

CHAITANYA CHS, 2<sup>nd</sup> FLOOR, OFFICE # 206, SIDDHARTH NAGAR, S.V.ROAD, GOREGAON (W), MUMBAI 400062, MH, INDIA.  
 CONTACT: +9122 28725393 /94/ 95 | EMAILID: CARE@SUVCHEM.COM

**MATERIAL SAFETY DATA SHEET (MSDS)**
**COPPER (II) SULPHATE AR (CRYSTALS) (CUPRIC SULPHATE) (PENTAHYDRATE)**
**1. Identification of the substance/mixture and of the company/undertaking**
**1.1. Product identifier**

Trade name : COPPER (II) SULPHATE AR (CRYSTALS) (CUPRIC SULPHATE) (PENTAHYDRATE)  
 Product code : C0077400500  
 Identification of the product : Sulfato de cobre  
 CAS No : 7758-99-8

**1.2. Relevant identified uses of the substance or mixture and uses advised against**

Use : Industrial. For professional use only.

**1.3. Details of the supplier of the safety data sheet**

Company identification : SUVCHEM  
 Chaitanya Tower, 2nd Floor, Office # 206,  
 Siddharth Nagar, S.V. Road,  
 Goregaon (West), Mumbai - 400062,  
 Maharashtra, India.  
 Contact: +91 22 28725393 / 94 / 95  
 Email ID: info@suvchem.com/care@suvchem.com

**1.4. Emergency telephone number**

Phone no. : + 91 22 28725393 / 94 / 95 (9:00am - 6:00 pm) [ Office hours ]

**2. Hazards identification -DSD**
**2.1. Classification of the substance or mixture**
**Classification EC 67/548 or EC 1999/45**

Classification : Xn; R22  
 Xi; R36/38  
 N; R50-53

**Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP)**

Health hazards : Eye irritation - Category 2A - Warning (CLP : Eye Irrit. 2) H319  
 Acute toxicity, Oral - Category 4 - Warning (CLP : Acute Tox. 4) H302  
 Skin irritation - Category 2 - Warning (CLP : Skin Corr. 2) H315  
 Environmental hazards : Hazardous to the aquatic environment - Acute hazard - Category 1 - Warning (CLP : Aquatic Acute 1) H400  
 Hazardous to the aquatic environment - Chronic hazard - Category 1 - Warning (CLP : Aquatic Chronic 1) H410

**2.2. Label elements**
**Labelling EC 67/548 or EC 1999/45**

**MATERIAL SAFETY DATA SHEET (MSDS)**
**COPPER (II) SULPHATE AR (CRYSTALS) (CUPRIC SULPHATE) (PENTAHYDRATE)**
**2. Hazards identification -DSD (continued)**
**Symbol(s)**

**Symbol(s)**

 : Xn : Harmful  
 N : Dangerous for the environment

**R Phrase(s)**

 : R22 : Harmful if swallowed.  
 R36/38 : Irritating to eyes and skin.  
 R50/53 : Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**S Phrase(s)**

 : S22 : Do not breathe dust.  
 S60 : This material and its container must be disposed of as hazardous waste.  
 S61 : Avoid release to the environment. Refer to special instructions/Safety data sheets.  
 S24/25 : Avoid contact with skin and eyes.

**Contains**

: Sulfato de cobre

**Labelling Regulation EC 1272/2008 (CLP)**
**Hazard pictograms**

**Signal words**

: Warning

**Hazard statements**

 : H302 : Harmful if swallowed.  
 H319 : Causes serious eye irritation.  
 H315 : Causes skin irritation.  
 H410 : Very toxic to aquatic life with long lasting effects.

**Precautionary statements**
**• Prevention**

 : P280: Wear protective gloves, protective clothing, eye protection, face protection.  
 P273: Avoid release to the environment.  
 P264: Wash thoroughly after handling.  
 P270: Do not eat, drink or smoke when using this product.

**• Response**

 : P302+P352: IF ON SKIN : Wash with plenty of soap and water.  
 P301+P312: IF SWALLOWED : Call a POISON CENTER or doctor if you feel unwell.  
 P332+P313: If skin irritation occurs : Get medical advice.  
 P391: Collect spillage.  
 P305+P351+P338: IF IN EYES : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P363: Wash contaminated clothing before reuse.

