



# Material Safety Data Sheet

NFPA	HMIS	Personal Protective Equipment						
	<table border="1" style="margin: auto;"> <tr> <td style="background-color: #00FFFF;">Health Hazard</td> <td style="text-align: center; border: 1px solid black;">2</td> </tr> <tr> <td style="background-color: #FFC0CB;">Fire Hazard</td> <td style="text-align: center; border: 1px solid black;">0</td> </tr> <tr> <td style="background-color: #FFFF00;">Reactivity</td> <td style="text-align: center; border: 1px solid black;">0</td> </tr> </table>	Health Hazard	2	Fire Hazard	0	Reactivity	0	 See Section 15.
Health Hazard	2							
Fire Hazard	0							
Reactivity	0							

Section 1. Chemical Product and Company Identification		Page Number: 1
<b>Common Name/Trade Name</b>	<b>Cobalt Bromide</b>	
<b>Manufacturer</b>	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248	
<b>Commercial Name(s)</b>	Not available.	
<b>Synonym</b>	Cobalt dibromide; Cobaltous bromide	
<b>Chemical Name</b>	Cobalt (II) Bromide	
<b>Chemical Family</b>	Not available.	
<b>Chemical Formula</b>	CoBr <sub>2</sub>	
<b>Supplier</b>	SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248	
	<b>Catalog Number(s)</b>	C1079
	<b>CAS#</b>	7789-43-7
	<b>RTECS</b>	GF9595000
	<b>TSCA</b>	TSCA 8(b) inventory: Cobalt Bromide
	<b>CI#</b>	Not available.
<b>IN CASE OF EMERGENCY</b> <a href="tel:8004249300">CHEMTREC (24hr) 800-424-9300</a>  CALL (310) 516-8000		

Section 2. Composition and Information on Ingredients					
Name	CAS #	Exposure Limits			% by Weight
		TWA (mg/m <sup>3</sup> )	STEL (mg/m <sup>3</sup> )	CEIL (mg/m <sup>3</sup> )	
1) Cobalt Bromide	7789-43-7	0.1			100
<b>Toxicological Data on Ingredients</b> <b>Cobalt Bromide:</b> ORAL (LD50):      Acute: 406 mg/kg [Rat].					

Section 3. Hazards Identification	
<b>Potential Acute Health Effects</b>	Hazardous in case of ingestion. Slightly hazardous in case of skin contact (irritant), of eye contact (irritant), of inhalation.
<b>Potential Chronic Health Effects</b>	<b>CARCINOGENIC EFFECTS:</b> Classified A3 (Proven for animal.) by ACGIH. <b>MUTAGENIC EFFECTS:</b> Not available. <b>TERATOGENIC EFFECTS:</b> Not available. <b>DEVELOPMENTAL TOXICITY:</b> Not available. Repeated or prolonged exposure is not known to aggravate medical condition.

**Section 4. First Aid Measures**

<b>Eye Contact</b>	Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention if irritation occurs.
<b>Skin Contact</b>	Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops. Cold water may be used.
<b>Serious Skin Contact</b>	Not available.
<b>Inhalation</b>	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
<b>Serious Inhalation</b>	Not available.
<b>Ingestion</b>	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.
<b>Serious Ingestion</b>	Not available.

**Section 5. Fire and Explosion Data**

<b>Flammability of the Product</b>	Non-flammable.
<b>Auto-Ignition Temperature</b>	Not applicable.
<b>Flash Points</b>	Not applicable.
<b>Flammable Limits</b>	Not applicable.
<b>Products of Combustion</b>	Not available.
<b>Fire Hazards in Presence of Various Substances</b>	Not applicable.
<b>Explosion Hazards in Presence of Various Substances</b>	Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.
<b>Fire Fighting Media and Instructions</b>	Not applicable.
<b>Special Remarks on Fire Hazards</b>	Not available.
<b>Special Remarks on Explosion Hazards</b>	Not available.

