

Safety data sheet

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BASF Safety data sheet
Date / Revised: 27.02.2015
Product: **Librel® BMX**

Version: 3.0

(55859869/SDS_GEN_NZ/EN)

Date of print 19.10.2015

1. Substance/preparation and company identification

Librel® BMX

Use: Micronutrient

Manufacturer/supplier:

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 1021
New Zealand

Tel + 64 9 361 4060
24hr Emergency Tel + 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

NZ Classifications: Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001 (New Zealand)

Hazard Statement(s) Subclass 6.4 Category A - Substance which are eye irritants Subclass 6.8 Category A - Substance which are reproductive or developmental toxicants



Precautionary Statement(s) Prevention

DANGER

Causes Serious eye irritation

May damage fertility or the unborn child

P201 Obtain special instructions before use

P202 Do not handle until all the safety precautions have been read and understood

P264 Wash hands thoroughly after handling

P280 Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statement(s) Response	<p>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do, Continue rinsing.</p> <p>P337+P313 IF eye irritation persists: Get medical advice/attention.</p> <p>P308+P313 IF exposed: or concerned: Get medical advice/attention</p>
Precautionary Statement(s) Storage	<p>P405 Store locked up</p>
Precautionary Statement(s) Disposal	<p>P501 Must be disposed of in accordance with local regulations. Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance/product. It is recommended that a licensed disposal firm, experienced in hazardous waste, is used for this purpose.</p>

3. Composition/information on ingredients

Chemical nature

metal chelates

Hazardous ingredients

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

Content (W/W): >= 10 % - < 15 %
CAS Number: 14025-15-1
EC-Number: 237-864-5
Hazard symbol(s): Xn
R-phrase(s): 22, 36

Boron sodium oxide (B8Na2O13), tetrahydrate

Content (W/W): >= 3 % - < 5 %
CAS Number: 12280-03-4
EC-Number: 234-541-0
Hazard symbol(s): T
R-phrase(s): 60, 61

The wording of the hazard symbols and R-phrases is specified in section 16 if dangerous ingredients are mentioned.

4. First-Aid Measures

General advice:

First aid personnel should pay attention to their own safety. If the patient is likely to become unconscious, place and transport in stable sideways position (recovery position). Immediately remove contaminated clothing.

If inhaled:

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

On skin contact:

Immediately wash thoroughly with soap and water, seek medical attention.

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., Further important symptoms and effects are so far not known.

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, carbon oxides, nitrogen 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: High density polyethylene (HDPE), Polypropylene (PP), Paper/Fibreboard

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

Boron sodium oxide (B8Na2O13), tetrahydrate, 12280-03-4;
TWA value 2 mg/m³ (ACGIHTLV), Inhalable fraction
STEL value 6 mg/m³ (ACGIHTLV), Inhalable fraction

Manganate(2-), ((N,N'-1,2-ethanediylbis(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 lower concentrations or short-term effect: Particle filter with high efficiency for solid and liquid particles (e.g. EN 143 or 149, Type P3 or FFP3).

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)

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 required additionally to the stated personal protection equipment. 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:	green	
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	
Flammability:	not readily ignited	
Lower explosion limit:	For solids not relevant for classification and labelling.	
Upper explosion limit:	For solids not relevant for classification and labelling.	
Ignition temperature:	> 530 °C	(BAM)
Self ignition:	not self-igniting	
Minimum ignition energy:	> 2 kJ	
Explosion hazard:	not explosive	
Fire promoting properties:	not fire-propagating	
Vapour pressure:	< 0.000001 hPa	
Density:	Study does not need to be conducted.	
Relative density:	No data available.	
Bulk density:	650 - 900 kg/m ³	
Relative vapour density (air):	The product is a non-volatile solid.	
Solubility in water:	approx. 150 g/l (20 °C)	
Hygroscopy:	The product has not been tested.	
Partitioning coefficient n-octanol/water (log Pow):	not applicable	
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:

See MSDS section 7 - Handling and storage.

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

Thermal decomposition: 237 °C (VDI 2263, sheet 1, 1.4.1)

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

ATE rat (oral): > 5,000 mg/kg

ATE rat (by inhalation): > 5 mg/l
Determined for dust

ATE rat (dermal): > 5,000 mg/kg

Irritation

Primary skin irritation rabbit: non-irritant (other)

Primary irritations of the mucous membrane rabbit: non-irritant (OECD Guideline 405)

Assessment other acute effects

Remarks: No data available.

Sensitization

Assessment of sensitization:

Skin sensitizing effects were not observed in animal studies.

Repeated dose toxicity

Information on: Boron sodium oxide (B8Na2O13), tetrahydrate

Assessment of repeated dose toxicity:

The substance may cause damage to the testes after repeated ingestion of high doses, as shown 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:**

Based on available Data, the classification criteria are not met.

Information on: Disodium [[N,N'-ethylenebis[N-(carboxymethyl)glycinato]](4-)-N,N',O,O',ON,ON']cuprate(2-)

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 fully tested. The statements have been derived in parts from products of a similar structure or composition.

Information on: Boron sodium oxide (B8Na2O13), tetrahydrate

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:**

The whole of the information assessable provides no indication of a carcinogenic effect. Lack of data.

Information on: Disodium [[N,N'-ethylenebis[N-(carboxymethyl)glycinato]](4-)-N,N',O,O',ON,ON']cuprate(2-)

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.

Information on: Boron sodium oxide (B8Na2O13), tetrahydrate

Assessment of carcinogenicity:

In long-term studies in mice 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

Information on: Boron sodium oxide (B8Na2O13), tetrahydrate

Assessment of reproduction toxicity:

Causes impairment of fertility in laboratory animals. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Developmental toxicity

Information on: Boron sodium oxide (B8Na2O13), tetrahydrate

Assessment of teratogenicity:

The substance caused malformations/developmental toxicity in laboratory animals. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Other relevant toxicity information

The product has not been tested. The statements on toxicology have been derived from the properties of the individual components.

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 > 100 mg/l, Fish

Aquatic invertebrates:

LC50 (48 h), daphnia
not determined

Aquatic plants:

EC50 (72 h), algae
not determined

Microorganisms/Effect on activated sludge:

EC50 (0.5 h), bacteria
not determined

Chronic toxicity to fish:

No data available.

Chronic toxicity to aquatic invertebrates:

No data available.

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):

The product can be virtually eliminated from water by abiotic processes e.g. adsorption onto activated sludge. Not readily biodegradable (by OECD criteria).

Bioaccumulation potential

Assessment bioaccumulation potential:

The product has not been tested.

Bioaccumulation potential:

Significant 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.

The product has not been tested. The statements on ecotoxicology have been derived from the properties of the individual components.

13. Disposal Considerations

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

Contaminated packaging:

Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance/product.

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

Classification: Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001 (New Zealand)

Subclasses: Subclass 6.4 Category A - Substance which are eye irritants
Subclass 6.8 Category A - Substance which are reproductive or developmental toxicants

Hazard determining component(s) for labelling: Boron sodium oxide (B8Na2O13), tetrahydrate

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 released / listed
HSNO Approval GrpStd HSR002571

Fertilisers (subsidiary hazard) Group Standard 2006

If further information is required 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.

Full text of hazard symbols and R-phrases if mentioned as hazardous components in section 3:

Xn	Harmful.
T	Toxic.
22	Harmful if swallowed.
36	Irritating to eyes.
60	May impair fertility.
61	May cause harm to the unborn child.

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.