

Safety data sheet

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BASF Safety data sheet
Date / Revised: 26.02.2014
Product: **Librel® Cu**

Version: 2.0

(50144103/SDS_GEN_AU/EN)

Date of print 28.02.2014

1. Substance/preparation and company identification

Librel® Cu

Use: Micronutrient

Manufacturer/supplier:

BASF Australia Limited (ABN 62 008 437 867)
Level 12, 28 Freshwater Place Southbank
Victoria 3006, AUSTRALIA
Telephone: +61 3 8855-6600
Telefax number: +61 3 8855-6511

Emergency information:

BASF Emergency Advice Number: 1800 803 440 (24h) [within Australia]
BASF Emergency Advice Number: + 61 3 8855 6666 [outside Australia]

2. Hazard identification

HAZARDOUS SUBSTANCE, NON-DANGEROUS GOOD

Harmful if swallowed.

Irritating to eyes.

Keep away from food, drink and animal feeding stuffs.

If swallowed, seek medical advice immediately and show this container or label.

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

3. Composition/information on ingredients

Chemical nature

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

CAS Number: 14025-15-1

EC-Number: 237-864-5

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 eyes:

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.

Note to physician:

Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or 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.

Protection against fire and explosion:

Avoid dust formation. Take precautionary measures against static discharges.

Dust explosion class: none.

Storage

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

8. Exposure controls and personal protection

Components with occupational exposure limits

no exposure standard allocated

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

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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)

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:	odourless	
pH value:	5 - 9 (20 g/l)	
Melting point:	The substance / product decomposes therefore not determined.	
Boiling point:	not applicable	
Flash point:	not applicable	
Lower explosion limit:	not applicable	
Upper explosion limit:	not applicable	
Ignition temperature:	> 200 °C	(DIN 51794)
Self ignition:	not self-igniting	
Explosion hazard:	not explosive	
Fire promoting properties:	not fire-propagating	
Vapour pressure:	< 0.000001 hPa (25 °C)	

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Density:	Study does not need to be conducted.	
Bulk density:	600 - 900 kg/m ³	
Solubility in water:	approx. 350 g/l (20 °C)	
Hygroscopy:	The product has not been tested.	
Partitioning coefficient n-octanol/water (log Pow):	-4.1	(measured)
	(25 °C; pH value: 4.9)	
Viscosity, dynamic:	not applicable	
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.

Thermal decomposition: > 100 °C

Substances to avoid:

strong bases, oxidizing agents

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.

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

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.

Primary skin irritation rabbit: non-irritant (OECD Guideline 404)

Primary irritations of the mucous membrane rabbit: Irritant. (OECD Guideline 405)

Sensitization

Assessment of sensitization:
Skin sensitizing effects were not observed in animal studies.

Repeated dose toxicity

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.

Genetic toxicity

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 carcinogenicity 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.

12. Ecological Information

Ecotoxicity

Assessment of aquatic toxicity:
There is a high probability that the product is not acutely harmful to aquatic organisms.

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.

Assessment of terrestrial toxicity:

No data available concerning terrestrial toxicity.

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.

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.

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.

13. Disposal Considerations

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

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

Poisons Schedule: Not scheduled

Regulations of the European union (Labelling)

EC-Number: 237-864-5

EEC Directives:

Hazard symbol(s) Xn	Harmful.
R-phrase(s) R22 R36	Harmful if swallowed. Irritating to eyes.
S-phrase(s) S13 S46	Keep away from food, drink and animal feeding stuffs. If swallowed, seek medical advice immediately and show this container or label.
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

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.

Registration status:

AICS, AU released / listed

16. Other Information

Information on intended use: 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.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. The data do not describe the product's properties (product specification). Neither should any agreed property nor the suitability of the product for any specific purpose be deduced from the data contained in the safety data sheet. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.