

Issue Date 09-Apr-2015

Revision Date 09-Apr-2015

Version 1

1. IDENTIFICATION

Product identifier

Product Name Cupric Bromide, Reagent Grade

Other means of identification

Product Code 1410
UN/ID no. UN3260
Synonyms Copper (II) Bromide

Recommended use of the chemical and restrictions on use

Recommended Use Laboratory chemicals.
Uses advised against No information available

Details of the supplier of the safety data sheet

Manufacturer Address

Harrell Industries, Inc.
 2495 Commerce Drive
 Rock Hill, SC 29730

www.harrellindustries.com

Emergency telephone number

Company Phone Number 803-327-6335
Fax Number 803-327-7808
24 Hour Emergency Phone Number 800 633-8253 (PERS)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)


Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1

Label elements

Emergency Overview

Danger

Hazard statements
 Harmful if swallowed
 Causes severe skin burns and eye damage
 Very toxic to aquatic life with long lasting effects



WARNING! HARMFUL IF SWALLOWED OR INHALED. AFFECTS CENTRAL NERVOUS SYSTEM, BRAIN AND EYES. MAY

CAUSE IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT.

Appearance glistening black crystals.

Physical state Solid

Odor slight odor of bromine

Precautionary Statements - Prevention

Avoid breathing dust/fume/gas/mist/vapors/spray

Wash skin thoroughly after handling

Do not eat, drink or smoke when using this product

Wear protective gloves/protective clothing/eye protection/face protection

Copper salts may produce conjunctivitis or even ulceration of the cornea.

Causes irritation to skin. Symptoms include redness, itching and pain.

May produce eczema

May result in ulceration and perforation of respiratory tract. When heated, it may give off a coppery fume, which can cause symptoms similar to the common cold (chills and stuffiness of the head).

Causes irritation to the respiratory tract. Symptoms may include coughing, shortness of breath.

Single doses of bromide or copper salts can cause burning pain in the mouth, esophagus, and stomach. Hemorrhagic gastritis, nausea, vomiting, abdominal pain, metallic taste, and diarrhea may occur. If vomiting does not occur immediately, systematic poisoning can occur. For copper salts, symptoms may include capillary damage, headache, cold sweat, weak pulse, kidney and liver damage, central nervous system excitation followed by depression, blood effects, jaundice, paralysis and coma. Death may occur from shock or renal failure. Symptoms of systematic poisoning may include irritability, dizziness, confusion, skin rash, blurred vision and other eye effects, mania and coma.

Hazards not otherwise classified (HNOC)

Not applicable

Other Information

Not applicable

Unknown acute toxicity

100% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Synonyms

Copper (II) Bromide.

Formula

CuBr₂

Chemical Name	CAS No.	Weight-%
Cupric Bromide	7789-45-9	99

4. FIRST AID MEASURES

Description of first aid measures

Eye contact

Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician if irritation occurs.

Skin contact

Wash contaminated clothing before reuse. Wash off immediately with plenty of water for at least 15 minutes. Wipe off excess material from skin. Remove contaminated clothing and shoes. Call a physician.

Inhalation

If not breathing, give artificial respiration. Remove to fresh air. Call a physician. Administer oxygen if breathing is difficult.

Ingestion

Call a physician immediately. Never give anything by mouth to an unconscious person. Induce vomiting immediately as directed by medical personnel.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Water spray may be used to keep fire exposed containers cool.

Unsuitable extinguishing media Caution: Use of water spray when fighting fire may be inefficient.

Specific hazards arising from the chemical

No information available.

Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation, especially in confined areas.

Environmental precautions

Environmental precautions See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers. Use a clean up method that does not generate dust.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible materials Strong oxidizing agents. Bases. Acetylene. Sodium Hypobromite. Nitromethane.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Guidelines This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Cupric Bromide	TWA: 1 mg/m ³ Cu dust and mist	-	IDLH: 100 mg/m ³ Cu dust and mist

7789-45-9		TWA: 1 mg/m ³ Cu dust and mist
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Appropriate engineering controls

Engineering Controls Showers
 Eyewash stations
 Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection No special technical protective measures are necessary.

