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Edition: January 2015

Copper Sulphate

(TNL 1768)

### 1. Identification of the substance/preparation and of the company/undertaking

Product name: Copper Sulphate (Cupric Sulphate 5 Hydrate)

Product code: 1768

Relevant identified uses of the substance or mixture

Laboratory reagent. Uses in soil improvement Mineral nutrient source for feedstuffs. Mineral/nutrient source for Pharma and Food. Manufacture of substances.

Company name: Lawrence Art Supplies

36 Kingsthorpe Road

Hove

BN3 5HR

Tel: 01273 260260

Fax: 01273 260270

Email: artbox@lawrence.co.uk

Emergency Number: Mon - Thurs 9am-5pm, Fri 9am - 4pm (not a poison centre) 01273 260260

### 2. Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification under CLP:

Acute Tox. 4: H302

Aquatic Chronic 1: H410

Eye Irrit. 2: H319

Skin Irrit. 2: H315

Aquatic Acute 1: H400

##### Most important adverse effects:

Harmful if swallowed

Causes skin irritation

Causes serious eye irritation

Very toxic to aquatic life with long lasting effects

#### 2.2. Label elements

Label elements:

Hazard statements: H302: Harmful if swallowed.

H315: Causes skin irritation.

H319: Causes serious eye irritation.

H410: Very toxic to aquatic life with long lasting effects

**Hazard pictograms:** GHS07: Exclamationmark  
GHS09: Environmental



**Signal words:** Warning

**Precautionary statements:** P264: Wash skin thoroughly after handling.  
P270: Do not eat, drink or smoke when using this product.  
P301+310: IF SWALLOWED: Immediately call a if you feel unwell.  
P330: Rinse mouth.  
P280: Wear protective gloves/protective clothing/eye protection/face protection.  
P273: Avoid release to the environment.  
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P501: Dispose of contents/container to.

### 2.3. Other hazards

**PBT:** This product is not identified as a PBT/vPvB substance.

## 3. Composition/information on ingredients

### 3.1. Substances

**Chemical identity:** COPPER SULPHATE  
**CAS number:** 7758-99-8  
**EINECS number:** 231-847-6

## 4. First aid measures

### 4.1. Description of first aid measures

**Skin contact:** Remove all contaminated clothes and footwear immediately unless stuck to skin. Wash immediately with plenty of soap and water.  
**Eye contact:** Bathe the eye with running water for 15 minutes. Consult a doctor.  
**Ingestion:** Wash out mouth with water. Consult a doctor.  
**Inhalation:** Remove casualty from exposure ensuring one's own safety whilst doing so. Consult a doctor.

### 4.2. Most important symptoms and effects, both acute and delayed

**Skin contact:** There may be irritation and redness at the site of contact.  
**Eye contact:** There may be irritation and redness. The eyes may water profusely.  
**Ingestion:** There may be soreness and redness of the mouth and throat.  
**Inhalation:** There may be irritation of the throat with a feeling of tightness in the chest. Exposure may cause coughing or wheezing.

**Delayed / immediate effects:**  
No data available.

### 4.3. Indication of any immediate medical attention and special treatment needed

## 5. Fire-fighting measures

### 5.1. Extinguishing media

**Extinguishing media:** Suitable extinguishing media for the surrounding fire should be used.

## 5.2. Special hazards arising from the substance or mixture

**Exposure hazards:** In combustion emits toxic fumes. Thermal combustion will result in releases of oxides of copper.

## 5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus.  
Wear protective clothing to prevent contact with skin and eyes.

## 6. Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

**Personal precautions:** Refer to section 8 of SDS for personal protection details.  
If outside do not approach from downwind.  
If outside keep bystanders upwind and away from danger point.  
Mark out the contaminated area with signs and prevent access to unauthorised personnel.  
Do not create dust.

### 6.2. Environmental precautions

**Environmental precautions:** Do not discharge into drains or rivers.  
Cover drains. Collect, bind and pump off spills.  
Advise local authorities if large quantities are spilled.

### 6.3. Methods and material for containment and cleaning up

**Clean-up procedures:** Transfer to a closable, labelled salvage container for disposal by an appropriate method.

### 6.4. Reference to other sections

**Reference to other sections:** Refer to section 8 of SDS

## 7. Handling and storage

### 7.1. Precautions for safe handling

**Handling requirements:** Avoid direct contact with the substance.  
Ensure there is sufficient ventilation of the area.  
Do not handle in a confined space.  
Avoid the formation or spread of dust in the air.

### 7.2. Conditions for safe storage, including any incompatibilities

**Storage conditions:** Store in a cool, well ventilated area. Keep container tightly closed.  
The floor of the storage room must be impermeable to prevent the escape of liquids.  
Suitable packaging: Not applicable.

### 7.3. Specific end use(s)

## 8. Exposure controls/personal protection

### 8.1. Control parameters

**Hazardous ingredients:**

COPPER SULPHATE

**Workplace exposure limits:**

**Respirable dust**

State	Respirable dust			
	8 hour TWA	15min. STEL	8 hour TWA	15min. STEL
UK	1 mg/m <sup>3</sup>	2 mg/m <sup>3</sup>	-	-

## DNEL/PNEC Values

DNEL / PNEC No data available.

