SLS Select Education - Safety Data Sheet CHE1714SE

(in accordance with regulation (EU) 2015/830 and regulation (EC) 1272/2008)

Revision: 2.1 Revision date: 16 April 2021
Date printed: 25 January 2022

Section 1. Identification

1.1 Product Identifier CHE1714SE

Product Name COPPER (II) SULPHATE 5H2O pure 500g.

CAS Number 7758-99-8
REACH Registration No 01-2119520566-40-XXXX

Molecular Formula $CuSO_4.5H_2O = 249.68$

1.2 Relevent identified uses of the substance or mixure & uses advised against

Uses of Material Chemical for industrial and laboratory use. Not suitable for domestic use.

1.3 Supplier SLS Select Education

Wilford Industrial Estate
Ruddington Lane
Wilford
Nottingham
NG11 7EP
UNITED KINGDOM

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(24hr) 112
(Have this document to hand)

Section 2. Hazards Identification

2.1 Classification of the substance or mixture

Classification according to regulation 1272/2008/EC

Acute toxicity, category 4 (oral)	H302: Harmful if swallowed.
Serious eye damage/irritation, category 1	H318: Causes serious eye damage.
Hazard to aquatic environment, category 1	H400: Very toxic to aquatic life.
Hazard to aquatic environment, category 1	H410: Very toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling according to regulation 1272/2008/EC

Signal word Danger

Hazard Pictograms

Hazard Statements Harmful if swallowed. Very toxic to aquatic life with long lasting effects. Causes serious eye damage.

Precautionary Statements	Wear protective gloves / protective clothing / eye protection. Wash thoroughly after handling. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do and continue rinsing. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth. Do NOT induce vomiting.

Section 3. Composition

3.1 Substances

Component	CAS No.	EEC No.	REACH No.	Conc w/w	CLP Classification (1272/2008/CE)
Cupric sulphate	7758-99-8	231-847-6	01-2119520566-40-XXXX	>99%	Acute Tox. 4 (O),Eye Dam. 1,Aquatic Acute 1,Aquatic Chronic 1

Section 4. First Aid

4.1 Description of first aid measures

Eyes	Irrigate thoroughly with plenty of water for at least 10 minutes, holding the eye open. If discomfort persists OBTAIN MEDICAL ATTENTION.
Skin	Thoroughly wash off skin with soap and water. Remove contaminated clothing immediately and wash before re-use.
Inhalation	Remove from exposure.
Ingestion	Wash out the patients mouth thoroughly with water. Induce vomiting. OBTAIN MEDICAL ATTENTION URGENTLY.
Personal protection for first aiders	Wear protective gloves / eye protection.

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

No further relevant information available.

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

No further relevant information available.

Section 5. Fire Fighting

5.1 Extinguishing media

Extinguishing Media	Consider what other flammable materials are present and act accordingly. Water spray, alcohol resistant foam, dry powder or carbon dioxide.
Unsuitable Media	Nothing specified.

5.2 Special hazards arising from the substance or mixture

Hazards	May evolve toxic fumes if involved in a fire.

5.3 Advice for firefighters

Advice for firefighters	Evacuate area immediately. Keep up wind. Avoid exposure to toxic vapours and fumes. Fire-fighters should wear protective clothing and breathing apparatus.

Section 6. Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Protection	Avoid breathing dust.

6.2 Environmental precautions

Enviromental	Notify the Environmental Agency and local Environmental Health Officer if major spillage occurs. Do not allow large quantities to enter the environment.

6.3 Methods and material for containment and cleaning up

Major Spillage	Shovel/sweep up into container for removal Wash area down with copious amounts of water.

Minor Spillage	Wash area down with copious amounts of water.

6.4 Reference to other sections

See section 8.2 for information on protective equipment and section 13 for information on disposal.

Section 7. Storage & Handling

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Do not breath dust. Do not allow to contaminate clothing.

Ensure Local Exhaust Ventilation maintains dust concentrations below the recommended limits.

7.2 Conditions for safe storage, including any incompatibilities

Well ventilated, cool, dry storage .

7.3 Specific end use(s)

See section 1.2.

Section 8. Workplace Exposure & Personal Protection

8.1 Control parameters

Component	CAS No	Concentration	Workplace Exposure Limits			
			Long Term (8hr TWA)		Short Term 15min period)	
Cupric sulphate	7758-99-8	>99%	-	-	-	-

Exposure data source(s)	No occupational exposure data currently available.

8.2 Exposure controls

Respiratory Protection	If process creates significant amounts of dust use L.E.V. or wear suitable dust mask.
Hand Protection	Wear gloves.
Eye Protection	Use tightly fitting chemical splash proof glasses or goggles.
Skin Protection	Avoid contact with skin. If skin contact or contamination of clothing is likely, protective clothing must be worn.
Special Hazards	No special precautions required.