**• Disposal considerations**

: P501: Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

**Contains**

: Sulfato de cobre

**2.3. Other hazards**

CHAITANYA CHS, 2<sup>nd</sup> FLOOR, OFFICE # 206, SIDDHARTH NAGAR, S.V.ROAD, GOREGAON (W), MUMBAI 400062, MH, INDIA.  
 CONTACT: +9122 28725393 /94/ 95 | EMAILID: CARE@SUVCHEM.COM

## MATERIAL SAFETY DATA SHEET (MSDS)

### COPPER (II) SULPHATE AR (CRYSTALS) (CUPRIC SULPHATE) (PENTAHYDRATE)

#### 2. Hazards identification -DSD (continued)

**Other hazards** : The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

#### 3. Composition/information on ingredients

**Substance / Preparation** : Sulfato de cobre  
 CAS No :7758-99-8  
 Substance.

Substance name	Contents	CAS No	EC No	Annex No	REACH Ref.	Classification
Sulfato de cobre	100 %	7758-99-8	----	----	----	Xn; R22 Xi; R36/38 N; R50-53 ----- Acute Tox. 4 (oral) _ H302 Eye irrit 2 _ H319 Skin Irrit. 2 _ H315 Aquatic Acute 1 _ H400 Aquatic Chronic 1 _ H410

Contains no other components or impurities which will influence the classification of the product.

#### 4. First aid measures

##### 4.1. Description of first aid measures

**Inhalation** : Assure fresh air breathing. Allow the victim to rest.

**Skin contact** : Specific treatment (see on this label). Get medical advice. If skin irritation occurs : Wash with plenty of soap and water. Wash contaminated clothing before reuse.

**Eye contact** : Get medical advice. If eye irritation persists : Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes.

**Ingestion** : Obtain emergency medical attention. Call a POISON CENTER or doctor if you feel unwell. Rinse mouth. Do NOT induce vomiting.

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

**Symptoms relating to use** : Swallowing a small quantity of this material will result in serious health hazard.  
 Causes serious eye irritation.  
 Causes skin irritation.

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

**General information** : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

#### 5. Fire-fighting measures

##### 5.1. Extinguishing media

**Suitable extinguishing media** : Foam. Dry powder. Carbon dioxide. Water spray. Sand.

**Unsuitable extinguishing media** : Do not use a heavy water stream.

**MATERIAL SAFETY DATA SHEET (MSDS)**
**COPPER (II) SULPHATE AR (CRYSTALS) (CUPRIC SULPHATE) (PENTAHYDRATE)**
**5. Fire-fighting measures (continued)**

**Surrounding fires** : Use water spray or fog for cooling exposed containers.

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

**Hazardous combustion products** : Under fire conditions, hazardous fumes will be present.

**5.3. Advice for fire-fighters**

**Protection against fire** : Do not enter fire area without proper protective equipment, including respiratory protection.

**Special procedures** : Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to enter environment.

**6. Accidental release measures**
**6.1. Personal precautions, protective equipment and emergency procedures**

**For emergency responders** : Equip cleanup crew with proper protection.  
Ventilate area.

**For non-emergency personnel** : Evacuate unnecessary personnel.

**6.2. Environmental precautions**

**Environmental precautions** : Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.  
Avoid release to the environment.

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

**Clean up methods** : Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

**6.4. Reference to other sections**

See section 8. Exposure controls/personal protection

**7. Handling and storage**
**7.1. Precautions for safe handling**

**Handling** : Do not eat, drink or smoke when using this product. Wash thoroughly after handling.  
Wash thoroughly after handling.

**Technical protective measures** : Provide good ventilation in process area to prevent formation of vapour.

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

**MATERIAL SAFETY DATA SHEET (MSDS)**
**COPPER (II) SULPHATE AR (CRYSTALS) (CUPRIC SULPHATE) (PENTAHYDRATE)**
**7. Handling and storage (continued)**

**Storage** : Keep only in the original container in a cool, well ventilated place. Keep container closed when not in use.

