

Safety data sheet

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BASF Safety data sheet Date / Revised: 01.04.2021 Product: **Librel® Cu**

Version: 4.1

(30482695/SDS_GEN_NZ/EN)

Date of print 06.03.2024

1. Substance/preparation and manufacturer/supplier identification

Librel® Cu

Use: Micronutrient

Manufacturer/supplier:

BASF New Zealand Ltd. 5E City Works Depot 77 Cook Street Auckland Central, Auckland 1010 NEW ZEALAND

Telephone: +64 9 255-4300 Telefax number: +64 9 255-4307

Emergency information:

National Poisons Centre: 0800 764 766

BASF Emergency Advice Number: 0800 944 955 (24 hour advice in an emergency only) BASF Emergency Advice Number: +61 3 8855 6666 (If calling from outside New Zealand)

2. Hazard identification

Classification of the substance and mixture:

Acute toxicity: Cat. 4 (oral)

Serious eye damage/eye irritation: Cat. 2A

Label elements and precautionary statement:

Pictogram:



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Signal Word: Warning

Hazard Statement:

H319 Causes serious eye irritation.

H302 Harmful if swallowed.

Precautionary Statements (Prevention):

P280 Wear eye and face protection.

P270 Do not eat, drink or smoke when using this product.
P264 Wash contaminated body parts thoroughly after handling.

Precautionary Statements (Response):

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you

feel unwell.

P330 Rinse mouth

P337 + P311 If eye irritation persists: Call a POISON CENTER or physician.

Precautionary Statements (Disposal):

P501 Dispose of contents and container to hazardous or special waste

collection point.

Other hazards which do not result in classification:

No specific dangers known, if the regulations/notes for storage and handling are considered.

3. Composition/information on ingredients

Chemical nature

Cuprate(2-), [[N,N'-1,2-ethanediylbis[N-[(carboxy-.kappa.O)methyl]glycinato-.kappa.N,.kappa.O]](4-)]-, disodium, (OC-6-21)-

CAS Number: 14025-15-1

4. First-Aid Measures

General advice:

Remove contaminated clothing.

If inhaled:

Keep patient calm, remove to fresh air, seek medical attention.

On skin contact:

Wash thoroughly with soap and water

On contact with eves:

Wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

On ingestion:

Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention.

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Note to physician:

Symptoms: Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11.

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. Fire-Fighting Measures

Suitable extinguishing media:

dry powder, foam

Unsuitable extinguishing media for safety reasons:

carbon dioxide

Specific hazards:

harmful vapours, nitrogen oxides, carbon oxides

Evolution of fumes/fog. The substances/groups of substances mentioned can be released in case of fire.

Special protective equipment:

Wear a self-contained breathing apparatus.

Further information:

The degree of risk is governed by the burning substance and the fire conditions. Contaminated extinguishing water must be disposed of in accordance with official regulations.

6. Accidental Release Measures

Personal precautions:

Use personal protective clothing. Information regarding personal protective measures, see section 8.

Environmental precautions:

Contain contaminated water/firefighting water. Do not discharge into drains/surface waters/groundwater.

Methods for cleaning up or taking up:

For small amounts: Pick up with suitable appliance and dispose of.

For large amounts: Contain with dust binding material and dispose of.

Dispose of absorbed material in accordance with regulations.

Additional information: Forms slippery surfaces with water.

7. Handling and Storage

Handling

Breathing must be protected when large quantities are decanted without local exhaust ventilation.

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Protection against fire and explosion:

Avoid dust formation. Take precautionary measures against static discharges.

Dust explosion class: none.

<u>Storage</u>

Suitable materials for containers: High density polyethylene (HDPE), Low density polyethylene (LDPE), Paper/Fibreboard

Further information on storage conditions: Keep container tightly closed and dry; store in a cool place.

