

Safety Data Sheet

Trilon® B Powder

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Version: 3.0

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(30043442/SDS_GEN_CA/EN)

1. Identification

Product identifier used on the label

Trilon® B Powder

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: diamines

Synonyms: Tetrasodium ethylenediaminetetraacetate

2. Hazards Identification

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

Classification of the product

Acute Tox.	4 (Inhalation - dust)	Acute toxicity
Acute Tox.	4 (oral)	Acute toxicity
Eye Dam./Irrit.	1	Serious eye damage/eye irritation
STOT RE	2 (by inhalation)	Specific target organ toxicity — repeated exposure
Combustible Dust	Combustible Dust (1)	Combustible Dust

Label elements

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Pictogram:



Signal Word:
Danger

Hazard Statement:

H318 May form combustible dust concentration in air.
Causes serious eye damage.
H332 Harmful if inhaled.
H302 Harmful if swallowed.
H373 May cause damage to organs (Respiratory system) through prolonged or repeated exposure (inhalation).

Precautionary Statements (Prevention):

P271 Use only outdoors or in a well-ventilated area.
P280 Wear eye/face protection.
P261 Avoid breathing dust.
P260 Do not breathe dust/gas/mist/vapours.
P270 Do not eat, drink or smoke when using this product.
P264 Wash with plenty of water and soap thoroughly after handling.

Precautionary Statements (Response):

P310 Immediately call a POISON CENTER or doctor/physician.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P330 Rinse mouth.

Precautionary Statements (Disposal):

P501 Dispose of contents/container to hazardous or special waste collection point.

3. Composition / Information on Ingredients

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

<u>CAS Number</u>	<u>Weight %</u>	<u>Chemical name</u>
64-02-8	75.0 - 100.0%	tetrasodium ethylenediaminetetraacetate
1310-73-2	1.0 - 3.0%	Sodium Hydroxide
5064-31-3	3.0 - 5.0%	trisodium nitrilotriacetate
19019-43-3	5.0 - 7.0%	Glycine, N-(carboxymethyl)-N-[2-[(carboxymethyl)amino]ethyl]-, trisodium salt
2836-32-0	1.0 - 3.0%	Acetic acid, hydroxy-, monosodium salt

4. First-Aid Measures

Description of first aid measures

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General advice:

Remove contaminated clothing.

If inhaled:

Keep patient calm, remove to fresh air, seek medical attention. Immediately administer a corticosteroid from a controlled/metered dose inhaler.

If on skin:

Immediately wash thoroughly with plenty of water, apply sterile dressings, consult a skin specialist.

If in eyes:

Immediately wash affected eyes for at least 15 minutes under running water with eyelids held open, consult an eye specialist.

If swallowed:

Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms: difficulty breathing, corneal injury, gastrointestinal complaints, irritation of the mucous membranes

Indication of any immediate medical attention and special treatment needed

Note to physician

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. Fire-Fighting Measures

Extinguishing media

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.

Special hazards arising from the substance or mixture

Hazards during fire-fighting:

harmful vapours, carbon oxides, nitrogen 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.

Impact Sensitivity:

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Remarks: Based on the chemical structure there is no shock-sensitivity.

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. Avoid inhalation of dusts.

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 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.

Conditions for safe storage, including any incompatibilities

Suitable materials for containers: Low density polyethylene (LDPE), glass, Paper/Fibreboard, 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

Components with occupational exposure limits

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Sodium Hydroxide	OSHA PEL	PEL 2 mg/m3 ;
	ACGIH TLV	CLV 2 mg/m3 ;

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:

Tightly fitting safety goggles (chemical goggles).

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. Wash soiled clothing immediately.

9. Physical and Chemical Properties

Form:	powder	
Odour:	product specific	
Colour:	white	
pH value:	approx. 10.5 - 12.5 (10 g/l, 23 °C)	(DIN 19268)
Melting point:	The substance / product decomposes therefore not determined.	
decomposition point:	> 150 °C The substance / product decomposes. Literature data.	
Flash point:	Study scientifically not justified.	
Flammability:	not highly flammable	(VDI 2263, sheet 1, 1.1)
Lower explosion limit:	For solids not relevant for classification and labelling.	
Upper explosion limit:	For solids not relevant for classification and labelling.	
Autoignition:	> 200 °C	(DIN 51794)
Vapour pressure:	6 hPa (approx. 25 °C) contains water, Literature data.	(measured)
Relative density:	1.67 (20 °C) Literature data.	

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Bulk density:	620 - 760 kg/m ³	
Partitioning coefficient n-octanol/water (log Pow):	-13 (20 °C)	
Thermal decomposition:	> 300 °C	
Viscosity, dynamic:	Study scientifically not justified.	
Particle size:		(measured)
Solubility in water:	approx. 750 g/l	
Solubility (qualitative):	soluble	
	solvent(s): polar solvents,	
Evaporation rate:	The product is a non-volatile solid.	

10. Stability and Reactivity

Reactivity

Minimum ignition energy:

> 4 J (VDI 2263, sheet 1, 2.1.1)

The product is capable of dust explosion.

Formation of flammable gases: Remarks:

Forms no flammable gases in the presence of water.

Chemical stability

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

Possibility of hazardous reactions

Dust explosion hazard.

Conditions to avoid

Avoid humidity. Avoid dust formation.

Incompatible materials

amphoteric metals, light metals

Hazardous decomposition products

Decomposition products:

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

Thermal decomposition:

> 300 °C

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

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Assessment of acute toxicity: Of moderate toxicity after single ingestion. Of moderate toxicity after short-term inhalation.

Oral

Type of value: LD50

Species: rat

Value: 1,780 - 2,000 mg/kg (BASF-Test)

Information on: tetrasodium ethylenediaminetetraacetate

Type of value: LD50

Species: rat

Value: > 1,780 - < 2,000 mg/kg (BASF-Test)

Inhalation

Type of value: LC50

Species: rat

Value: > 1 mg/l (other)

An aerosol was tested.

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

Information on: tetrasodium ethylenediaminetetraacetate

Type of value: LC50

Species: rat

Value: > 1 mg/l (other)

An aerosol was tested.

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

Dermal

Type of value: LD50

Study scientifically not justified.

Assessment other acute effects

Assessment of STOT single:

Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

Irritation / corrosion

Assessment of irritating effects: Not irritating to the skin. May cause severe damage to the eyes.

Information on: tetrasodium ethylenediaminetetraacetate

Assessment of irritating effects: Not irritating to the skin. May cause severe damage to the eyes.

Information on: Glycine, N-(carboxymethyl)-N-[2-[(carboxymethyl)amino]ethyl]-, trisodium salt

Assessment of irritating effects: Not irritating to the skin. Eye contact causes irritation.

Information on: Acetic acid, hydroxy-, monosodium salt

Assessment of irritating effects: Skin contact causes irritation. May cause severe damage to the eyes.

Skin

Species: rabbit

Result: non-irritant

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Method: BASF-Test

Eye

Species: rabbit

Result: Irritant.

Method: BASF-Test

Sensitization

Guinea pig maximization test

Species: guinea pig

Result: Non-sensitizing.

Method: OECD Guideline 406

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

Aspiration Hazard

Not relevant.

Chronic Toxicity/Effects

Repeated dose toxicity

Assessment of repeated dose toxicity: Repeated inhalation exposure may affect certain organs. 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: In the majority of tests performed (bacteria/microorganisms/cell cultures) a mutagenic effect was not found. A mutagenic effect was also not observed in in-vivo assays.

Carcinogenicity

Assessment of carcinogenicity: In long-term studies in rats and mice in which the substance was given by feed, a carcinogenic effect was not observed.

Reproductive toxicity

Assessment of reproduction toxicity: The results of animal studies gave no indication of a fertility impairing effect.

Teratogenicity

Assessment of teratogenicity: Animal studies gave no indication of a developmental toxic effect at doses that were not toxic to the parental animals.

Symptoms of Exposure

difficulty breathing, corneal injury, gastrointestinal complaints, irritation of the mucous membranes

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.

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Toxicity to fish

LC50 (96 h) > 100 mg/l, Lepomis macrochirus (OPP 72-1 (EPA-Guideline), static)
Nominal concentration. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Aquatic invertebrates

EC50 (48 h) > 100 mg/l, Daphnia magna (DIN 38412 Part 11, static)
Nominal concentration. 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), Scenedesmus obliquus (Directive 88/302/EEC, part C, p. 89, static)
Nominal concentration.

Chronic toxicity to fish

No observed effect concentration (35 d) \geq 36.9 mg/l, Brachydanio rerio (OECD Guideline 210, Flow through.)
The statement of the toxic effect relates to the analytically determined concentration. 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) 25 mg/l, Daphnia magna (OECD Guideline 211, semistatic)
Nominal concentration. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Soil living organisms

Toxicity to soil dwelling organisms:
LC50 (14 d) 156 mg/kg, Eisenia foetida (OECD Guideline 207, artificial soil)
The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Toxicity to terrestrial plants

No observed effect concentration 84 mg/kg, terrestrial plants (other)
The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Other terrestrial non-mammals

Study scientifically not justified.

Microorganisms/Effect on activated sludge

Toxicity to microorganisms

OECD Guideline 209 aquatic
activated sludge, domestic/EC20 (30 min): > 500 mg/l
Nominal concentration. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Persistence and degradability

Assessment biodegradation and elimination (H2O)

Was found to be potentially biodegradeable.

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Not readily biodegradable (by OECD criteria).

Assessment of stability in water

According to structural properties, hydrolysis is not expected/probable.

Bioaccumulative potential

Bioaccumulation potential

Bioconcentration factor: approx. 1.8 (28 d), *Lepomis macrochirus*
Does not significantly accumulate in organisms.

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

Sum parameter

Theoretical Oxygen Demand (ThOD): 654 mg/g

Adsorbable organically-bound halogen (AOX):
This product contains no organically-bound halogen.

Other ecotoxicological advice:
Do not release untreated into natural waters.

13. Disposal considerations

Waste disposal of substance:

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

Container disposal:

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

Land transport

TDG

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

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15. Regulatory Information

Federal Regulations

Registration status:

Chemical DSL, CA released / listed

Cosmetic DSL, CA released / listed

16. Other Information

SDS Prepared by:

BASF NA Product Regulations

SDS Prepared on: 2016/12/21

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

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