**Storage - away from** : Strong bases. Strong acids. Sources of ignition. Direct sunlight.

**7.3. Specific end use(s)**

**Specific end use(s)** : None.

**8. Exposure controls/personal protection**
**8.1. Exposure controls**

**Personal protection** : Avoid all unnecessary exposure.

- **Respiratory protection** : Wear approved mask.
- **Hand protection** : Wear protective gloves.
- **Skin protection** : Wear suitable protective clothing.
- **Eye protection** : Chemical goggles or safety glasses.
- **Others** : When using, do not eat, drink or smoke.

**8.2. Control parameters**

**Occupational Exposure Limits** : No data available.

**9. Physical and chemical properties**
**9.1. Information on basic physical and chemical properties**

**Physical state at 20 °C** : Solid.

**Colour** : Blue

**Odour** : Odorless

**Odour threshold** : No data available.

**pH value** : No data available.

**Melting point [°C]** : 110 °C

**Decomposition point [°C]** : N/A

**Critical temperature [°C]** : N/A

**Auto-ignition temperature [°C]** : N/A

**Flammability (solid, gas)** : N/A

**Flash point [°C]** : N/A

**Boiling point [°C]** : > 1500C

**Initial boiling point [°C]** : N/A

**Final boiling point [°C]** : N/A

**Evaporation rate** : N/A

**MATERIAL SAFETY DATA SHEET (MSDS)**
**COPPER (II) SULPHATE AR (CRYSTALS) (CUPRIC SULPHATE) (PENTAHYDRATE)**
**9. Physical and chemical properties (continued)**

Vapour pressure [20°C]	: 9.5 hPa at 20 °C
Vapour pressure mm/Hg	: N/A
Vapour density	: N/A
Density [g/cm <sup>3</sup> ]	: 2,28
Relative density, gas (air=1)	: N/A
Relative density, liquid (water=1)	: N/A
Solubility in water [% weight]	: 31.6g/100cc H <sub>2</sub> O @ 00
Solubility in water	: N/A
Log Pow octanol / water at 20°C	: No data available.
Solubility	: 3.7 - 4.5
Viscosity at 40°C [mm <sup>2</sup> /s]	: N/A

**9.2. Other information**

Explosive properties	: N/A
Explosion limits - upper [%]	: N/A
Explosion limits - lower [%]	: N/A
Oxidising properties	: No data available.

**10. Stability and reactivity**
**10.1. Reactivity**

Reactivity	: Not established.
------------	--------------------

**10.2. Chemical stability**

Chemical stability	: Stable under recommended storage conditions.
--------------------	--

**10.3. Possibility of hazardous reactions**

Hazardous reactions	: Not established.
---------------------	--------------------

**10.4. Conditions to avoid**

Conditions to avoid	: Direct sunlight. Extremely high or low temperatures.
---------------------	--

**10.5. Incompatible materials**

Materials to avoid	: Strong acids. Strong bases.
--------------------	-------------------------------

**10.6. Hazardous decomposition products**

Hazardous decomposition products	: Fumes. Carbon monoxide. Carbon dioxide.
----------------------------------	---

**MATERIAL SAFETY DATA SHEET (MSDS)**
**COPPER (II) SULPHATE AR (CRYSTALS) (CUPRIC SULPHATE) (PENTAHYDRATE)**
**11. Toxicological information**
**11.1. Information on toxicological effects**
**Acute toxicity**

- Inhalation : Based on available data, the classification criteria are not met.
- Dermal : Based on available data, the classification criteria are not met.
- Ingestion : Harmful if swallowed.

**Corrosion**

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

**Irritation**

 : Causes serious eye irritation.  
 Causes skin irritation.

**Sensitization**

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

**Mutagenicity**

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

**Carcinogenicity**

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

**Toxic for reproduction**

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

**STOT-single exposure**

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

**STOT-repeated exposure**

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

**Aspiration hazard**

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

**12. Ecological information**
**12.1. Toxicity**
**Toxicity information** : Very toxic to aquatic life with long lasting effects.

**12.2. Persistence - degradability**
**Persistence - degradability** : May cause long-term adverse effects in the environment.