Storage stability:

Storage temperature: 5 - 40 °C

Protect from temperatures below: 5 °C Protect from temperatures above: 40 °C

8. Exposure controls and personal protection

Components with occupational exposure limits

Cuprate(2-), [[N,N'-1,2-ethanediylbis[N-[(carboxy-.kappa.O)methyl]glycinato-.kappa.N,.kappa.O]](4-)]-, disodium, (OC-6-21)-, 14025-15-1;

TWA value 0.2 mg/m3 (ACGIHTLV), fumes/smoke

Measured as: copper (Cu)

TWA value 1 mg/m3 (ACGIHTLV), Dust and mist

Measured as: copper (Cu)

Personal protective equipment

Respiratory protection:

Suitable respiratory protection for lower concentrations or short-term effect: Particle filter with medium efficiency for solid and liquid particles (e.g. EN 143 or 149, Type P2 or FFP2)

Hand protection:

Chemical resistant protective gloves

Suitable materials also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374):

e.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), polyvinylchloride (0.7 mm) and other Supplementary note: The specifications are based on tests, literature data and information of glove manufacturers or are derived from similar substances by analogy. Due to many conditions (e.g. temperature) it must be considered, that the practical usage of a chemical-protective glove in practice may be much shorter than the permeation time determined through testing. Manufacturer's directions for use should be observed because of great diversity of types.

Eye protection:

Safety glasses with side-shields (frame goggles) (e.g. EN 166)

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Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

General safety and hygiene measures:

Wearing of closed work clothing is recommended. No eating, drinking, smoking or tobacco use at the place of work. Handle in accordance with good industrial hygiene and safety practice.

9. Physical and Chemical Properties

Form: free flowing fine granules

Colour: blue

Odour: product specific
Odour threshold: not determined

pH value: 5 - 9

(2 %(m), 25 °C)

Melting point:

The substance / product decomposes therefore not

determined.

Boiling point:

not applicable

Flash point:

not applicable

Evaporation rate:

The product is a non-volatile solid.

Flammability (solid/gas): not flammable

Lower explosion limit:

For solids not relevant for classification and labelling.

Upper explosion limit:

For solids not relevant for classification and labelling.

Ignition temperature: > 250 °C

Thermal decomposition: > 140 °C (DTA)

Self ignition: not self-igniting

Self heating ability: It is not a substance capable of

spontaneous heating according to UN transport regulations class 4.2.

Explosion hazard: not explosive

Fire promoting properties: not fire-propagating

Vapour pressure: < 0.000001 hPa

(20 °C)

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Density:

Study does not need to be

conducted.

Relative density:

No data available.

Bulk density: 600 - 900 kg/m3

Relative vapour density (air):

The product is a non-volatile solid.

Solubility in water:

approx. 475 g/l

(20 °C)

Hygroscopic hygroscopic

Partitioning coefficient n-octanol/water (log Pow): -4.1 (measured)

(25 °C; pH value: 4.9)

Viscosity, dynamic:

not applicable, the product is a solid

Viscosity, kinematic:

not applicable, the product is a solid

Other Information:

If necessary, information on other physical and chemical parameters is indicated in this section.

10. Stability and Reactivity

Conditions to avoid:

Avoid extreme temperatures. Avoid dust formation. Avoid humidity. Avoid deposition of dust.

Thermal decomposition: > 140 °C (DTA)

Substances to avoid:

strong bases, oxidizing agents, strong alkalies

Hazardous reactions:

The product is not a dust explosion risk as supplied; however the build-up of fine dust can lead to a risk of dust explosions.

Hazardous decomposition products:

No hazardous decomposition products if stored and handled as prescribed/indicated.

11. Toxicological Information

Acute toxicity

Assessment of acute toxicity:

Of moderate toxicity after single ingestion. Virtually nontoxic by inhalation.

Experimental/calculated data:

LD50 rat (oral): > 300 - 2,000 mg/kg (BASF-Test)

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LC50 rat (by inhalation): > 5 mg/l 4 h (OECD Guideline 436)

LD50 rat (dermal): not determined

Irritation

Assessment of irritating effects:

Eye contact causes irritation. Not irritating to the skin.

Experimental/calculated data:

Skin corrosion/irritation rabbit: non-irritant (OECD Guideline 404)

Serious eye damage/irritation rabbit: Irritant. (OECD Guideline 405)

Respiratory/Skin sensitization

Assessment of sensitization:

Skin sensitizing effects were not observed in animal studies.