**Section 6. Accidental Release Measures**

<b>Small Spill</b>	Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.
<b>Large Spill</b>	Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

**Section 7. Handling and Storage**

<b>Precautions</b>	Do not ingest. Do not breathe dust. Wear suitable protective clothing. If ingested, seek medical advice immediately and show the container or the label. Keep away from incompatibles such as oxidizing agents, metals.
<b>Storage</b>	Keep container tightly closed. Keep container in a cool, well-ventilated area. Hygroscopic

**Section 8. Exposure Controls/Personal Protection**

<b>Engineering Controls</b>	Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
<b>Personal Protection</b>	Safety glasses. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.
<b>Personal Protection in Case of a Large Spill</b>	Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.
<b>Exposure Limits</b>	TWA: 0.02 (mg(Co)/m <sup>3</sup> ) from ACGIH (TLV) [United States] TWA: 0.1 (mg(Co)/m <sup>3</sup> ) from OSHA (PEL) [United States] TWA: 0.1 (mg(Co)/m <sup>3</sup> ) [United Kingdom (UK)] TWA: 0.02 (mg(Co)/m <sup>3</sup> ) [Canada]  Consult local authorities for acceptable exposure limits.

**Section 9. Physical and Chemical Properties**

<b>Physical state and appearance</b>	Solid. (Granular solid.)	<b>Odor</b>	Not available.
<b>Molecular Weight</b>	218.75 g/mole	<b>Taste</b>	Not available.
<b>pH (1% soln/water)</b>	Not available.	<b>Color</b>	Green.
<b>Boiling Point</b>	Not available.		
<b>Melting Point</b>	678°C (1252.4°F)		
<b>Critical Temperature</b>	Not available.		
<b>Specific Gravity</b>	4.909 (Water = 1)		
<b>Vapor Pressure</b>	Not applicable.		
<b>Vapor Density</b>	Not available.		
<b>Volatility</b>	Not available.		
<b>Odor Threshold</b>	Not available.		
<b>Water/Oil Dist. Coeff.</b>	Not available.		
<b>Ionicity (in Water)</b>	Not available.		
<b>Dispersion Properties</b>	See solubility in water, methanol, diethyl ether.		
<b>Solubility</b>	Soluble in cold water, hot water, methanol, diethyl ether. Solubility in Water: 112 parts/100 parts water at 20 deg. C.; 66.7 g/100 cc water at 59 deg. C; 681. g/100 cc water at 97 deg. C. Solubility in Methanol: 58.6 g/100 cc methanol at 30 deg. C. Solubility in Ethanol: 77.1 g/100 cc ethanol at 20 deg. C.		

**Section 10. Stability and Reactivity Data**

<b>Stability</b>	The product is stable.
<b>Instability Temperature</b>	Not available.
<b>Conditions of Instability</b>	Incompatible materials
<b>Incompatibility with various substances</b>	Reactive with oxidizing agents, metals.
<b>Corrosivity</b>	Not available.
<b>Special Remarks on Reactivity</b>	Incompatible with alkali metals (potassium, sodium, etc.)
<b>Special Remarks on Corrosivity</b>	Not available.
<b>Polymerization</b>	Will not occur.

**Section 11. Toxicological Information**

<b>Routes of Entry</b>	Inhalation. Ingestion.
<b>Toxicity to Animals</b>	Acute oral toxicity (LD50): 406 mg/kg [Rat].
<b>Chronic Effects on Humans</b>	<b>CARCINOGENIC EFFECTS:</b> Classified A3 (Proven for animal.) by ACGIH.
<b>Other Toxic Effects on Humans</b>	Hazardous in case of ingestion. Slightly hazardous in case of skin contact (irritant), of inhalation.
<b>Special Remarks on Toxicity to Animals</b>	Not available.
<b>Special Remarks on Chronic Effects on Humans</b>	Not available.
<b>Special Remarks on other Toxic Effects on Humans</b>	Acute Potential Health Effects Skin: May cause skin irritation. May cause dermatitis, an allergic reaction. Eyes: May cause eye irritation. Inhalation: May cause respiratory tract irritation with coughing, shortness of breath, decreased pulmonary function, dermatitis. Ingestion: Harmful if swallowed. May cause abdominal pain, vomiting, hypermotility, diarrhea, anorexia/weight loss, flushing, rash, tinnitus and nerve deafness, hyperglycemia. May affect the cardiovascular system (vasodilation, hypotension), blood (polycythemia), behavior/central nervous system/nervous system (CNS depression, headache, ataxia, tremor, fatigue, disorientation, confusion, agitation, aggression, hallucinations, somnolence, convulsions, paralysis), urinary system (Kidneys - renal failure, anuria), liver. Chronic Potential Health Effects Ingestion: Prolonged or repeated ingestion may decrease thyroid function and cause development of goiter. It may affect the cardiovascular system (increased heart rate, hypotension), and blood/bone marrow (changes in blood lipids, hyperplasia of bone marrow).

