



## Safety Data Sheet

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### Section 1. Identification of the substance/mixture and of the company/undertaking

#### Product identifier:

Product name: Cupferron

SDS No. : 1902E-1

#### Relevant identified uses of the substance or mixture and uses advised against

Research and Development

#### Details of the supplier of the safety data sheet

Manufacturer/Supplier: KISHIDA CHEMICAL CO., LTD.

Address: 3-1, Honmachibashi, Chuo-ku, Osaka, JAPAN

Division: Chemical Safety Management Department

Telephone number: +81-6-6946-8061

FAX: +81-6-6946-1607

e-mail address: kagakuhinanzenkanri@kishida.co.jp

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### Section 2. Hazards identification

#### GHS classification and label elements of the product

#### Classification of the substance or mixture

##### HEALTH HAZARDS

Acute toxicity (Oral): Category 3

Carcinogenicity: Category 1B

Specific target organ toxicity – repeated exposure: Category 2 (liver)

(Note) GHS classification without description: Not classified/Classification not possible

#### Label elements



Signal word: Danger

#### HAZARD STATEMENT

Toxic if swallowed

May cause cancer

May cause damage to organs through prolonged or repeated exposure (liver)

#### PRECAUTIONARY STATEMENT

##### Prevention

Do not breathe dust/fume/gas/mist/vapors/spray.

Wash contaminated parts thoroughly after handling.

Do not eat, drink or smoke when using this product.

##### Response

Get medical advice/attention if you feel unwell.

IF exposed or concerned: Get medical advice/attention.

IF SWALLOWED: Immediately call a POISON CENTER/doctor/physician.

IF SWALLOWED: Rinse mouth.

##### Disposal

Dispose of contents/container in accordance with local/national regulation.



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### Section 3. Composition/information on ingredients

#### Mixture/Substance selection:

##### Substance

Ingredient name:Cupferron

Content (%):100

Chemical formula:C<sub>6</sub>H<sub>5</sub>N(NO)ONH<sub>4</sub>

Chemicals No, Japan:9-2320

CAS No.:135-20-6

MW:155.16

ECNO:205-183-2

Note : The figures shown above are not the specifications of the product.

#### Stabilizing additives

Ammonium carbonate (CAS No.506-87-6). Hazard statement is explained by reference to SDS of Ammonium carbonate(SDS No.0374).

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### Section 4. First-aid measures

#### Descriptions of first-aid measures

##### General measures

Get medical advice/attention if you feel unwell.

##### IF INHALED

Remove person to fresh air and keep comfortable for breathing.

Call a POISON CENTER/doctor/physician if you feel unwell.

##### IF ON SKIN (or hair)

Take off immediately all contaminated clothing. Rinse skin with water or shower.

If skin irritation or rash occurs: Get medical advice/attention.

##### IF IN EYES

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

##### IF SWALLOWED

Rinse mouth.

Immediately call a POISON CENTER/doctor/physician.

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### Section 5. Fire-fighting measures

#### Extinguishing media

##### Suitable extinguishing media

In case of fire, use water mist, foam, dry sand to extinguish.

##### Unsuitable extinguishing media

Inactive gas firefighting equipment

Halogenated firefighting system

Dry-powder firefighting equipment - phosphate etc.

Dry-powder firefighting equipment - hydrogen carbonate etc.

Dry-powder firefighting equipment - other (except for phosphate etc.,hydrogen carbonate etc.)

Carbon dioxide extinguisher

Halogenated extinguisher

Dry-powder extinguisher - phosphate etc.

Dry-powder extinguisher - hydrogen carbonate etc.

Dry-powder extinguisher - other (except for phosphate etc.,hydrogen carbonate etc.)

#### Advice for firefighters

##### Specific fire-fighting measures



Evacuate non-essential personnel to safe area.

Special protective equipment and precautions for fire-fighters

Wear fire resistant or flame retardant clothing.

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

Firefighters should wear self-contained breathing apparatus with full face piece operated positive pressure mode.

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## Section 6. Accidental release measures

Personnel precautions, protective equipment and emergency procedures

Ventilate area until material pick up is complete.

Wear proper protective equipment.

Environmental precautions

Prevent spills from entering sewers, watercourses or low areas.

Avoid raising dust.

Methods and materials for containment and cleaning up

Sweep up, place in a bag and hold for waste disposal.

Preventive measures for secondary accident

Collect spillage.

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## Section 7. Handling and storage

Precautions for safe handling

Preventive measures

(Exposure Control for handling personnel)

Do not breathe dust/fume/gas/mist/vapors/spray.

(Protective measures against fire and explosion)

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

(Exhaust/ventilator)

Exhaust/ventilator should be available.

(Safety treatments)

Avoid contact with skin.

Avoid contact with eyes.

Safety Measures

Wear protective gloves, protective clothing or face protection.

When using do not eat, drink or smoke.

Any incompatibilities

See "10.Stability and Reactivity"

Advice on general occupational hygiene

Wash contaminated parts thoroughly after handling.

Do not eat, drink or smoke when using this product.

Storage

Conditions for safe storage

Keep container tightly closed.

Chilled storage.

Container and packaging materials for safe handling

Glass

Polyethylene



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## Section 8. Exposure controls/personal protection

### Control parameters

### Exposure controls

#### Appropriate engineering controls

Do not use in areas without adequate ventilation.

Eye wash station should be available.

Washing facilities should be available.

