

# ZINC AMMONIUM CHLORIDE

ZAC

CAUTIONARY RESPONSE INFORMATION				4. FIRE HAZARDS	7. SHIPPING INFORMATION
Common Synonyms Ammonium pentachlorozincate Ammonium zinc chloride	Solid	White	Odorless	<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: Currently not available</p> <p>4.7 Auto Ignition Temperature: Not pertinent</p> <p>4.8 Electrical Hazards: Not pertinent</p> <p>4.9 Burning Rate: Not pertinent</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>	<p>7.1 Grades of Purity: Commercial</p> <p>7.2 Storage Temperature: Ambient</p> <p>7.3 Inert Atmosphere: No requirement</p> <p>7.4 Venting: Open</p> <p>7.5 IMO Pollution Category: Currently not available</p> <p>7.6 Ship Type: Currently not available</p> <p>7.7 Barge Hull Type: Currently not available</p>
Fire	Not flammable.				8. HAZARD CLASSIFICATIONS
Exposure	<p>CALL FOR MEDICAL AID. DUST</p> <p>Irritating to eyes, nose and throat.</p> <p>If inhaled will cause coughing or difficult breathing.</p> <p>If in eyes, hold eyelids open and flush with plenty of water.</p> <p>If breathing has stopped, give artificial respiration.</p> <p>If breathing is difficult, give oxygen.</p> <p>SOLID</p> <p>Irritating to skin and eyes.</p> <p>If swallowed will cause nausea and vomiting.</p> <p>Remove contaminated clothing and shoes.</p> <p>Flush affected areas with plenty of water.</p> <p>IF IN EYES, hold eyelids open and flush with plenty of water.</p> <p>IF SWALLOWED and victim is CONSCIOUS, have victim drink water or milk and have victim induce vomiting.</p> <p>IF SWALLOWED and victim is UNCONSCIOUS OR HAVING CONVULSIONS, do nothing except keep victim warm.</p>				<p>8.1 49 CFR Category: ORM-E</p> <p>8.2 49 CFR Class: Not pertinent</p> <p>8.3 49 CFR Package Group: Not listed</p> <p>8.4 Marine Pollutant: No</p> <p>8.5 NFPA Hazard Classification: Not listed</p> <p>8.6 EPA Reportable Quantity: 1000 pounds</p> <p>8.7 EPA Pollution Category: C</p> <p>8.8 RCRA Waste Number: Not listed</p> <p>8.9 EPA FWPCA List: Yes</p>
Water Pollution	<p>Effect of low concentrations on aquatic life is unknown.</p> <p>May be dangerous if it enters water intakes.</p> <p>Notify local health and wildlife officials.</p> <p>Notify operators of nearby water intakes.</p>				9. PHYSICAL & CHEMICAL PROPERTIES
1. CORRECTIVE RESPONSE ACTIONS	Dilute and disperse Stop discharge	2. CHEMICAL DESIGNATIONS		5. CHEMICAL REACTIVITY	9.1 Physical State at 15° C and 1 atm: Solid
		<p>2.1 CG Compatibility Group: Not listed.</p> <p>2.2 Formula: ZnCl<sub>2</sub>·3NH<sub>4</sub>Cl</p> <p>2.3 IMO/UN Designation: Not listed</p> <p>2.4 DOT ID No.: 9154</p> <p>2.5 CAS Registry No.: 52628-25-8</p> <p>2.6 NAERG Guide No.: 171</p> <p>2.7 Standard Industrial Trade Classification: 52329</p>		<p>5.1 Reactivity with Water: No reaction</p> <p>5.2 Reactivity with Common Materials: Currently not available</p> <p>5.3 Stability During Transport: Stable</p> <p>5.4 Neutralizing Agents for Acids and Caustics: Not pertinent</p> <p>5.5 Polymerization: Not pertinent</p> <p>5.6 Inhibitor of Polymerization: Not pertinent</p>	9.2 Molecular Weight: 296.8
3. HEALTH HAZARDS				6. WATER POLLUTION	9.3 Boiling Point at 1 atm: (sublimes) 644°F = 340°C = 613°K
3.1 Personal Protective Equipment: Dust mask; goggles or face shield; protective gloves					9.4 Freezing Point: Not pertinent
3.2 Symptoms Following Exposure: Inhalation of dust irritates nose and throat. Ingestion can cause irritation or corrosion of the alimentary tract. Contact with eyes or skin causes irritation.					9.5 Critical Temperature: Not pertinent
3.3 Treatment of Exposure: INHALATION: remove from exposure; begin artificial respiration if breathing has ceased. INGESTION: induce vomiting, followed by prompt and complete gastric lavage, catharsis, and demulcents. EYES: flush with water for at least 15 min. SKIN: flush with water.					9.6 Critical Pressure: Not pertinent
3.4 TLV-TWA: Not listed.					9.7 Specific Gravity: 1.81 at 20°C (solid)
3.5 TLV-STEL: Not listed.					9.8 Liquid Surface Tension: Not pertinent
3.6 TLV-Ceiling: Not listed.					9.9 Liquid Water Interfacial Tension: Not pertinent
3.7 Toxicity by Ingestion: Grade 2; LD <sub>50</sub> = 0.5-5 g/kg					9.10 Vapor (Gas) Specific Gravity: Not pertinent
3.8 Toxicity by Inhalation: Currently not available.					9.11 Ratio of Specific Heats of Vapor (Gas): Not pertinent
3.9 Chronic Toxicity: Currently not available					9.12 Latent Heat of Vaporization: Not pertinent
3.10 Vapor (Gas) Irritant Characteristics: Currently not available					9.13 Heat of Combustion: Not pertinent
3.11 Liquid or Solid Characteristics: Currently not available					9.14 Heat of Decomposition: Not pertinent
3.12 Odor Threshold: Currently not available					9.15 Heat of Solution: Not pertinent
3.13 IDLH Value: Not listed.					9.16 Heat of Polymerization: Not pertinent
3.14 OSHA PEL-TWA: Not listed.					9.17 Heat of Fusion: Currently not available
3.15 OSHA PEL-STEL: Not listed.					9.18 Limiting Value: Currently not available
3.16 OSHA PEL-Ceiling: Not listed.					9.19 Reid Vapor Pressure: Currently not available
3.17 EPA AEGL: Not listed					
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
VERY SOLUBLE			NOT PERTINENT		NOT PERTINENT		NOT PERTINENT