Section 9. Physical & Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance	Pale blue crystals.
Odour	No specific odour.
pH	4 @ 20°C solution.
Boiling Point	Not available
Melting Point	110°C
Flash Point	Not applicable
Upper Flammable Limit	Not applicable
Lower Flammable Limit	Not applicable
Auto Ignition	Not applicable
Explosive Properties	No.
Oxidising Properties	No.
Vapour Pressure	7.3 mmHg @ 25°C
Relative Density	2.2860
Water Solubility	320 g/L (20°C) Very soluble in water.

9.2 Other information

No data available.

Section 10. Stability & Reactivity

10.1	Reactivity	None known at present.
10.2	Chemical Stability	Stable under normal conditions Hygroscopic; protect from moisture.
10.3	Possibility of hazardous reactions	None identified.
10.4	Conditions to Avoid	Excessive heating.
10.5	Incompatable Materials	Strong oxidising agents.
10.6	Hazardous Decomposition Products	May produce hazardous fumes if involved in a fire. Sulphur oxides. Copper oxide.

Section 11. Toxicological Information

11.1 Information on toxicological effects

Eyes	Contact with the solid or dust may be irritating to the eyes.
Skin	Contact with the solid or solution may be irritating to the skin.
LD50 Skin	Not available
Ingestion	Ingestion of large amounts will produce vomiting, gastric pain, dizziness, convulsions, shock, coma and possibly death. As little as 10g has been reported as causing death although victims have recovered after ingesting much larger amounts Copper salts tend to cause vomiting and for this reason poisoning by ingestion is rare . Chronic poisoning may give rise to kidney damage, enlargement of the liver and jaundice.
LD50 Oral	690mg/kg Rat
Inhalation	Inhalation of dust will produce irritation of the eyes, nose, throat and respiratory tract.
LD50 Inhalation	Not available
TCLo	Not available
Carcinogenicity	Not considered to be a carcinogen.
Mutagenicity	Not considered to be a mutagen.
Reproductive Effects	None identified.

Section 12. Ecological

12.1	Toxicity	Copper salts are harmful to the environment. Very Toxic to aquatic organisms and may cause long term adverse effects in the aquatic environment.
	LC50 Algal	Not available
	LC50 Crustacea	Not available
	LC50 Fish	Not available
12.2	Persistence and degradability	The complex may persist for some time in the environment.
12.3	Bioaccumulative potential	No data available.
12.4	Mobility in soil	Keep material out of sewers, storm drains, surface waters and soil.
12.5	Results of PBT & vPvB assessment	Assessment not required.
12.6	Other adverse effects	None known at present.

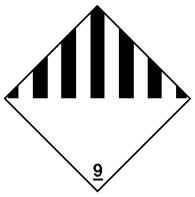
Section 13. Disposal Considerations

13.1 Waste treatment methods

Disposal Methods	Do not dispose of as domestic waste.
Contaminated Packaging	Wash out containers with water. Do not dispose of as domestic waste.

Section 14. Transport Information

14.1	**UN Number**	3077
14.2	**Proper Shipping Name**	Environmentally hazardous substance, solid, N.O.S. (Cupric Sulphate)
14.3	**Transport classes**	
	UN classification	9
	Subsidiary hazard(s)	None
	Transport category	3
	ADR Hazard ID	90
	Tunnel Restriction Code	E
14.4	**Packing Group**	III
14.5	**Environment hazards**	Marine pollutant.
14.6	**Special precautions for user**	No special precautions required.
14.7	**Transport in bulk**	Not transported in bulk.



Section 15. Regulatory Information

15.1 Safety, health and environment regulations specific for subtance/mixture.

Classification, Labeling & Packaging of Substances & Mixtures Regulations (1272/2008/CE)

Classification: Acute toxicity, category 4 (oral); Serious eye damage/irritation, category 1; Hazard to aquatic environment, category 1; Hazard to aquatic environment, category 1

Signal word: Danger

Hazard Pictograms

Hazard Statements: H302, H410, H318
Harmful if swallowed. Very toxic to aquatic life with long lasting effects. Causes serious eye damage.

Precautionary Statements: P280, P264, P305+P351+P338, P301+P312, P330, P331
Wear protective gloves / protective clothing / eye protection. Wash thoroughly after handling. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do and continue rinsing. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth. Do NOT induce vomiting.

15.2 Chemical safety assessment

Assessment not required.

Section 16. Other Information

The information contained in this document only covers the hazards presented by this material, it DOES NOT constitute a workplace risk assessment. See sections 11 for toxicological information and section 12 for ecological information.

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