

MATERIAL SAFETY DATA SHEET

SECTION 1: Identification of substance/mixture and of the company/undertaking

Product Identifier: Copper(II)hydroxide

Product Identification number: X50023

CAS # [20427-59-2]

Relevant identified uses of the substance or mixture and uses advised against: SU24 Scientific research and development

Details of Supplier of the safety data sheet:

Manufacturer/Supplier: Manchester Organics Limited
The Heath Business and Technical Park,
Runcorn,
Cheshire,
WA7 4QX

Emergency Telephone Number: 01928 710 200

SECTION 2: Hazard Identification

Classification of substance or mixture:

Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]

Acute toxicity, Oral (Category 4),

Acute toxicity, Inhalation (Category 2),

Serious eye damage (Category 1),

Acute aquatic toxicity (Category 1),

Chronic aquatic toxicity (Category 2),

Classification according to EU Directives 67/548/EEC or 1999/45/EC

R23/24/25, Toxic by inhalation, in contact with skin, and if swallowed

R36/37/38, Irritating to eyes, respiratory system and skin

Label elements

Signal Word: Danger



Hazard statements:

H302 Harmful if swallowed.

H318 Causes serious eye damage.

H330 Fatal if inhaled.

H400 Very toxic to aquatic life.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements:

P260 Do not breathe dust/fumes/gas/mist/vapours/spray

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair). Remove /Take off immediately all contaminated clothing. Rinse SKIN with water/shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.

P310 Immediately call a poison centre or doctor/physician.

Other Hazards: none

SECTION 3: Composition/information on ingredients

Substances

Name: Copper(II)hydroxide

CAS# [20427-59-2]

Formula : Cu H₂ O₂

Molecular Weight : 97.5598

SECTION 4: First Aid Measures

Description of first aid measures:

EYE CONTACT: Immediately flush eyes with large amounts of water for at least 15 minutes. Assure adequate flushing of the eyes by separating the eyelids with the fingers. Contact a physician.

SKIN CONTACT: Immediately take off all contaminated clothing and flush contaminated area with copious amounts of water for at least 15 minutes. If irritation develops, contact a physician.

INGESTION: Wash mouth out with large amounts of water for at least 15 minutes. DO NOT induce vomiting. Contact a physician.

INHALATION: Remove to fresh air, rest and keep warm. In severe cases or if symptoms persist, contact a physician.

Most important symptoms and effects, both acute and delayed

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated

Indication of any immediate medical attention and special treatment needed

No data available.

SECTION 5: Fire and explosion

Extinguishing Media: Carbon Dioxide or dry powder (NOT WATER). Wear protective clothing.

Special hazards arising from the substance or mixture: Can be released in case of fire: Carbon monoxide, oxides of nitrogen, hydrogen cyanide.

Advice for firefighters: Wear self contained breathing apparatus for fire fighting if necessary

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.

Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

Reference to other sections

For disposal see section 13.

SECTION 7: STORAGE AND HANDLING

Precautions for safe handling

This material should be handled only by, or under the close supervision of, properly qualified people. Open container and use product in an efficient fume hood. Do not eat or smoke while handling this product. Care should be taken to avoid contact with skin and eyes and prevent contamination of personal clothing.

Conditions for safe storage, including any incompatibilities

Storage area should be cool, dry and free from sources of heat. Store in a closed vessel or equivalent system. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Incompatible with strong oxidising agents. Avoid heat, flames and sparks.

Specific end uses: No data available.

SECTION 8: Exposure controls/Personal Protection**Control Parameters**

Components with workplace control parameters: Contains no substances with occupational exposure limit values.

Exposure Controls

Use in a mechanically exhausted area wearing an approved mask/respirator, suitable gloves, protective clothing and eye protection.

SECTION 9: Physical and chemical properties

APPEARANCE: Blue solid

ODOUR: No known odours.

MELTING POINT: 229 °C

BOILING POINT: No data

FLASH POINT: No data

DENSITY: 3.71 g/cm³ at 20 °C

MOLECULAR WEIGHT: 97.5598

Other information: none

SECTION 10: Stability and Reactivity**Reactivity**

no data available

Chemical stability

no data available

Possibility of hazardous reactions

no data available

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

Strong oxidizing agents

Hazardous decomposition products

Other decomposition products - no data available.

SECTION 11: Toxicological information**Acute toxicity**

LD50 Oral - Human - 200 mg/kg

LC50 Inhalation - rat - male and female - 4 h - 0.451 mg/l
(OECD Test Guideline 403)

LC50 Inhalation - rat - male and female - 4 h - 0.56 mg/l

LD50 Dermal - rabbit - > 3,160 mg/kg

LD50 Dermal - rat - > 2,000 mg/kg

(OECD Test Guideline 402)

Skin corrosion/irritation

Serious eye damage/eye irritation

Eyes - rabbit

Result: Risk of serious damage to eyes.

(OECD Test Guideline 405)

SECTION 12: Ecological information**Toxicity**

no data available

Persistence and degradability

no data available

Bioaccumulative potential

no data available

Mobility in soil

no data available

Results of PBT and vPvB assessment

no data available

Other adverse effects

no data available

SECTION 13: Disposal**Waste treatment methods**

Arrange disposal as special waste, by licensed disposal company, in consultation with local Waste Disposal Authority, in accordance with national and regional regulations.

SECTION 14: Transport Information**UN number**

ADR/RID: 3288 IMDG: 3288 IATA: 3288

UN proper shipping name

ADR/RID: TOXIC SOLID, INORGANIC, N.O.S. (Copper dihydroxide)

IMDG: TOXIC SOLID, INORGANIC, N.O.S. (Copper dihydroxide)

IATA: TOXIC SOLID, INORGANIC, N.O.S. (Copper dihydroxide)

Transport hazard class(es)

ADR/RID: 6.1 IMDG: 6.1 IATA: 6.1

Packaging group

ADR/RID: II IMDG: II IATA: II

Environmental hazards

ADR/RID: yes IMDG Marine pollutant: yes IATA: no

Special precautions for user

no data available

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

no data available

Chemical Safety Assessment

no data available

SECTION 16: ADDITIONAL INFORMATION

The information presented in this document is, to the best of our knowledge, correct at the time of publication. Manchester Organics Ltd cannot accept liability for any loss, injury or damage which may result from its use. The information given in this document is intended only as a guidance for the safe handling, storage and use of the material. All chemicals should be handled within a controlled environment by competent individuals.

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First prepared November 2014