

ZINC BROMIDE

ZBR

CAUTIONARY RESPONSE INFORMATION				4. FIRE HAZARDS	7. SHIPPING INFORMATION	
Common Synonyms	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: Technical, 98+%</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 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.</p> <p>SOLID Irritating to skin and eyes. If swallowed will cause nausea and vomiting. 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 and have victim induce vomiting. IF SWALLOWED and victim is UNCONSCIOUS OR HAVING CONVULSIONS, do nothing except keep victim warm.</p>			<p>8.1 49 CFR Category: Not listed.</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: Yes</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>	8. HAZARD CLASSIFICATIONS	
Water Pollution	<p>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.</p>				9. PHYSICAL & CHEMICAL PROPERTIES	
1. CORRECTIVE RESPONSE ACTIONS	Dilute and disperse Stop discharge	2. CHEMICAL DESIGNATIONS		<p>5. CHEMICAL REACTIVITY</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>	9.1 Physical State at 15° C and 1 atm: Solid	
3. HEALTH HAZARDS					<p>9.2 Molecular Weight: 225.18</p> <p>9.3 Boiling Point at 1 atm: Not pertinent (decomposes)</p> <p>9.4 Freezing Point: Not pertinent</p> <p>9.5 Critical Temperature: Not pertinent</p> <p>9.6 Critical Pressure: Not pertinent</p> <p>9.7 Specific Gravity: 4.22 at 20°C (solid)</p> <p>9.8 Liquid Surface Tension: Not pertinent</p> <p>9.9 Liquid Water Interfacial Tension: Not pertinent</p> <p>9.10 Vapor (Gas) Specific Gravity: Not pertinent</p> <p>9.11 Ratio of Specific Heats of Vapor (Gas): Not pertinent</p> <p>9.12 Latent Heat of Vaporization: Not pertinent</p> <p>9.13 Heat of Combustion: Not pertinent</p> <p>9.14 Heat of Decomposition: Not pertinent</p> <p>9.15 Heat of Solution: Not pertinent</p> <p>9.16 Heat of Polymerization: Not pertinent</p> <p>9.17 Heat of Fusion: Currently not available</p> <p>9.18 Limiting Value: Currently not available</p> <p>9.19 Reid Vapor Pressure: Currently not available</p>	9. PHYSICAL & CHEMICAL PROPERTIES
3.1 Personal Protective Equipment: Chemical goggles or face shield; rubber gloves; dust mask					9.10 Vapor (Gas) Specific Gravity: Not pertinent	
3.2 Symptoms Following Exposure: Inhalation of dust may irritate nose and throat. Ingestion can cause irritation or corrosion of the alimentary tract; if large amount is swallowed and not thrown up, drowsiness and other symptoms of bromide poisoning may occur. Contact with eyes or skin causes irritation.					9.11 Ratio of Specific Heats of Vapor (Gas): Not pertinent	
3.3 Treatment of Exposure: INHALATION: move to fresh air. INGESTION: give large amount of water; induce vomiting, followed by prompt and complete gastric lavage, catharsis, and demulcents. EYES or SKIN: wash immediately with large volumes of water.					9.12 Latent Heat of Vaporization: Not pertinent	
3.4 TLV-TWA: Not listed.					9.13 Heat of Combustion: Not pertinent	
3.5 TLV-STEL: Not listed.					9.14 Heat of Decomposition: Not pertinent	
3.6 TLV-Ceiling: Not listed.					9.15 Heat of Solution: Not pertinent	
3.7 Toxicity by Ingestion: Grade 2; LD ₅₀ = 0.5-5 g/kg					9.16 Heat of Polymerization: Not pertinent	
3.8 Toxicity by Inhalation: Currently not available.					9.17 Heat of Fusion: Currently not available	
3.9 Chronic Toxicity: Currently not available					9.18 Limiting Value: Currently not available	
3.10 Vapor (Gas) Irritant Characteristics: Currently not available					9.19 Reid Vapor Pressure: 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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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	341.399		NOT		NOT		NOT
36	347.800						
38	354.299						
40	360.799						
42	367.199		PERTINENT		PERTINENT		PERTINENT
44	373.699						
46	380.099						
48	386.500						
50	393.000						
52	399.399		NOT		NOT		NOT
54	405.899						
56	412.299						
58	418.799		NOT		NOT		NOT
60	425.199						
62	431.699						
64	438.099						
66	444.500						
68	451.000						
70	457.399						
72	463.899						
74	470.299						
76	476.799						
78	483.199						
80	489.699						
82	496.099						
84	502.500						