## 8.2. Exposure controls

**Engineering measures:** Ensure there is sufficient ventilation of the area.  
The floor of the storage room must be impermeable to prevent the escape of liquids.

**Respiratory protection:** Self-contained breathing apparatus must be available in case of emergency.  
Respiratory protective device with particle filter. Particle filter class P2S (EN143).

**Hand protection:** Glove material: Nitrile rubber. Glove thickness: 0.11 mm. Break through time: >480 min.

**Eye protection:** Safety glasses. Ensure eye bath is to hand. Skin protection: Protective clothing.

**Environmental:** Storage should be placed inside a fully bunded area of sufficient size to contain the volume plus

## 9 Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

**State:** Solid

**Colour:** Blue

**Odour:** Odourless

**Evaporation rate:** Not applicable.

**Oxidising:** Non-oxidising (by EC criteria)

**Solubility in water:** Soluble

**Viscosity:** Not applicable.

**Boiling point/range°C:** 560

**Melting point/range°C:** Decomposes 560

**Flammability limits %:** Lower: Not applicable. **Upper:** Not applicable.

**Flash point°C:** Not applicable. **Part.coeff. n-octanol/water:** Not applicable.

**Autoflammability°C:** Not applicable. **Vapour pressure:** Not applicable.

**Relative density:** 2.284g/cm<sup>3</sup> **pH:** 4

**VOC g/l:** Not applicable.

### 9.2. Other information

**Other information:** No data available.

## 10. Stability and reactivity

### 10.1. Reactivity

**Reactivity:** Stable under recommended transport or storage conditions.

### 10.2. Chemical stability

**Chemical stability:** Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

**Hazardous reactions:** Hazardous reactions will not occur under normal transport or storage conditions.

### 10.4. Conditions to avoid

**Conditions to avoid:** Heat.

### 10.5. Incompatible materials

**Materials to avoid:** Strong oxidising agents. Strong acids.

### 10.6. Hazardous decomposition products

**Haz. decomp. products:** In combustion emits toxic fumes.

## 11. Toxicological information

### Toxicity values:

Route	Species	Test	Value	Units
LDLO	HMN	LDLO	1088	mg/kg
ORAL	RAT	LD50	960	mg/kg
DERMAL	RAT	LD50	2000	mg/kg

### Hazardous ingredients:

#### COPPER SULPHATE

IVN	RAT	LD50	48900	µg/kg
ORL	MUS	LD50	369	mg/kg
ORL	RAT	LD50	520	mg/kg

### Relevant hazards for product:

Hazard	Route	Basis
Acute toxicity (ac. tox. 4)	ING	Hazardous: calculated
Skin corrosion/irritation	DRM	Hazardous: calculated
Serious eye damage/irritation	OPT	Hazardous: calculated

### Symptoms / routes of exposure

- Skin contact:** There may be irritation and redness at the site of contact.
- Eye contact:** There may be irritation and redness. The eyes may water profusely.
- Ingestion:** There may be soreness and redness of the mouth and throat.
- Inhalation:** There may be irritation of the throat with a feeling of tightness in the chest.  
Exposure may cause coughing or wheezing.

**Delayed / immediate effects:** No data available.

## 12. Ecological information

### 12.1. Toxicity

#### Ecotoxicity values:

Species	Test	Value	Units
RAINBOW TROUT ( <i>Oncorhynchus mykiss</i> )	96H LC50	0,11	mg/l
Daphnia magna	48H EC50	0,02	mg/l

### 12.2. Persistence and degradability

Persistence and degradability: Not applicable. Not scientifically justified.

### 12.3. Bioaccumulative potential

Bioaccumulative potential: No data available.

### 12.4. Mobility in soil

Mobility: Soluble in water.

### 12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

**12.6. Other adverse effects:** Toxic to aquatic organisms. Toxic to soil organisms

## 13. Disposal considerations

### 13.1. Waste treatment methods

**Disposal operations:** Transfer to a suitable container and arrange for collection by specialised disposal company.

**NB:** The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

## 14. Transport information

### 14.1. UN number

UN number: UN3077

### 14.2. UN proper shipping name

Shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (COPPER SULPHATE)

### 14.3. Transport hazard class(es)

Transport class: 9

### 14.4. Packing group

Packing group: III

### 14.5. Environmental hazards

Environmentally hazardous: Yes

Marine pollutant: No

### 14.6. Special precautions for user

## 15. Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

### 15.2. Chemical Safety Assessment

**Chemical safety assessment:** A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

## 16. Other information

**Other information:** This safety data sheet is prepared in accordance with Commission Regulation (EU) No 2015/830. \* indicates text in the SDS which has changed since the last revision.

### Phrases used in s.2 and s.3:

H302: Harmful if swallowed.

H315: Causes skin irritation.

H319: Causes serious eye irritation.

H410: Very toxic to aquatic life with long lasting effects.

### Legal disclaimer:

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling