SDS

永华化学股份有限公司
YONGHUA CHEMICAL CO., LTD.

Copper (II) Chloride Dihydrate

1. Product Identification

Synonyms: Cupric Chloride; Copper Oxychloride

CAS No.: 10125-13-0

Manufacturer/supplier:

Yonghua Chemical Co., Ltd.

Address: Xiangqiao Village, Zhitang(Heshi)Town, Changshu City 215500,

Jiangsu Province, China

Emergency phone：0086 512 52549653

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2. Composition/Information on Ingredients

CAS No.	Chemical Name	Content	EINECS#
10125-13-0	Copper(II) Chloride Dihydrate	⩽100	231-210-2

Hazard Symbols: XN

Risk Phrases: 22 36/37/38

3. Hazards Identification

EMERGENCY OVERVIEW

Harmful if swallowed. Irritating to eyes, respiratory system and skin.Hygroscopic (absorbs moisture from the air).The toxicological properties of this material have not been fully investigated.

Potential Health Effects

Eye:

Causes eye irritation. Exposure to particulates or solution may cause conjunctivitis, ulceration, and corneal abnormalities. Contact with the eyes may cause corneal damage. May cause chemical conjunctivitis.

Skin:

Causes skin irritation. May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material.

May cause irritation with burning pain, itching and redness.

Ingestion:

Harmful if swallowed. May cause gastrointestinal irritation with nausea, vomiting and diarrhea. May cause hemorrhaging of the digestive tract. The toxicological properties of this substance have not been fully investigated.

Inhalation:

Causes respiratory tract irritation. May cause ulceration and perforation of the nasal septum if inhaled in excessive quantities. Inhalation of fumes may cause metal fume fever, which is characterized by flu-like symptoms with metallic taste, fever, chills, cough, weakness, chest pain, muscle pain and increased white blood cell count. The toxicological properties of this substance have not been fully investigated. May be harmful if inhaled. Can produce delayed pulmonary edema.

Chronic:

Prolonged or repeated skin contact may cause dermatitis. Effects may be delayed. Individuals with Wilson's disease are unable to metabolize copper. Thus, copper accumulates in various tissues and may result in liver, kidney, and brain damage.

4. First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Skin:

Get medical aid. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Wash clothing before reuse.

Ingestion:

Never give anything by mouth to an unconscious person. Get medical aid. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

Inhalation:

Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid. Do NOT use mouth-to-mouth resuscitation. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask.

Notes to Physician:

Treat symptomatically and supportively.

Antidote: The use of d-Penicillamine as a chelating agent should be determined by qualified medical personnel.

5. Fire Fighting Measures

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Wear appropriate protective clothing to prevent contact with skin and eyes. Wear a self-contained breathing apparatus (SCBA) to prevent contact with thermal decomposition products. Use extinguishing media appropriate to the surrounding fire. Substance is noncombustible.

Extinguishing Media:

Substance is noncombustible; use agent most appropriate to extinguish surrounding fire.

6. Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions.

Provide ventilation.

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7. Handling and Storage

Handling:

Wash thoroughly after handling. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation. Use with adequate ventilation. Wash clothing before reuse.

Storage:

Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Store protected from moisture.

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8. Exposure Controls/Personal Protection

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits CAS# 10125-13-0: United Kingdom, WEL - TWA: (listed as copper): 0.2 mg/m3 TWA (fum 1 mg/m3 TWA (dust and mist) United Kingdom, WEL - STEL: (listed as copper): 0.6 mg/m3 STEL (fume); 2 mg/m3 STEL (dust and mist) United States OSHA: 0.1 mg/m3 TWA (fume); 1 mg/m3 TWA (dusts and mists) (listed under Copper).