**12.3. Bioaccumulative potential**
**Bioaccumulative potential** : Not established.

**12.4. Mobility in soil**
**Mobility in soil** : Not established.

**12.5. Results of PBT and vPvB assessment**
**Results of PBT and vPvB assessment** : The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

**12.6. Other adverse effects**
**Environmental precautions** : Avoid release to the environment.



**MATERIAL SAFETY DATA SHEET (MSDS)**
**COPPER (II) SULPHATE AR (CRYSTALS) (CUPRIC SULPHATE) (PENTAHYDRATE)**
**13. Disposal considerations**
**13.1. Waste treatment methods**

**General** : Avoid release to the environment. Dispose in a safe manner in accordance with local/national regulations.  
 Dispose of this material and its container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

**14. Transport information**
**14.1. Land transport (ADR-RID)**

**Proper shipping name** : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.  
**UN N°** : 3077  
**H.I. nr** : 90  
**ADR - Class** : 9  
**Labelling - Transport** : 9 : Miscellaneous dangerous substances and articles.



**ADR - Classification code** : M7  
**ADR - Group** : III  
**ADR - Packing instructions** : P002 R001 LP002  
**ADR - Limited Quantity** : 5 KG  
**ADR - Tunnel code** : E : Passage forbidden through tunnels of category E.


**14.2. Sea transport (IMDG) [English only]**

**Proper shipping name** : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.  
**UN N°** : 3077  
**IMO-IMDG - Class or division** : 9 : Miscellaneous dangerous substances and articles.  
**IMO-IMDG - Packing group** : III  
**IMO-IMDG - Packing instructions** : P002 LP02  
**IMO-IMDG - Limited quantities** : 5 kg  
**IMO-IMDG - Marine pollution** : Yes  
**EMS-Nr** : F-A S-F

**14.3. Air transport (ICAO-IATA) [English only]**



**MATERIAL SAFETY DATA SHEET (MSDS)**
**COPPER (II) SULPHATE AR (CRYSTALS) (CUPRIC SULPHATE) (PENTAHYDRATE)**
**14. Transport information (continued)**

Proper shipping name	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
UN N°	: 3077
IATA - Class or division	: 9 : Miscellaneous dangerous substances and articles.
IATA - Packing group	: III
IATA - Passenger and Cargo Aircraft	: ALLOWED
- Passenger and Cargo - Packing instruction	: 956
- Passenger and Cargo - Maximum Quantity/Packing	: 400 kg
IATA - Cargo only	: ALLOWED
- Cargo only - Packing instruction	: 956
- Cargo only - Maximum Quantity/Packing	: 400 kg
IATA - Limited Quantities	: 30 kg G
ERG-Nr	: 9L

**15. Regulatory information**
**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Safety, health and environmental regulations/legislation specific for the substance or mixture	: Ensure all national/local regulations are observed.
REACH Restrictions - Annex XVII	: The components of this product are not subject to restrictions.
REACH Authorisation - Annex XIV	: The components of this product are not subject to authorization.

**15.2. Chemical Safety Assessment**

Chemical Safety Assessment	: It has not been carried out.
----------------------------	--------------------------------

**16. Other information**

Revision	: Revision - See : *
Abbreviations and acronyms	: PBT: persistent, bioaccumulative and toxic. vPvB: very persistent and very bioaccumulative
Sources of key data used	: REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006
List of relevant R phrases (heading 3)	: R22 : Harmful if swallowed. R36/38 : Irritating to eyes and skin. R50/53 : Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
List of full text of H-statements in section 3	: H302 : Harmful if swallowed. H315 : Causes skin irritation.

CHAITANYA CHS, 2<sup>nd</sup> FLOOR, OFFICE # 206, SIDDHARTH NAGAR, S.V.ROAD, GOREGAON (W), MUMBAI 400062, MH, INDIA.  
CONTACT: +9122 28725393 /94/ 95 | EMAILID: CARE@SUVCHEM.COM

**MATERIAL SAFETY DATA SHEET (MSDS)**

**COPPER (II) SULPHATE AR (CRYSTALS) (CUPRIC SULPHATE) (PENTAHYDRATE)**

In accordance with REACH Regulation (CE) N° 1907/2006 and with CLP Regulation (CE) N° 1272/2008

**DISCLAIMER:**

- **SUVCHEM** Products are to be used as Lab Chemicals for R&D only. Not for drug, medicinal, household or other uses.
- **SUVCHEM** shall not be responsible for any damage resulting from handling or from contact with the above product.
- **SUVCHEM** provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product.

**End of document**