

Safety Data Sheet

Copper Sulfate Squares

CAROLINA[®]
www.carolina.com

Section 1

Product Description

Product Name: Copper Sulfate Squares
Recommended Use: Science education applications
Distributor: Carolina Biological Supply Company
2700 York Road, Burlington, NC 27215
1-800-227-1150
Chemical Information: 800-227-1150 (8am-5pm (ET) M-F)
Chemtrec: 800-424-9300 (Transportation Spill Response 24 hours)

Section 2

Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

WARNING



Harmful if swallowed. Causes skin irritation. Causes serious eye irritation. Toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

GHS Classification:

Hazardous to the aquatic environment - Chronic Category 1, Skin Corrosion/Irritation Category 2, Serious Eye Damage/Eye Irritation Category 2A, Hazardous to the aquatic environment - Acute Category 2, Acute Toxicity - Oral Category 4

Section 3

Composition / Information on Ingredients

<u>Chemical Name</u>	<u>CAS #</u>	<u>%</u>
Copper (II) Sulfate, 5-Hydrate	7758-99-8	18
Balance (82% by weight) consists of felt squares impregnated with chemical(s) listed above		

Section 4

First Aid Measures

Emergency and First Aid Procedures

Inhalation: In case of accident by inhalation: remove casualty to fresh air and keep at rest.
Eyes: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Skin Contact: After contact with skin, wash immediately with plenty of water.
Ingestion: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

Section 5

Firefighting Procedures

Extinguishing Media: Use dry chemical, CO2 or appropriate foam.
Fire Fighting Methods and Protection: Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.
Fire and/or Explosion Hazards: Fire or excessive heat may produce hazardous decomposition products.
Hazardous Combustion Products: Metal Oxides, , Carbon oxides

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Section 6

Spill or Leak Procedures

Steps to Take in Case Material Is Released or Spilled:

No health affects expected from the clean-up of this material if contact can be avoided. Follow personal protective equipment recommendations found in Section 8 of this (M)SDS. Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation. Collect spillage.

Section 7

Handling and Storage

Handling:

Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection. Avoid release to the environment. Refer to special instructions/safety data sheet. Do not breathe dust.

Storage:

Keep container tightly closed in a cool, well-ventilated place.

Storage Code:

Green - general chemical storage

Section 8

Protection Information

Chemical Name

Copper (II) Sulfate, 5-Hydrate

ACGIH

(TWA)

1 mg/m³ TWA (dust and mist, as Cu)

(STEL)

N/A

OSHA PEL

(TWA)

N/A

(STEL)

N/A

Control Parameters

Engineering Measures:

No exposure limits exist for the constituents of this product. No engineering controls are likely to be required to maintain operator comfort under normal conditions of use.

Personal Protective Equipment (PPE):

Lab coat, apron, eye wash, safety shower.

Respiratory Protection:

No respiratory protection required under normal conditions of use.

Respirator Type(s):

NIOSH approved air purifying respirator with dust/mist filter.

Eye Protection:

Wear chemical splash goggles when handling this product. Have an eye wash station available.

Skin Protection:

Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

Gloves:

No information available

Section 9

Physical Data

Formula: See Section 3

Molecular Weight: 249.68 g/mol

Appearance: White to off-white Solid

Odor: None

Odor Threshold: No data available

pH: No data available

Melting Point: No data available

Boiling Point: No data available

Flash Point: No data available

Flammable Limits in Air: No data available

Vapor Pressure: No data available

Evaporation Rate (BuAc=1): No data available

Vapor Density (Air=1): No data available

Specific Gravity: 2.28 @ 15.6 C

Solubility in Water: Appreciable (>10%)

Log Pow (calculated): No data available

Autoignition Temperature: No data available

Decomposition Temperature: No data available

Viscosity: No data available

Percent Volatile by Volume: No data available

Section 10

Reactivity Data

Reactivity:

Not generally reactive under normal conditions.

Chemical Stability:

Stable under normal conditions.

Conditions to Avoid:

None known.

Incompatible Materials:

Hydroxylamine, Hypobromite, Strong reducing agents, Magnesium

Hazardous Decomposition Products:

Carbon oxides, Metal Oxides,

Hazardous Polymerization:

Will not occur

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Section 11 Toxicity Data

Symptoms (Acute): No data available
Delayed Effects: No data available

Acute Toxicity:

Chemical Name	CAS Number	Oral LD50	Dermal LD50	Inhalation LC50
Copper (II) Sulfate, 5-Hydrate	7758-99-8	Oral LD50 Rat = 300 mg/kg	Dermal LD50 Rat > 2000 mg/kg	

Carcinogenicity:

Chemical Name	CAS Number	IARC	NTP	OSHA
No data available		Not listed	Not listed	Not listed

Chronic Effects:

Mutagenicity: No evidence of a mutagenic effect.
Teratogenicity: No evidence of a teratogenic effect (birth defect).
Sensitization: No evidence of a sensitization effect.
Reproductive: No evidence of negative reproductive effects.
Target Organ Effects:
Acute: No data available
Chronic: No data available

Section 12 Ecological Data

Overview: Moderate ecological hazard. This product may be dangerous to plants and/or wildlife.
Mobility: No data
Persistence: Dissolved into water, Adsorbs to soil., Chemically Transformed
Bioaccumulation: No data
Degradability: No data
Other Adverse Effects: No data

Chemical Name	CAS Number	Eco Toxicity
Copper (II) Sulfate, 5-Hydrate	7758-99-8	96 HR LC50 PIMEPHALES PROMELAS 0.6752 MG/L [STATIC]

Section 13 Disposal Information

Disposal Methods: Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.
Waste Disposal Code(s): Not Determined

Section 14 Transport Information

Ground - DOT Proper Shipping Name:	Air - IATA Proper Shipping Name:
Not regulated for transport by DOT	Not regulated for transport by IATA

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Section 15

Regulatory Information

TSCA Status:

All components in this product are on the TSCA Inventory.

Chemical Name	CAS Number	§ 313 Name	§ 304 RQ	CERCLA RQ	§ 302 TPQ	CAA 112(2) TQ
Copper (II) Sulfate, 5-hydrate	7758-99-8	No	No	No	No	No

Section 16

Additional Information

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The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the (Material) Safety Data Sheet.

Glossary

ACGIH	American Conference of Governmental Industrial Hygienists	NTP	National Toxicology Program
CAS	Chemical Abstract Service Number	OSHA	Occupational Safety and Health Administration
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	PEL	Permissible Exposure Limit
DOT	U.S. Department of Transportation	ppm	Parts per million
IARC	International Agency for Research on Cancer	RCRA	Resource Conservation and Recovery Act
N/A	Not Available	SARA	Superfund Amendments and Reauthorization Act
		TLV	Threshold Limit Value
		TSCA	Toxic Substances Control Act
		IDLH	Immediately dangerous to life and health