

Safety data sheet

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BASF Safety data sheet
Date / Revised: 08.09.2014
Product: **Librel® Zn**

Version: 2.0

(50112180/SDS_GEN_AU/EN)

Date of print 09.10.2014

1. Substance/preparation and company identification

Librel® Zn

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

The product does not require a hazard warning label in accordance with EC Directives.

NON-HAZARDOUS SUBSTANCE, NON-DANGEROUS GOODS

3. Composition/information on ingredients

Chemical nature

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

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CAS Number: 14025-21-9
EC-Number: 237-865-0

4. First-Aid Measures

General advice:

Remove contaminated clothing.

If inhaled:

Keep patient calm, remove to fresh air.

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.

On ingestion:

Rinse mouth and then drink plenty of water.

Note to physician:

Symptoms: No significant symptoms are expected due to the non-classification of the product.

Treatment: Symptomatic treatment (decontamination, vital functions).

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.

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

Suitable materials for containers: Polypropylene (PP), High density polyethylene (HDPE)

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

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.

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: white
Odour: odourless

pH value: 5 - 9

Melting point: not applicable

Boiling point: not applicable

Flash point: not applicable

Flammability: not highly flammable

Lower explosion limit: not applicable

Upper explosion limit: not applicable

Ignition temperature: > 530 °C

Self ignition: not self-igniting

Explosion hazard: not applicable

Fire promoting properties: not fire-propagating

Vapour pressure: < 0.000001 hPa
(25 °C)

Density: Study does not need to be conducted.

Bulk density: 650 - 900 kg/m³

Solubility in water: approx. 300 g/l
(20 °C)

Hygroscopy: The product has not been tested.

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Partitioning coefficient n-octanol/water (log Pow): -8.841 (calculated)
(25 °C)

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

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 dust formation. Avoid extreme temperatures.

Thermal decomposition: not determined

Substances to avoid:

strong oxidizing agents, strong bases, strong acids

Hazardous reactions:

The product may contain explosive fine dust or such dust may be produced by abrasion during transport or product transfer.

Hazardous decomposition products:

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

11. Toxicological Information

Acute toxicity

Assessment of acute toxicity:

Virtually nontoxic after a single ingestion. Virtually nontoxic by inhalation.

LD50 rat (oral): > 2,000 mg/kg (OECD Guideline 423)

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

An aerosol was tested.

LD50 rat (dermal):

not determined

Irritation

Assessment of irritating effects:

Not irritating to eyes and skin.

Primary skin irritation In vitro assay: non-irritant (OECD Guideline 439)

Primary irritations of the mucous membrane: Slightly irritating. (BCOP)

Sensitization

Assessment of sensitization:

There is no evidence of a skin-sensitizing potential. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Repeated dose toxicity

Assessment of repeated dose toxicity:

No adverse effects were observed after repeated oral exposure in animal studies. No adverse effects were observed after repeated inhalative exposure in animal studies. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Genetic toxicity

Assessment of mutagenicity:

Results from a number of mutagenicity studies with microorganisms, mammalian cell culture and mammals are available. Taking into account all of the information, there is no indication that the substance is mutagenic. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Carcinogenicity

Assessment of carcinogenicity:

In long-term studies in rats in which the substance was given by feed, a carcinogenic effect was not observed. 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. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Developmental toxicity

Assessment of teratogenicity:

Animal studies gave no indication of a developmental toxic effect at doses that were not toxic to the parental animals. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

12. Ecological Information

Ecotoxicity

Assessment of aquatic toxicity:

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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, static)

Aquatic invertebrates:

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

Aquatic plants:

EC50 (72 h) > 100 mg/l (growth rate), *Pseudokirchneriella subcapitata* (OECD Guideline 201, static) acute Effect

EC10 (72 h) > 10 mg/l (growth rate), *Pseudokirchneriella subcapitata* (OECD Guideline 201, static) long-term effect

Microorganisms/Effect on activated sludge:

EC50 (0.5 h), bacteria
not determined

Chronic toxicity to fish:

No observed effect concentration (35 d) > 30 mg/l, *Brachydanio rerio* (OECD Guideline 210, Flow through.)

Chronic toxicity to aquatic invertebrates:

No observed effect concentration (21 d), > 30 mg/l, *Daphnia magna* (OECD Guideline 211, semistatic)

Assessment of terrestrial toxicity:

No data available concerning terrestrial toxicity.

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:**

Because of the n-octanol/water distribution coefficient (log Pow) accumulation in organisms is not to be expected.

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.

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: 237-865-0

as in Annex VI of Directive 67/548/EEC:

The product does not require a hazard warning label in accordance with EC Directives.

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:

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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.