

# CADMIUM BROMIDE

CMB

CAUTIONARY RESPONSE INFORMATION			
Common Synonyms	Solid	White	Odorless
Cadmium bromide tetrahydrate Mixes with water.			
KEEP PEOPLE AWAY. AVOID CONTACT WITH SOLID AND DUST. Wear dust respirator and rubber overclothing (including gloves). Notify local health and pollution control agencies. Protect water intakes.			
Fire	Not flammable. POISONOUS GASES MAY BE PRODUCED IN FIRE. Wear goggles and self-contained breathing apparatus.		
Exposure	CALL FOR MEDICAL AID. DUST POISONOUS IF INHALED. 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.  SOLID POISONOUS IF SWALLOWED. Irritating to skin and eyes. If swallowed will cause nausea, vomiting and loss of consciousness. Remove contaminated clothing and shoes. Flush affected area 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.		
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	2.1 CG Compatibility Group: Not listed. 2.2 Formula: CdBr <sub>4</sub> H <sub>2</sub> O 2.3 IMO/UN Designation: Not listed 2.4 DOT ID No.: 2570 2.5 CAS Registry No.: 7789-42-6 2.6 NAERG Guide No.: 154 2.7 Standard Industrial Trade Classification: 52329
<b>3. HEALTH HAZARDS</b>	
3.1 Personal Protective Equipment: Dust mask; goggles or face shield; rubber gloves 3.2 Symptoms Following Exposure: Inhalation causes coughing, sneezing, symptoms of lung damage. Ingestion produces severe toxic symptoms; both kidney and liver injuries may occur. Contact with eyes causes irritation. 3.3 Treatment of Exposure: INHALATION: remove patient to fresh air; seek medical attention. INGESTION: induce vomiting; alay GI irritation by giving milk or egg whites at frequent intervals; perform gastric lavage; seek medical attention. EYES: flush with water for at least 15 min. 3.4 TLV-TWA: 0.01 mg Cd/m <sup>3</sup> inhalable; 0.002 mg Cd/m <sup>3</sup> respirable fraction. 3.5 TLV-STEL: Not listed. 3.6 TLV-Ceiling: Not listed. 3.7 Toxicity by Ingestion: Grade 4; LD <sub>50</sub> <50 mg/kg 3.8 Toxicity by Inhalation: Currently not available. 3.9 Chronic Toxicity: Delayed liver, kidney, and lung damage has followed respiratory exposure to cadmium salts in industry. 3.10 Vapor (Gas) Irritant Characteristics: Currently not available 3.11 Liquor or Solid Characteristics: Currently not available 3.12 Odor Threshold: Currently not available 3.13 IDLH Value: 9 mg/m <sup>3</sup> as Cd 3.14 OSHA PEL-TWA: 0.005 mg/m <sup>3</sup> as Cd 3.15 OSHA PEL-STEL: Not listed. 3.16 OSHA PEL-Ceiling: Not listed. 3.17 EPA AEGL: Not listed	

4. FIRE HAZARDS	7. SHIPPING INFORMATION
4.1 Flash Point: Not flammable	7.1 Grades of Purity: Commercial, 99.5%; Anhydrous, 99+%
4.2 Flammable Limits in Air: Not flammable	7.2 Storage Temperature: Ambient
4.3 Fire Extinguishing Agents: Not pertinent	7.3 Inert Atmosphere: No requirement
4.4 Fire Extinguishing Agents Not to Be Used: Not pertinent	7.4 Venting: Open
4.5 Special Hazards of Combustion Products: Toxic cadmium oxide fumes may form in fires.	7.5 IMO Pollution Category: Currently not available
4.6 Behavior in Fire: Currently not available	7.6 Ship Type: Currently not available
4.7 Auto Ignition Temperature: Not pertinent	7.7 Barge Hull Type: Currently not available
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	
8. HAZARD CLASSIFICATIONS	9. PHYSICAL & CHEMICAL PROPERTIES
8.1 49 CFR Category: Poison	9.1 Physical State at 15° C and 1 atm: Solid
8.2 49 CFR Class: 6.1	9.2 Molecular Weight: 344.27
8.3 49 CFR Package Group: II	9.3 Boiling Point at 1 atm: Not pertinent (decomposes)
8.4 Marine Pollutant: Yes	9.4 Freezing Point: Not pertinent
8.5 NFPA Hazard Classification: Not listed	9.5 Critical Temperature: Not pertinent
8.6 EPA Reportable Quantity: 10 pounds	9.6 Critical Pressure: Not pertinent
8.7 EPA Pollution Category: A	9.7 Specific Gravity: >1.1 at 20°C (solid)
8.8 RCRA Waste Number: Not listed	9.8 Liquid Surface Tension: Not pertinent
8.9 EPA FWPCA List: Yes	9.9 Liquid Water Interfacial Tension: Not pertinent
5. CHEMICAL REACTIVITY	6. WATER POLLUTION
5.1 Reactivity with Water: No reaction	6.1 Aquatic Toxicity: Currently not available
5.2 Reactivity with Common Materials: Currently not available	6.2 Waterfowl Toxicity: Currently not available
5.3 Stability During Transport: Stable	6.3 Biological Oxygen Demand (BOD): None
5.4 Neutralizing Agents for Acids and Caustics: Not pertinent	6.4 Food Chain Concentration Potential: Concentrated by shellfish.
5.5 Polymerization: Not pertinent	6.5 GESAMP Hazard Profile: Not listed
5.6 Inhibitor of Polymerization: Not pertinent	
	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	58.600		NOT		NOT		NOT
36	60.960						
38	63.310						
40	65.669						
42	68.020		PERTINENT		PERTINENT		PERTINENT
44	70.379						
46	72.730						
48	75.089						
50	77.450						
52	79.799						
54	82.160		PERTINENT		PERTINENT		PERTINENT
56	84.509						
58	86.870						
60	89.219						
62	91.580						
64	93.929						
66	96.290						
68	98.650						
70	101.000						
72	103.400						
74	105.700						
76	108.099						
78	110.400						
80	112.799						
82	115.099						
84	117.500						