According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial preparation date: 02.20.2018

Cupric Bromide,

SECTION 1: Identification

Product identifier

Product name: Cupric Bromide, Product code: S25277A

Recommended use of the product and restriction on use

Relevant identified uses: Not determined or not applicable. Uses advised against: Not determined or not applicable. Reasons why uses advised against: Not determined or not applicable.

Manufacturer or supplier details

Manufacturer: Supplier:

AquaPhoenix Scientific	Fisher Science Education
860 Gitts Run Road	6771 Silver Crest Road
Hanover	Nazareth
PA 17331	PA 18064
(717) 632-1291	800 955-1177

Emergency telephone number: United States

Emergency Telephone No.: 800-255-3924

SECTION 2: Hazard(s) identification

GHS classification:

Acute toxicity (oral), category 4 Skin corrosion, category 1B Combustible dust

Label elements

Hazard pictograms:



Signal word: Danger

Hazard statements:

H900 May form combustible dust concentrations in air

H302 Harmful if swallowed

H314 Causes severe skin burns and eye damage

Precautionary statements:

P264 Wash skin thoroughly after handling

P270 Do not eat, drink or smoke when using this product

P260 Do not breathe dust/fume/gas/mist/vapors/spray

P280 Wear protective gloves/protective clothing/eye protection/face protection

P321 Specific treatment (see supplemental first aid instructions on this label).

P363 Wash contaminated clothing before reuse

P304+P340+P310 If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for

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Cupric Bromide,

breathing. Immediately call a poison center or doctor/physician

P301+P330+P331+P310 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

P303+P361+P353+P310 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician.

P305+P351+P338+P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician. P405 Store locked up

P501 Dispose of contents and container as instructed in Section 13

Hazards not otherwise classified: None

SECTION 3: Composition/information on ingredients

Identification	Name	Weight %
CAS number: 7789-45-9	Copper(II) Bromide	>99

Additional Information: None

SECTION 4: First aid measures

Description of first aid measures

General notes:

Not determined or not applicable.

After inhalation:

Loosen clothing as necessary and position individual in a comfortable position Maintain an unobstructed airway Move exposed individual to fresh air Immediately call a POISON CONTROL CENTER or seek medical attention

After skin contact:

Rinse affected area with soap and water If symptoms develop or persist, seek medical attention Immediately remove all contaminated clothing Wash affected area with soap and water Immediately call a POISON CONTROL CENTER or seek medical attention

After eye contact:

Rinse/flush exposed eye(s) gently using water for 15-20 minutes If symptoms develop or persist, seek medical attention Remove contact lens(es) if able to do so during rinsing Immediately call a POISON CONTROL CENTER or seek medical attention

After swallowing:

Rinse mouth thoroughly Seek medical attention if irritation, discomfort, or vomiting persists Call a POISON CONTROL CENTER or seek medical attention if you feel unwell Do not induce vomiting Rinse mouth and then drink plenty of water Immediately call a POISON CONTROL CENTER or seek medical attention

Most important symptoms and effects, both acute and delayed

Acute symptoms and effects:

Not determined or not applicable.

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Delayed symptoms and effects:

Not determined or not applicable.

Immediate medical attention and special treatment

Specific treatment:

Not determined or not applicable.

Notes for the doctor:

Not determined or not applicable.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media:

Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition

Unsuitable extinguishing media:

Not determined or not applicable.

Specific hazards during fire-fighting:

Thermal decomposition can lead to release of irritating gases and vapors

Special protective equipment for firefighters:

Wear protective eye wear, gloves and clothing Refer to Section 8

Special precautions:

Avoid inhaling gases, fumes, dust, mist, vapor and aerosols Avoid contact with skin, eyes and clothing

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation Ensure air handling systems are operational Wear protective eye wear, gloves and clothing

Environmental precautions:

Should not be released into the environment Prevent from reaching drains, sewer or waterway

Methods and material for containment and cleaning up:

Wear protective eye wear, gloves and clothing

Reference to other sections:

Not determined or not applicable.

SECTION 7: Handling and storage

Precautions for safe handling:

Do not eat, drink, smoke or use personal products when handling chemical substances. Avoid breathing mist or vapor.

Conditions for safe storage, including any incompatibilities:

Store in a cool, well-ventilated area.

SECTION 8: Exposure controls/personal protection

Only those substances with limit values have been included below.

Occupational Exposure limit values:

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Cupric Bromide,

Country (Legal Basis)	Substance	Identifier	Permissible concentration
ACGIH	Copper(II) Bromide	7789-45-9	8-Hour Exposure Limit (TLV-TWA): 0.2 mg/m ³ (Copper, Fume as Cu)
	Copper(II) Bromide	7789-45-9	8-Hour Exposure Limit (TLV-TWA): 1 mg/m ³ (Copper, Dusts and Mists, as Cu)
NIOSH	Copper(II) Bromide	7789-45-9	NIOSH REL (for up to a 10-hour workday during a 40-hour workweek): 1 mg/m ³ (Copper and Copper Compounds [except copper fume] [dusts and mists] [as Cu])
	Copper(II) Bromide	7789-45-9	NIOSH IDLH: 100 mg/m ³ (Copper and Copper Compounds [except copper fume] [dusts and mists] [as Cu])
	Copper(II) Bromide	7789-45-9	NIOSH REL (for up to a 10-hour workday during a 40-hour workweek): 0.1 mg/m ³ (Copper Fume [as Cu])
	Copper(II) Bromide	7789-45-9	NIOSH IDLH: 100 mg/m ³ (Copper Fume [as Cu])
United States (OSHA)	Copper(II) Bromide	7789-45-9	PEL: 1 mg/m ³ , as Cu

Biological limit values:

No biological exposure limits noted for the ingredient(s).