**Section 12. Ecological Information**

<b>Ecotoxicity</b>	Not available.
<b>BOD5 and COD</b>	Not available.
<b>Products of Biodegradation</b>	Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
<b>Toxicity of the Products of Biodegradation</b>	The products of degradation are less toxic than the product itself.
<b>Special Remarks on the Products of Biodegradation</b>	Not available.

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**Section 13. Disposal Considerations**

**Waste Disposal** Waste must be disposed of in accordance with federal, state and local environmental control regulations.

**Section 14. Transport Information**

**DOT Classification** Not a DOT controlled material (United States).

**Identification** Not applicable.

**Special Provisions for Transport** Not applicable.

**DOT (Pictograms)**

**Section 15. Other Regulatory Information and Pictograms**

**Federal and State Regulations**

Connecticut hazardous material survey.: Cobalt Bromide  
 Illinois toxic substances disclosure to employee act: Cobalt Bromide  
 Illinois chemical safety act: Cobalt Bromide  
 New York release reporting list: Cobalt Bromide  
 Pennsylvania RTK: Cobalt Bromide  
 Massachusetts RTK: Cobalt Bromide  
 Massachusetts spill list: Cobalt Bromide  
 New Jersey: Cobalt Bromide  
 New Jersey spill list: Cobalt Bromide  
 Louisiana spill reporting: Cobalt Bromide  
 TSCA 8(b) inventory: Cobalt Bromide  
 SARA 313 toxic chemical notification and release reporting: Cobalt (Listed as Cobalt and Cobalt compounds)  
 CERCLA: Hazardous substances.: Cobalt Bromide: 1000 lbs. (453.6 kg)

**California Proposition 65 Warnings**

California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: No products were found.  
 California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: No products were found.

**Other Regulations**

OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).  
 EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances (EINECS No. 232-266-7).  
 Canada: Listed on Canadian Non-Domestic Substance List (NDSL).  
 China: Not listed on National Inventory.  
 Japan: Listed on National Inventory (ENCS).  
 Korea: Listed on National Inventory (KECI).  
 Philippines: Listed on National Inventory (PICCS).  
 Australia: Listed on AICS.

**Other Classifications**

**WHMIS (Canada)** CLASS D-1B: Material causing immediate and serious toxic effects (TOXIC).

**DSCL (EEC)**

R22- Harmful if swallowed.	S36/37- Wear suitable protective clothing and gloves
R40- Limited evidence of a carcinogenic effect.	S46- If swallowed, seek medical advice immediately and show this container or label.

**HMS (U.S.A.)**

Health Hazard	2
Fire Hazard	0
Reactivity	0
Personal Protection	E

**National Fire Protection Association (U.S.A.)**

Health



Flammability

Reactivity

Specific hazard

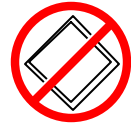
WHMIS (Canada)  
(Pictograms)



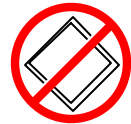
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TDG (Canada)  
(Pictograms)



ADR (Europe)  
(Pictograms)



### Protective Equipment



Gloves



Lab coat.



Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.



Safety glasses

### Section 16. Other Information

MSDS Code C0573

References Not available.

Other Special Considerations Major Uses: in hygrometers, as catalyst for organic reactions

Validated by Sonia Owen on 6/24/2009.

Verified by Sonia Owen.  
Printed 6/24/2009.

CALL (310) 516-8000

[Notice to Reader](#)

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*All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Spectrum Quality Products, Inc. assumes no responsibility for the completeness or accuracy of the information contained herein.*