Germ cell mutagenicity

Assessment of mutagenicity:

In the majority of studies performed with microorganisms and in mammalian cell culture, a mutagenic effect was not found. A mutagenic effect was also not observed in in vivo tests. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Carcinogenicity

Assessment of carcinogenicity:

Results from a number of long-term carcinogenity studies are available. Taking into account all of the information, there is no indication that the substance itself is carcinogenic. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Reproductive toxicity

Assessment of reproduction toxicity:

The results of animal studies gave no indication of a fertility impairing effect.

Developmental toxicity

Assessment of teratogenicity:

No indications of a developmental toxic / teratogenic effect were seen in animal studies.

Specific target organ toxicity (single exposure):

Assessment of STOT single:

Apart from effects causing lethality, no specific target organ toxicity was observed in experimental studies.

Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

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Assessment of repeated dose toxicity:

The substance may cause damage to the liver after repeated ingestion of high doses, as shown in animal studies. The substance may cause damage to the kidney after repeated ingestion of high doses, as shown in animal studies.

Aspiration hazard

No aspiration hazard expected.

12. Ecological Information

Ecotoxicity

Assessment of aquatic toxicity:

There is a high probability that the product is not acutely harmful to aquatic organisms. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

Toxicity to fish:

LC50 (96 h) > 100 mg/l, Lepomis macrochirus (Fish test acute)

Aquatic invertebrates:

EC50 (48 h) > 100 mg/l, Daphnia magna (OECD Guideline 202, part 1, static)

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Aquatic plants:

EC50 (72 h) > 100 mg/l (growth rate), Pseudokirchneriella subcapitata (OECD Guideline 201, static) acute Effect The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

EC10 (72 h) > 1 mg/l (growth rate), Pseudokirchneriella subcapitata (OECD Guideline 201, static) long-term effect The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Microorganisms/Effect on activated sludge:

No observed effect concentration (3 h) > 100 mg/l.

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Chronic toxicity to fish:

No observed effect concentration (35 d) > 1 mg/l, Brachydanio rerio (OECD Guideline 210, Flow through.)

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Chronic toxicity to aquatic invertebrates:

No observed effect concentration (21 d), > 1 mg/l, Daphnia magna (OECD Guideline 211, semistatic) The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

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Soil living organisms:

LC50 (14 d) > 100 mg/kg, Eisenia foetida (OECD Guideline 207)

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Terrestrial plants:

No observed effect concentration, terrestrial plants (other)

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Mobility

Assessment transport between environmental compartments:

The substance will not evaporate into the atmosphere from the water surface.

Adsorption to solid soil phase is not expected.

Persistence and degradability

Assessment biodegradation and elimination (H2O):

Poorly biodegradable.

Elimination information:

79 % BOD of the ThOD (35 d) (OECD 301D; EEC 92/69, C.4-E) (aerobic, Seawater)

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Assessment of stability in water:

According to structural properties, hydrolysis is not expected/probable.

Bioaccumulation potential

Assessment bioaccumulation potential:

Does not accumulate in organisms.

Bioaccumulation potential:

Bioconcentration factor: approx. 1.8 (28 d), Lepomis sp.

The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Additional information

Add. remarks environm. fate & pathway:

Treatment in biological waste water treatment plants has to be performed according to local and administrative regulations.

Other ecotoxicological advice:

Do not discharge product into the environment without control.

13. Disposal Considerations

Must be disposed of or incinerated in accordance with local regulations.

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Contaminated packaging:

Uncontaminated packaging can be re-used.

Packs that cannot be cleaned should be disposed of in the same manner as the contents.

14. Transport Information

Domestic transport:

Not classified as a dangerous good under transport regulations

Sea transport

IMDG

Not classified as a dangerous good under transport regulations

Air transport IATA/ICAO

Not classified as a dangerous good under transport regulations

15. Regulatory Information

Other regulations

If other regulatory information applies that is not already provided elsewhere in this safety data sheet, then it is described in this subsection.

HSNO Approval Number HSR003551

A certified handler is not required for the handling of this substance.

Tracking requirements do not apply to this substance.

16. Other Information

This product is of industrial quality and unless otherwise specified or agreed intended exclusively for industrial use. This includes the mentioned and recommended usage. Any other intended applications should be discussed with the manufacturer. In particular this concerns the application for products that are the object of special standards and regulations.

Vertical lines in the left hand margin indicate an amendment from the previous version.

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