Information on monitoring procedures:

Not determined or not applicable.

Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.

Personal protection equipment

Eye and face protection:

Safety goggles or glasses, or appropriate eye protection.

Skin and body protection:

Select glove material impermeable and resistant to the substance.

Respiratory protection:

When necessary, use NIOSH-approved breathing equipment.

General hygienic measures:

Wash hands before breaks and at the end of work.

Avoid contact with skin, eyes and clothing.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Gray blue solid
Odor	Odorless
Odor threshold	Not determined or not available.
рН	Not determined or not available.
Melting point/freezing point	498°C

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Cupric Bromide,

Initial boiling point/range	900°C
<u> </u>	Not determined or not available.
Flash point (closed cup)	
Evaporation rate	Not determined or not available.
Flammability (solid, gas)	Not determined or not available.
Upper flammability/explosive limit	Not determined or not available.
Lower flammability/explosive limit	Not determined or not available.
Vapor pressure	Not determined or not available.
Vapor density	Not determined or not available.
Density	Not determined or not available.
Relative density	Not determined or not available.
Solubilities	Soluble in water.
Partition coefficient (n-octanol/water)	Not determined or not available.
Auto/Self-ignition temperature	Not determined or not available.
Decomposition temperature	Not determined or not available.
Dynamic viscosity	Not determined or not available.
Kinematic viscosity	Not determined or not available.
Explosive properties	Not determined or not available.
Oxidizing properties	Not determined or not available.

Other information

Specific gravity

4.77 g/mL at 20°C

SECTION 10: Stability and reactivity

Reactivity:

Does not react under normal conditions of use and storage.

Chemical stability:

Stable under normal conditions of use and storage.

Possibility of hazardous reactions:

None under normal conditions of use and storage.

Conditions to avoid:

None known.

Incompatible materials:

None known.

Hazardous decomposition products:

None known.

SECTION 11: Toxicological information

Acute toxicity

Assessment: Harmful if swallowed

Product data: No data available.

Substance data: No data available.

Skin corrosion/irritation

Assessment: Causes severe skin burns and eye damage

Product data: No data available.

Substance data:

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Cupric Bromide,

Name	Result			
Copper(II) Bromide	Causes severe skin burns and eye damage.			
Serious eye damage/irritati	on			
Assessment: Based on av	ailable data, the classification criteria are not met.			
Product data: No data ava	ailable.			
Substance data: No data	available.			
Respiratory or skin sensitiz	ation			
Assessment: Based on av	ailable data, the classification criteria are not met.			
Product data: No data ava	ailable.			
Substance data: No data	available.			
Carcinogenicity				
Assessment: Based on av	ailable data, the classification criteria are not met.			
Product data: No data ava	ailable.			
Substance data: No data	available.			
International Agency for	Research on Cancer (IARC): None of the ingredients are listed.			
National Toxicology Prog	gram (NTP): None of the ingredients are listed.			
Germ cell mutagenicity				
Assessment: Based on av	ailable data, the classification criteria are not met.			
Product data: No data ava	ailable.			
Substance data: No data	available.			
Reproductive toxicity				
Assessment: Based on av	ailable data, the classification criteria are not met.			
Product data: No data ava	ailable.			
Substance data: No data	available.			
Specific target organ toxici	ty (single exposure)			
Assessment: Based on av	ailable data, the classification criteria are not met.			
Product data: No data ava	ailable.			
Substance data: No data	available.			
Specific target organ toxici	ty (repeated exposure)			
Assessment: Based on av	ailable data, the classification criteria are not met.			
Product data: No data ava	ailable.			
Substance data: No data	available.			
Aspiration toxicity				
	ailable data, the classification criteria are not met.			
Product data: No data ava				
Substance data: No data	available.			
-	s of exposure: No data available.			
	hysical, chemical and toxicological characteristics: No data available.			
Other information: No data a	available.			
CTION 12: Ecological inform	antion			

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

Chronic (long-term) toxicity

Product data: No data available.

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Cupric Bromide,

Substance data: No data available.

Persistence and degradability

Product data: No data available.

Substance data: No data available.

Bioaccumulative potential

Product data: No data available.

Substance data: No data available.

Mobility in soil

Product data: No data available.

Substance data: No data available.

Other adverse effects: No data available.

SECTION 13: Disposal considerations

Disposal methods:

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11)

SECTION 14: Transport information

United States Transportation of dangerous goods (49 CFR DOT)

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

International Maritime Dangerous Goods (IMDG)

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

SECTION 15: Regulatory information

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Cupric Bromide,

United States regulations

Inventory listing (TSCA):

7789-45-9 Copper(II) Bromide

Significant New Use Rule (TSCA Section 5): Not determined.

Export notification under TSCA Section 12(b): Not determined.

SARA Section 311/312 hazards:

Acute	Chronic	Fire	Pressure	Reactive
Yes	No	No	No	No

SARA Section 302 extremely hazardous substances: Not determined.

SARA Section 313 toxic chemicals:

|--|

CERCLA: Not determined.

RCRA: Not determined.

Section 112(r) of the Clean Air Act (CAA): Not determined.

Massachusetts Right to Know:

	7789-45-9		Not Listed		
Ne	New Jersey Right to Know:				
	7789-45-9	Copper(II) Bromide	Listed		
New York Right to Know:					
	7789-45-9	Copper(II) Bromide	Listed		
Pennsylvania Right to Know:					
	7789-45-9	Copper(II) Bromide	Listed		

California Proposition 65: None of the ingredients are listed.

SECTION 16: Other information

Abbreviations and Acronyms: None

Disclaimer:

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

NFPA: 2-0-0 HMIS: 2-0-0 Initial preparation date: 02.20.2018

End of Safety Data Sheet

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Listed