</p> <p>4.8 Electrical Hazards: Not pertinent</p> <p>4.9 Burning Rate: Not flammable</p> <p>4.10 Adiabatic Flame Temperature: Currently not available</p> <p>4.11 Stoichiometric Air to Fuel Ratio: Not pertinent</p> <p>4.12 Flame Temperature: Currently not available</p> <p>4.13 Combustion Molar Ratio (Reactant to Product): Not pertinent.</p> <p>4.14 Minimum Oxygen Concentration for Combustion (MOCC): Not listed</p>										
Keep people away. Avoid contact with solid and solution. Notify local health and pollution control agencies. Protect water intakes.			7.1 Grades of Purity: Reagent; USP; technical; 50% solution in water										
Fire		7.2 Storage Temperature: Ambient			7.3 Inert Atmosphere: No requirement								
Exposure		7.4 Venting: Currently not available			7.5 IMO Pollution Category: Currently not available								
Water Pollution		7.6 Ship Type: Currently not available			7.7 Barge Hull Type: Currently not available								
1. CORRECTIVE RESPONSE ACTIONS				8. HAZARD CLASSIFICATIONS									
Dilute and disperse Stop discharge Chemical and Physical Treatment: Absorb				8.1 49 CFR Category: Corrosive material									
2. CHEMICAL DESIGNATIONS				8.2 49 CFR Class: 8									
2.1 CG Compatibility Group: Not listed. 2.2 Formula: ZnCl ₂ 2.3 IMO/UN Designation: 8.0/1840 2.4 DOT ID No.: 2331 2.5 CAS Registry No.: 7646-85-7 2.6 NAERG Guide No.: 154 2.7 Standard Industrial Trade Classification: 52329				8.3 49 CFR Package Group: III									
3. HEALTH HAZARDS				8.4 Marine Pollutant: No									
3.1 Personal Protective Equipment: Goggles or face shield. 3.2 Symptoms Following Exposure: Solid or water solution is astringent and can irritate the eyes. When ingested, can cause intoxication, severe irritation of stomach, nausea, vomiting, and diarrhea. 3.3 Treatment of Exposure: INGESTION: give large volumes of water and induce vomiting; repeat process; call a doctor. EYES: wash with water for at least 15 min. 3.4 TLV-TWA: 1 mg/m ³ (fume) 3.5 TLV-STEL: 2 mg/m ³ (fume) 3.6 TLV-Ceiling: Not listed. 3.7 Toxicity by Ingestion: Grade 3; LD ₅₀ = 50 to 500 mg/kg 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: Solid irritates skin on prolonged contact. 3.12 Odor Threshold: Odorless 3.13 IDLH Value: 50 mg/m ³ (fume) 3.14 OSHA PEL-TWA: 1 mg/m ³ (fume) 3.15 OSHA PEL-STEL: Not listed. 3.16 OSHA PEL-Ceiling: Not listed. 3.17 EPA A EGL: Not listed				8.5 NFPA Hazard Classification:									
				<table border="0"> <tr> <td>Category</td><td>Classification</td></tr> <tr> <td>Health Hazard (Blue).....</td><td>3</td></tr> <tr> <td>Flammability (Red).....</td><td>0</td></tr> <tr> <td>Instability (Yellow).....</td><td>0</td></tr> </table>		Category	Classification	Health Hazard (Blue).....	3	Flammability (Red).....	0	Instability (Yellow).....	0
Category	Classification												
Health Hazard (Blue).....	3												
Flammability (Red).....	0												
Instability (Yellow).....	0												
4. CHEMICAL REACTIVITY				8.6 EPA Reportable Quantity: 1,000 pounds									
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				8.7 EPA Pollution Category: C									
5. CHEMICAL REACTIVITY				8.8 RCRA Waste Number: Not listed									
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				8.9 EPA FWPCA List: Yes									
9. PHYSICAL & CHEMICAL PROPERTIES													
9.1 Physical State at 15° C and 1 atm: Solid 9.2 Molecular Weight: 136.28 9.3 Boiling Point at 1 atm: Very high 9.4 Freezing Point: 541°F = 283°C = 556°K 9.5 Critical Temperature: Not pertinent 9.6 Critical Pressure: Not pertinent 9.7 Specific Gravity: 2.91 at 25°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: 40.6 cal/g 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
	NOT PERTINENT		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
34	346.799		NOT		NOT		NOT
36	351.699						
38	356.599						
40	361.500						
42	366.299		PERTINENT		PERTINENT		PERTINENT
44	371.199						
46	376.099						
48	381.000						
50	385.799						
52	390.699		NOT		NOT		NOT
54	395.599						
56	400.500						
58	405.399						
60	410.199						
62	415.099						
64	420.000						
66	424.899						
68	429.699						
70	434.599						
72	439.500						
74	444.399						
76	449.299						
78	454.099						
80	459.000						
82	463.899						
84	468.799						