Skin and body protection No special technical protective measures are necessary.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES**Information on basic physical and chemical properties**

Physical state	Solid	Odor	slight odor of bromine
Appearance	glistening black crystals.	Odor threshold	No information available
Color	black		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No information available	
Melting point / freezing point	498 °C / 928 °F	
Boiling point / boiling range	900 °C / 1652 °F	
Flash point	No information available	
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	No information available	
Vapor density	No information available	
Relative density	No information available	
Water solubility	Soluble in water	
Solubility in other solvents	126parts/100 parts water, alcohol, acetone, ammonia; insoluble in benzene	
Partition coefficient	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Kinematic viscosity	No information available	
Dynamic viscosity	No information available	
Explosive properties	No information available	
Oxidizing properties	No information available	

Other Information

Softening point	No information available
Molecular weight	No information available
VOC Content (%)	No information available
Density	No information available
Bulk density	No information available

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Extremes of temperature and direct sunlight.

Incompatible materials

Strong oxidizing agents. Bases. Acetylene. Sodium Hypobromite. Nitromethane.

Hazardous Decomposition Products

Oxides of the contained metal and halogen, possibly also free, or ionic halogen.

11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure**

Product Information	No data available
Inhalation	No data available.
Eye contact	No data available.
Skin contact	No data available.
Ingestion	No data available.

Information on toxicological effects

Symptoms No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization	No information available.
Germ cell mutagenicity	No information available.
Carcinogenicity	No information available.
Reproductive toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Aspiration hazard	No information available.

Numerical measures of toxicity - Product Information**12. ECOLOGICAL INFORMATION****Ecotoxicity**

100% of the mixture consists of components(s) of unknown hazards to the aquatic environment

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging Do not reuse container.

Chemical Name	California Hazardous Waste Status
Cupric Bromide 7789-45-9	Toxic

14. TRANSPORT INFORMATION

DOT	Regulated
UN/ID no.	UN3260
Proper shipping name	Corrosive solid, Acidic, Inorganic, N.O.S. (Cupric Bromide, ACS, Reagent grade)
Hazard Class	8
Packing Group	II
TDG	Regulated
UN/ID no.	UN3260
Proper shipping name	Corrosive solid, Acidic, Inorganic, N.O.S. (Cupric Bromide, ACS, Reagent grade)
Hazard Class	8
Packing Group	II
Marine pollutant	This product contains a chemical which is listed as a marine pollutant according to TDG.
MEX	Regulated
UN/ID no.	UN3260
Proper shipping name	Corrosive solid, Acidic, Inorganic, N.O.S. (Cupric Bromide, ACS, Reagent grade)
Hazard Class	8
Packing Group	II
ICAO (air)	Regulated
UN/ID no.	UN3260
Proper shipping name	Corrosive solid, Acidic, Inorganic, N.O.S. (Cupric Bromide, ACS, Reagent grade)
Hazard Class	8
Packing Group	II
IATA	Regulated
UN/ID no.	UN3260
Proper shipping name	Corrosive solid, Acidic, Inorganic, N.O.S. (Cupric Bromide, ACS, Reagent grade)
Hazard Class	8
Packing Group	II
IMDG	Regulated
UN/ID no.	UN3260
Proper shipping name	Corrosive solid, Acidic, Inorganic, N.O.S. (Cupric Bromide, ACS, Reagent grade)
Hazard Class	8
Packing Group	II
Marine pollutant	This product contains a chemical which is listed as a marine pollutant according to IMDG/IMO
RID	Regulated
UN/ID no.	UN3260
Proper shipping name	Corrosive solid, Acidic, Inorganic, N.O.S. (Cupric Bromide, ACS, Reagent grade)
Hazard Class	8
Packing Group	II
ADR	Regulated
UN/ID no.	UN3260
Proper shipping name	Corrosive solid, Acidic, Inorganic, N.O.S. (Cupric Bromide, ACS, Reagent grade)
Hazard Class	8
Packing Group	II
ADN	Regulated

UN Number	UN3260
Proper shipping name	Corrosive solid, Acidic, Inorganic, N.O.S. (Cupric Bromide, ACS, Reagent grade)
Hazard Class	8
Packing Group	II

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	SARA 313 - Threshold Values %
Cupric Bromide - 7789-45-9	1.0

SARA 311/312 Hazard Categories

Acute health hazard	No
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Cupric Bromide 7789-45-9	-	X	-	-

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania

Cupric Bromide 7789-45-9	X	-	X
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U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

NFPA	Health hazards 2	Flammability 0	Instability 0	Physical and Chemical Properties -
HMIS	Health hazards 2	Flammability 0	Physical hazards 0	Personal protection X

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Revision Note

No information available

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet