

Safety Data Sheet

Librel® Zn

Revision date : 2017/05/09

Version: 3.0

Page: 1/9

(30483290/SDS_GEN_CA/EN)

1. Identification

Product identifier used on the label

Librel® Zn

Recommended use of the chemical and restriction on use

Recommended use*: Chelate

* The "Recommended use" identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

Details of the supplier of the safety data sheet

Company:

BASF Canada Inc.
100 Milverton Drive
Mississauga, ON L5R 4H1, CANADA

Telephone: +1 289 360-1300

Emergency telephone number

CANUTEC (reverse charges): (613) 996-6666

BASF HOTLINE: (800) 454-COPE (2673)

Other means of identification

Chemical family: unspecified

2. Hazards Identification

According to Hazardous Products Regulations (HPR) (SOR/2015-17)

Classification of the product

Combustible Dust

Combustible Dust (1)

Combustible Dust

Label elements

Signal Word:

Warning

Hazard Statement:

Safety Data Sheet

Librel® Zn

Revision date : 2017/05/09
Version: 3.0

Page: 2/9
(30483290/SDS_GEN_CA/EN)

May form combustible dust concentration in air.

Hazards not otherwise classified

Labeling of special preparations (GHS):

The following percentage of the mixture consists of components(s) with unknown hazards regarding the acute toxicity: 96 % dermal

3. Composition / Information on Ingredients

According to Hazardous Products Regulations (HPR) (SOR/2015-17)

This product does not contain any components classified as hazardous under the referenced regulation.

4. First-Aid Measures

Description of first aid measures

General advice:

Remove contaminated clothing.

If inhaled:

Keep patient calm, remove to fresh air.

If on skin:

Wash thoroughly with soap and water.

If in eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open.

If swallowed:

Rinse mouth and then drink plenty of water.

Most important symptoms and effects, both acute and delayed

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

Indication of any immediate medical attention and special treatment needed

Note to physician

Treatment: Symptomatic treatment (decontamination, vital functions).

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media:
dry powder, foam

Safety Data Sheet

Librel® Zn

Revision date : 2017/05/09
Version: 3.0

Page: 3/9
(30483290/SDS_GEN_CA/EN)

Unsuitable extinguishing media for safety reasons:
carbon dioxide

Additional information:
Avoid whirling up the material/product because of the danger of dust explosion.

Special hazards arising from the substance or mixture

Hazards during fire-fighting:

harmful vapours, nitrogen oxides, carbon oxides

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

Advice for fire-fighters

Protective equipment for fire-fighting:
Wear a self-contained breathing apparatus.

Further information:

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

6. Accidental release measures

Further accidental release measures:

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.

Further accidental release measures:

Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air).

Personal precautions, protective equipment and emergency procedures

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 and material for containment and cleaning 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.

Nonsparking tools should be used.

7. Handling and Storage

Precautions for safe handling

Provide exhaust ventilation.

Protection against fire and explosion:

Avoid dust formation. 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. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Routine

Safety Data Sheet

Librel® Zn

Revision date : 2017/05/09
Version: 3.0

Page: 4/9
(30483290/SDS_GEN_CA/EN)

housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Refer to NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids (2013 Edition) for safe handling.

Dust explosion class: none.

Conditions for safe storage, including any incompatibilities

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.

Avoid all sources of ignition: heat, sparks, open flame.

8. Exposure Controls/Personal Protection

No occupational exposure limits known.

Advice on system design:

It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen deficient environment. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment). Use only appropriately classified electrical equipment and powered industrial trucks.

Personal protective equipment

Respiratory protection:

Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator.

Hand protection:

Chemical resistant protective gloves

Eye protection:

Wear face shield or tightly fitting safety goggles (chemical goggles) if splashing hazard exists.

Body protection:

Body protection must be chosen based on level of activity and exposure.