Belgium - TWA: (listed as copper): 0.2 mg/m3 VLE (fume); 1 mg/m3 (dust and mist) France - VME: (listed as copper): 0.2 mg/m3 VME (fume); 1 mg/m3 V (dust, as Cu) France - VLE: (listed as copper): 2 mg/m3 VLE (dust, as Cu) Germany: (listed as copper): 0.2 mg/m3 VME (fume); 1 mg/m3 VME (d as Cu) Malaysia: (listed as copper): 0.2 mg/m3 TWA (fume, as Cu); 1 mg/m TWA (dust and mist, as Cu) Netherlands: (listed as copper): 0.2 mg/m3 MAC (smoke); 1 mg/m3 M (dust) Russia: (listed as copper): 1 mg/m3 TWA (dust) Russia: (listed as copper): 0.5 mg/m3 STEL (dust) Spain: (listed as copper): 0.2 mg/m3 VLA-ED (fume); 1 mg/m3 VLA-E (dust and mist, as Cu) Personal Protective Equipment Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN

149 must be followed whenever workplace conditions warrant respirator use.

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9. Physical and Chemical Properties

Physical State: Solid

Color: green

Odor: odorless

pH: 3.6 for 0.2 M soln.

Vapor Pressure: Not available.

Viscosity: Not available.

Boiling Point: 1819 deg F

Freezing/Melting Point: 212 deg F

Autoignition Temperature: Not applicable.

Flash Point: Not applicable.

Explosion Limits, lower: Not available.

Explosion Limits, upper: Not available.

Decomposition Temperature: 1819 deg F

Solubility in water: 1150 g/l (5% aq.sol.) in water.

Specific Gravity/Density: 2.54 (water=1)

Molecular Formula: CuCl2.2H2O

Molecular Weight: 170.4788

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10. Stability and Reactivity

Chemical Stability:

Stable at room temperature in closed containers under normal storage and handling conditions.

Conditions to Avoid:

Incompatible materials, dust generation, acids, excess heat, exposure to moist air or water.

Incompatibilities with Other Materials:

Not available.

Hazardous Decomposition Products:

Hydrogen chloride, irritating and toxic fumes and gases, chloride fumes.

Hazardous Polymerization: Has not been reported.

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11. Toxicological Information

RTECS#:

CAS# 10125-13-0: GL7030000 LD50/LC50:

Not available.

Carcinogenicity:

Copper(II) Chloride Dihydrate - Not listed by ACGIH, IARC, or NTP.

Other:

See actual entry in RTECS for complete information.

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12. Ecological Information

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13. Disposal Considerations

Products which are considered hazardous for supply are classified as Special Waste and the disposal of such chemicals is covered by regulations which may vary according to location. Contact a specialist disposal company or the local waste regulator for advice. Empty containers must be decontaminated before returning for recycling.

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14. Transport Information

IATA

Shipping Name: COPPER CHLORIDE

Hazard Class: 8

UN Number: 2802

Packing Group: III

IMO

Shipping Name: COPPER CHLORIDE

Hazard Class: 8

UN Number: 2802

Packing Group: III

RID/ADR

Shipping Name: COPPER CHLORIDE

Hazard Class: 8

UN Number: 2802

Packing group: III

15.Regulatory Information

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XN

Risk Phrases:

R 22 Harmful if swallowed.

R 36/37/38 Irritating to eyes, respiratory system

and skin.

Safety Phrases:

S 20 When using do not eat or drink.

S 28A After contact with skin, wash immediately with plenty of water.

S 37 Wear suitable gloves.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

WGK (Water Danger/Protection)

CAS# 10125-13-0: No information available.

Canada

None of the chemicals in this product are listed on the DSL/NDSL list.

CAS# 10125-13-0 is not listed on Canada's Ingredient Disclosure List.

US FEDERAL

TSCA

CAS# 10125-13-0 is not on the TSCA Inventory because it is a hydrate. It is considered to be listed if the CAS number for the anhydrous form is on the inventory (40CFR720.3(u)(2)).

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16. Other Information

Yonghua Chemical Co., Ltd. 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. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.

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