#### Individual protection measures

#### Respiratory protection

Wear respiratory protection.

#### Hand protection

Wear protective gloves.

#### Eye protection

Wear eye/face protection.

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## Section 9. Physical and Chemical Properties

### Information on basic physical and chemical properties

Physical state: Crystals or crystalline powder

Color: White to pale yellowish-brown

Odor: Characteristic odor

Melting point/Freezing point data is not available.

Boiling point or initial boiling point data is not available.

Boiling range data is not available.

Flammability (gases, liquids and solids) data is not available.

Lower and upper explosion limit/flammability limit data is not available.

Flash point data is not available.

Auto-ignition temperature data is not available.

Decomposition temperature data is not available.

pH data is not available.

Kinematic viscosity data is not available.

### Solubility:

Solubility in water: Soluble

n-Octanol/water partition coefficient data is not available.

Vapor pressure data is not available.

Density and/or relative density data is not available.

Relative vapor density (Air=1) data is not available.

Particle characteristics data is not available.

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## Section 10. Stability and Reactivity

### Reactivity

Not available.

### Chemical stability

May be altered by light.

### Possibility of hazardous reactions

Not available.

### Conditions to avoid

Contact with incompatible materials.

Contact with fire source.

### Incompatible materials

Strong oxidizing agents

### Hazardous decomposition products

Carbon oxides, Nitrogen oxides

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## Section 11. Toxicological Information

Information on toxicological effects

Acute toxicity

Acute toxicity (Oral)

[Data for components of the product]

[GHS Cat. Japan, base data]

(Cupferron)

ra LD50=199mg/kg (HSDB, Access on May 2016)

Irritant properties

Skin corrosion/irritation data is not available.

Serious eye damage/irritation data is not available.

Allergenic and sensitizing effects data is not available.

Mutagenic effects data is not available.

Carcinogenicity

[Data for components of the product]

[GHS Cat. Japan, base data]

(Cupferron)

cat.1B; (NTP RoC 14th., 2016 et al.)

[IARC]

(Cupferron)

Group 2B : Possibly carcinogenic to humans

Reproductive toxicity data is not available.

Specific target organ toxicity (STOT)

STOT-single exposure data is not available.

STOT-repeated exposure

[Data for components of the product]

[cat.2]

[GHS Cat. Japan, base data]

(Cupferron)

liver (NTP TR100, 1978)

Aspiration hazard data is not available.

Information on other hazards

May cause lung disorders by massive inhalation of powdered substance.

-e.g. fibrosis of lung tissue, cough, sputum, breath shortness, dyspnea, decline of lung function, interstitial lung disease, pneumothorax

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## Section 12. Ecological Information

Toxicity

Toxicity data is not available.

Persistence and degradability

Persistence and degradability data is not available.

Bioaccumulative potential

Bioaccumulative potential data is not available.

Mobility in soil

Mobility in soil data is not available.

Other adverse effects

Ozone depleting chemical data is not available.



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**Section 13. Disposal considerations**

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging

Waste treatment methods

Dispose of contents/container in accordance with local/national regulation.

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**Section 14. Transport Information**

UN Number or ID Number : 2811

UN Proper Shipping Name :

TOXIC SOLID, ORGANIC, N.O.S.

Class or division (Transport hazard class) : 6.1

Packing group : III

ERG GUIDE No.: 154

Special provisions No.: 223; 274

IMDG Code (International Maritime Dangerous Goods Regulations)

UN Number or ID Number : 2811

UN Proper Shipping Name :

TOXIC SOLID, ORGANIC, N.O.S.

Class or division (Transport hazard class) : 6.1

Packing group : III

Special provisions No.: 223; 274

IATA (Dangerous Goods Regulations)

UN Number or ID Number : 2811

UN Proper Shipping Name :

TOXIC SOLID, ORGANIC, N.O.S.

Class or division (Transport hazard class) : 6.1

Hazard labels : Toxic

Packing group : III

Special provisions No.: A3; A5

Environmental hazards

Marine pollutants (yes/no) : no

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**Section 15. Regulatory Information**

Safety, health and environmental regulations/legislation specific for the substance or mixture

U.S. Toxic Substances Control Act (TSCA) Inventory

Chemicals listed in TSCA Inventory

Cupferron

Other regulatory information

Ensure this material in compliance with federal requirements and ensure conformity to local regulations.

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**Section 16. Other information**

GHS classification and labelling

Acute toxicity, Category 3: H301 Toxic if swallowed

Carcinogenicity, Category 1B: H350 May cause cancer

STOT – Repeated exposure, Category 2: H373 May cause damage to organs through prolonged or repeated exposure

References and sources for data

Globally Harmonized System of classification and labelling of chemicals, UN

Recommendations on the TRANSPORT OF DANGEROUS GOODS 21th edit., 2019 UN



IMDG Code, 2020 Edition (Incorporating Amendment 40-20)

IATA Dangerous Goods Regulations (62nd Edition) 2021

2020 EMERGENCY RESPONSE GUIDEBOOK (US DOT)

2022 TLVs and BEIs. (ACGIH)

Supplier's data/information

#### General Disclaimer

This data sheet was created based on the information we currently have and may be revised according to new information. In addition, the precautions apply only to normal handling, and in the case of special handling, please make adequate countermeasure to maintain your safety.

The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties.

The GHS classification data given here is based on current Japan official data (NITE published in 2021).