General safety and hygiene measures:

Wear protective clothing as necessary to minimize contact. Handle in accordance with good industrial hygiene and safety practice. 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
Odour:	odourless
Colour:	white
pH value:	5 - 9
Melting point:	not applicable
Boiling point:	not applicable
Flash point:	not applicable
Flammability:	not highly flammable

Safety Data Sheet

Librel® Zn

Revision date : 2017/05/09
Version: 3.0

Page: 5/9
(30483290/SDS_GEN_CA/EN)

Lower explosion limit:	not applicable	
Upper explosion limit:	not applicable	
Autoignition:	> 530 °C	
Vapour pressure:	< 0.000001 hPa (25 °C)	
Density:	Study does not need to be conducted.	
Bulk density:	650 - 900 kg/m ³	
Partitioning coefficient n-octanol/water (log Pow):	-8.841 (25 °C)	(calculated)
	The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.	
Self-ignition temperature:	not self-igniting	
Thermal decomposition:	not determined	
Viscosity, dynamic:	not applicable	
Viscosity, kinematic:	not applicable, the product is a solid	
Particle size:		(measured)
% volatiles:	not determined	
Solubility in water:	approx. 300 g/l (20 °C)	
Other Information:	If necessary, information on other physical and chemical parameters is indicated in this section.	

10. Stability and Reactivity

Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Oxidizing properties:
not fire-propagating

Dust explosion class:
none (none)

Chemical stability

The product is stable if stored and handled as prescribed/indicated.

Possibility of hazardous reactions

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

Conditions to avoid

Avoid electro-static charge.

Incompatible materials

strong oxidizing agents, strong bases, strong acids

Hazardous decomposition products

Decomposition products:

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

Thermal decomposition:
not determined

Safety Data Sheet

Librel® Zn

Revision date : 2017/05/09
Version: 3.0

Page: 6/9
(30483290/SDS_GEN_CA/EN)

11. Toxicological information

Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Acute Toxicity/Effects

Acute toxicity

Assessment of acute toxicity: Virtually nontoxic after a single ingestion. Virtually nontoxic by inhalation.

Oral

Type of value: LD50

Species: rat

Value: > 2,000 mg/kg (OECD Guideline 423)

Inhalation

Type of value: LC50

Species: rat

Value: > 5 mg/l (OECD Guideline 436)

Exposure time: 4 h

An aerosol was tested.

Dermal

Type of value: LD50

Species: rat

not determined

Irritation / corrosion

Assessment of irritating effects: Not irritating to eyes and skin.

Skin

Species: In vitro assay

Result: non-irritant

Method: OECD Guideline 439

Eye

Result: Slightly irritating.

Method: 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.

Chronic Toxicity/Effects

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.

Safety Data Sheet

Librel® Zn

Revision date : 2017/05/09
Version: 3.0

Page: 7/9
(30483290/SDS_GEN_CA/EN)

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.

Teratogenicity

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.

Symptoms of Exposure

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

12. Ecological Information

Toxicity

Aquatic toxicity

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, 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

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)

Safety Data Sheet

Librel® Zn

Revision date : 2017/05/09
Version: 3.0

Page: 8/9
(30483290/SDS_GEN_CA/EN)

Assessment of terrestrial toxicity

No data available concerning terrestrial toxicity.

Microorganisms/Effect on activated sludge

Toxicity to microorganisms

bacteria/EC50 (0.5 h):
not determined

Persistence and degradability

Assessment biodegradation and elimination (H2O)

Poorly biodegradable.

Bioaccumulative potential

Assessment bioaccumulation potential

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

Mobility in soil

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.

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

Waste disposal of substance:

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

Do not discharge into drains/surface waters/groundwater. Dispose of in accordance with national, state and local regulations.

Container disposal:

Dispose of in accordance with national, state and local regulations. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

14. Transport Information

Land transport

TDG

Not classified as a dangerous good under transport regulations

Sea transport

Safety Data Sheet

Librel® Zn

Revision date : 2017/05/09
Version: 3.0

Page: 9/9
(30483290/SDS_GEN_CA/EN)

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

VOC content:

not determined

Federal Regulations

Registration status:

Chemical DSL, CA released / listed

Fertilizer DSL, CA released / exempt

16. Other Information

SDS Prepared by:

BASF NA Product Regulations

SDS Prepared on: 2017/05/09

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