

# 1. IDENTIFICATION OF THE PREPARATION AND OF THE COMPANY

Catalogue No. : C 12929

Product Name : COPPER SULPHATE

Manufacturer/supplier identification

Company : NICE Chemicals (P) Ltd., Cochin, India

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# 2. COMPOSITION/INFORMATION ON INGREDIENTS

CAS-No : 7758-98-7 Ec-Index No. : 029-004-00-0

Molar Mass : ---- EC-No. : 231-847-6

Molecular Formula: CuSO<sub>4</sub>

Hazardous ingredients:

Name according to EC Directives: Copper (II) Sulphate

Hazard symbols: Xn R-phrases: 22-36-38

Harmful if swallowed. Irritating to eyes and skin.

Content: 1 - 10 %

#### 3. HAZARDS IDENTIFICATION

According to the evaluative data available, a classification according to catagories of danger as specified in Directive 67/548/EEC & laid down in the legislation of the country concerned is not required.



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## 4. FIRST AID MEASURES

After inhalation: fresh air.

After skin contact: Wash off with plenty of water.

After eye contact: Rinse out with plenty of water with the eyelid held wide open.

After swallowing: Make victim drink plenty of water, induce vomiting.

Summon doctor if feeling unwell.

#### 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: In adaption to materials stored in the immediate neighbourhood.

Special risks: Combustible. Development of hazardous combustion gases or vapours possible in the event of fire.

The following may develop in event of fire: Sulphur Oxides

Other information: Non-combustible.

# 6. ACCIDENTAL RELEASE

Environmental-protection measures: Do not allow to enter sewerage system.

Procedures for cleaning/absorption: Take up with liquid- absorbent material (e.g. Chemizorb).

Forward for disposal. Clean up affected area.

Environmental-protection measures: Do not allow to enter sewerage system.



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## 7. HANDLING AND STORAGE

Handling: Cannot be stored in definitely.

Storage: At +15 ° C to +25 ° C. Tightly closed.

In a well-ventilated place.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory protection : Required when vapours/ aerosols are generated.

Eye Protection : Required

Hand Protection : Required

Industrial hygiene: Change contaminated clothing. Wash hands after working with

substance.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

Form : Solid

Colour : Blue

Odour : Odourless

pH value at gm/lt.  $H_2$  O (20  $^{\circ}$  C) : ~4.2

Melting temperature : Not available

Boiling temperature : Not available

Ignition temperature : Not available

Flash Point : Not available

Explosion limit lower : Not available

upper : Not available

Relative vapour density : Not available

Density  $(20^{\circ} \text{ C})$  :  $1.02 \text{ gm/cm}^3$ 

Solubility in Water (20° C) : Soluble



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#### 10. STABILITY & REACTIVITY

Conditions to be avoided: Heating

Substances to be avoided: Hydroxylamine

Hazardous decomposition products: In the event of fire: Sulphur Oxides

#### 11. TOXICOLOGICAL INFORMATION

Acute toxicity: Quantitative data on the toxicity of this product are not available.

Further toxicological information: Hazardous properties cannot be excluded, but are relatively improbable due to the low concentration of the dissolved substance.

### 12. ECOLOGICAL INFORMATION

Ecotoxic effects: Applicable to the dissolved substance: Biological effects:

Toxic for aquatic organisms. High aquatic toxicity: Fungicidal effect.

Fish toxicity: L.idus  $LC_{50}:0.8\ mg/lt$ .(calculated on the pure substance

Further ecologic data: The following applies to copper compounds: biological effects:

toxic for aquatic organisms: copper ions toxic for fish, algae, protozoa and bacteria at

concentrations below 1mg/lt. Fish : C.auratus toxic 0,01 mg/lt.; mussels : 0.55 mg/lt.

lethal in 12 h; oysters: 0,1 mg/lt. toxic

Do not allow to enter waters, waste water or soil!



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## 13. DISPOSAL METHOD

There are no uniform EC Regulations for the disposal of chemicals or residues. Chemical residues generally count as special waste. The disposal of the latter is regulated in the EC member countries through corresponding laws & regulations. We recommend that you contact either the authorities in charge or approved waste disposal companies which will advise you on how to dispose of special waste.

Disposal in compliance with official regulations. Handle contaminated packaging in the same way as the substance itself. If not officially specified differently, non-contaminated packaging may be treated like household waste or recycled.

**14. TRANSPORT INFORMATION**: Not subject to transport regulations.

### 15. REGULATORY INFORMATION

Labeling according to EC Directives

Symbol : ---

R-phrases: ---

S-phrases: ---

Water pollution class: 1 (slightly polluting substance)

(own classification)



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# 16. OTHER INFORMATION

Reason for alteration

Specific control parameter

Change in the chapter on toxicology

Change in the chapter on ecology.

The information contained herein is based on the present state of our knowledge.

It characterises the product with regard to the appropriate safety precautions.

It does not represent a guarantee of the properties of the product.