

Safety data sheet

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BASF Safety data sheet
Date / Revised: 20.03.2015
Product: **Librel® Mn**

Version: 2.0

(55763939/SDS_GEN_NZ/EN)

Date of print 16.08.2016

1. Substance/preparation and company identification

Librel® Mn

Use: Micronutrient

Manufacturer/supplier:

BASF SE

67056 Ludwigshafen

GERMANY

Contact address:

BASF New Zealand Limited

Level 4, 4 Leonard Isitt Drive, Auckland Airport, Auckland 2022

PO Box 407 Shortland Street, Auckland 1140

NEW ZEALAND

Telephone: +64 9 255-4300

Telefax number: +64 9 255-4307

NZ Supplier:

Chemiplas NZ Ltd

137 Great North Road

Grey Lynn, Auckland

New Zealand

Ph + 64 9 361 4060

24 Hour Emergency Ph + 64 9 361 4061

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

This product is not hazardous according to HSNO criteria

The product is under certain conditions capable of dust explosion.

3. Composition/information on ingredients

Chemical nature

Manganate(2-), ((N,N'-1,2-ethanediylbis(N-(carboxy-.kappa.O)methyl)glycinato-.kappa.N,.kappa.O))(4-)-, disodium, (OC-6-21)-
CAS Number: 15375-84-5

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

Additional information:

⌋ Avoid whirling up the material/product because of the danger of dust explosion.

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. Dusty conditions may ignite explosively in the presence of an ignition source causing flash fire.

6. Accidental Release Measures

Personal precautions:

Avoid dust formation. 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.

Avoid raising dust. Dispose of absorbed material in accordance with regulations.

Additional information: Avoid the formation and build-up of dust - danger of dust explosion. Dust in sufficient concentration can result in an explosive mixture in air. Handle to minimize dusting and eliminate open flame and other sources of ignition.

7. Handling and Storage

Handling

Provide exhaust ventilation.

Protection against fire and explosion:

Avoid dust formation. The product is capable of dust explosion. Take precautionary measures against static discharges. Avoid all sources of ignition: heat, sparks, open flame.

Storage

Suitable materials for containers: 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

Manganate(2-), ((N,N'-1,2-ethanediyIbis(N-(carboxy-.kappa.O)methyl)glycinato-.kappa.N,.kappa.O))(4-)-, disodium, (OC-6-21)-, 15375-84-5;

TWA value 1 mg/m³ (OEL (NZ)), dust
Measured as: manganese (Mn)

Personal protective equipment

Respiratory protection:

Suitable respiratory protection for higher concentrations or long-term effect: Particle filter with low efficiency for solid particles (e.g. EN 143 or 149, Type P1 or FFP1)

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:	pale pink	
Odour:	mild	
pH value:	approx. 7	
pKA:	13.89 (25 °C)	(OECD Guideline 112)
Melting point:	252 °C The substance / product decomposes.	(OECD Guideline 102)
Boiling point:	The substance / product decomposes therefore not determined.	
Flash point:	not applicable	
Flammability:	not highly flammable	(Directive 84/449/EEC, A.10)

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Lower explosion limit:	For solids not relevant for classification and labelling.	
Upper explosion limit:	For solids not relevant for classification and labelling.	
Ignition temperature:	not applicable	
Self ignition:	Based on its structural properties the product is not classified as self-igniting.	Test type: Spontaneous self-ignition at room-temperature.
	Temperature: 264 °C Pressure: 1,013 hPa	Test type: Self-ignition at high temperatures. (Method: Directive 92/69/EEC, A.16)
Self heating ability:	It is not a substance capable of spontaneous heating.	
Explosion hazard:	not explosive	(Directive 92/69/EEC, A.14)
Fire promoting properties:	not fire-propagating	(Directive 92/69/EEC, A.17)
Vapour pressure:	0.001 hPa (120.8 °C)	(Directive 92/69/EEC, A.4)
Density:	Study does not need to be conducted.	
Bulk density:	approx. 800 kg/m ³	
Relative vapour density (air):	The product is a non-volatile solid.	
Solubility in water:	412 g/l (25 °C)	
Hygroscoy:	The product has not been tested.	
Partitioning coefficient n-octanol/water (log Pow):	-9.10 (25 °C)	(calculated)
Surface tension:	72.7 mN/m (22 °C; 1.04 g/l)	(OECD-Guideline 115, Ring method)
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 humidity.

| Thermal decomposition: not determined

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

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. In animal studies the substance is virtually nontoxic after short-term inhalation.

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

LC50 rat (by inhalation): > 5.16 mg/l 4 h (other)
An aerosol was tested.

| LD50 rat (dermal):
not determined

Irritation

Assessment of irritating effects:

Not irritating to the skin. Not irritating to the eyes.

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

Primary irritations of the mucous membrane In vitro assay: non-irritant (OECD Guideline 437)

Assessment other acute effects

| Remarks: No data available.

Sensitization

Assessment of sensitization:

Skin sensitizing effects were not observed in animal studies.

mouse: Non-sensitizing. (OECD Guideline 429)

Repeated dose toxicity

Assessment of repeated dose toxicity:

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

Genetic toxicity

Assessment of mutagenicity:

The substance was not mutagenic in bacteria. The substance was not mutagenic in mammalian cell culture.

Carcinogenicity

Assessment of carcinogenicity:

No data available concerning carcinogenic effects.

Reproductive toxicity

Assessment of reproduction toxicity:

Repeated oral uptake of the substance did not cause damage to the reproductive organs. On the basis of animal study findings, an effect on fertility cannot be excluded when given in high doses. The results were determined in a Screening test (OECD 421/422).

Developmental toxicity

Assessment of teratogenicity:

The potential to cause toxicity to development cannot be excluded when given in high doses. The results were determined in a Screening test (OECD 421/422).

Other relevant toxicity information

The product has not been tested. The statements on toxicology have been derived from products of a similar structure and composition.

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, Brachydanio rerio (OECD 203; ISO 7346; 84/449/EEC, C.1, static)

The details of the toxic effect relate to the nominal concentration.

Aquatic invertebrates:

Study scientifically not justified.

Aquatic plants:

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

EC10 (72 h) > 1 mg/l (growth rate), Pseudokirchneriella subcapitata (OECD Guideline 201, static)

long-term effect

Microorganisms/Effect on activated sludge:

No observed effect concentration (3 h) 640 mg/l, (OECD Guideline 209, static)

The details of the toxic effect relate to the nominal concentration. The value meets the highest applied test concentration.

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)

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):

Not readily biodegradable (by OECD criteria). Inherently biodegradable. Under enhanced conditions

Elimination information:

> 70 % DOC reduction (60 d) (Screening test (style of OECD 301)) (aerobic, other)

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

0 - 10 % BOD of the ThOD (30 d) (OECD 301D; EEC 92/69, C.4-E) (aerobic, municipal sewage treatment plant effluent)

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

Bioaccumulation potential

Assessment bioaccumulation potential:

Does not accumulate in organisms.

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

Regulations of the European union (Labelling)

EC-Number: 239-407-5

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:

NZIOC, NZ

Listed

Not classified as hazardous according to HSNO criteria.

For further information contact the NZ supplier or go to www.epa.govt.nz

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.