

Safety Data Sheet

Trilon® BX Powder

Revision date : 2019/06/10

Version: 5.0

Page: 1/12

(30043448/SDS_GEN_US/EN)

1. Identification

Product identifier used on the label

Trilon® BX Powder

Recommended use of the chemical and restriction on use

Recommended use*: complexing agents for the chemical industry

* 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 CORPORATION
100 Park Avenue
Florham Park, NJ 07932, USA

Telephone: +1 973 245-6000

Emergency telephone number

CHEMTREC: 1-800-424-9300
BASF HOTLINE: 1-800-832-HELP (4357)

Other means of identification

Chemical family: acetate

Synonyms: Not available. Use: complexing agents for the chemical industry

2. Hazards Identification

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

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

Safety Data Sheet

Trilon® BX Powder

Revision date : 2019/06/10
Version: 5.0

Page: 2/12
(30043448/SDS_GEN_US/EN)

Label elements

Pictogram:



Signal Word:
Danger

Hazard Statement:

H318	May form combustible dust concentration in air.
H332	Causes serious eye damage.
H302	Harmful if inhaled.
H373	Harmful if swallowed.
	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.
------	---

Hazards not otherwise classified

No specific dangers known, if the regulations/notes for storage and handling are considered.

3. Composition / Information on Ingredients

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

<u>CAS Number</u>	<u>Weight %</u>	<u>Chemical name</u>
64-02-8	>= 75.0 - <= 100.0%	tetrasodium ethylenediaminetetraacetate

4. First-Aid Measures

Description of first aid measures

Safety Data Sheet

Trilon® BX Powder

Revision date : 2019/06/10
Version: 5.0

Page: 3/12
(30043448/SDS_GEN_US/EN)

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: respiratory disorders, 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

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:

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.

Impact Sensitivity:

Safety Data Sheet

Trilon® BX Powder

Revision date : 2019/06/10
Version: 5.0

Page: 4/12
(30043448/SDS_GEN_US/EN)

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

Personal precautions, protective equipment and emergency procedures

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.
Dispose of absorbed material in accordance with regulations.

Nonsparking tools should be used.

7. Handling and Storage

Precautions for safe handling

Closed containers should only be opened in well-ventilated areas.

Protection against fire and explosion:

Avoid dust formation. Take precautionary measures against static discharges.

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: High density polyethylene (HDPE), Low density polyethylene (LDPE), Stainless steel 1.4301 (V2), Stainless steel 1.4306 (V2A), Stainless steel 1.4361, Stainless steel 1.4401, Stainless steel 1.4439, Stainless steel 1.4539, Stainless steel 1.4541, Stainless steel 1.4571

Further information on storage conditions: Keep container tightly closed and dry; store in a cool place.

Protect from temperatures below: -20 °C

Protect from temperatures above: 70 °C

Safety Data Sheet

Trilon® BX Powder

Revision date : 2019/06/10
Version: 5.0

Page: 5/12
(30043448/SDS_GEN_US/EN)

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.

Observe OSHA regulations for respirator use (29 CFR 1910.134).

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. Keep away from food, drink and animal feeding stuffs. Avoid contact with skin and eyes. Remove contaminated clothing.

9. Physical and Chemical Properties

Form:	powder	
Odour:	product specific	
Odour threshold:	No data available.	
Colour:	white	
pH value:	approx. 10.7 - 11.7 (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.	
:	not applicable	(other)
Flash point:	Study scientifically not justified.	
Flammability:	not highly flammable	
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)

Safety Data Sheet

Trilon® BX Powder

Revision date : 2019/06/10
Version: 5.0

Page: 6/12
(30043448/SDS_GEN_US/EN)

Vapour pressure:	6 hPa (approx. 25 °C) contains water, Literature data.	(measured)
Density:	1.67 g/cm ³ (20 °C) Literature data.	
Bulk density:	approx. 760 - 930 kg/m ³	(DIN ISO 697)
Vapour density:	not determined	
Partitioning coefficient n-octanol/water (log Pow):	-13 (20 °C)	
Thermal decomposition:	not determined	
Viscosity, dynamic:	Study scientifically not justified.	
Particle size:		(measured)
Solubility in water:	approx. 700 g/l	
Solubility (qualitative):	soluble solvent(s): polar solvents,	
Evaporation rate:	The product is a non-volatile solid.	

10. Stability and Reactivity

Reactivity

Corrosion to metals:
Corrodes metals in the presence of water or moisture.

Oxidizing properties:
Based on its structural properties the product is not classified as oxidizing.
Formation of Remarks: Forms no flammable gases in the
flammable gases: presence of water.

Chemical stability

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

Possibility of 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.

Conditions to avoid

Avoid dust formation. Avoid humidity.

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:
not determined

11. Toxicological information

Primary routes of exposure

Safety Data Sheet

Trilon® BX Powder

Revision date : 2019/06/10
Version: 5.0

Page: 7/12
(30043448/SDS_GEN_US/EN)

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

Oral

Type of value: LD50

Species: rat

Value: 1,000 - 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.

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.

Skin

Species: rabbit

Result: non-irritant

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.

Safety Data Sheet

Trilon® BX Powder

Revision date : 2019/06/10
Version: 5.0

Page: 8/12
(30043448/SDS_GEN_US/EN)

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.

Information on: tetrasodium ethylenediaminetetraacetate

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. 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.

Symptoms of Exposure

respiratory disorders, 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. Based on long-term (chronic) toxicity study data, the product is very likely not harmful to aquatic organisms.

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.

Safety Data Sheet

Trilon® BX Powder

Revision date : 2019/06/10
Version: 5.0

Page: 9/12
(30043448/SDS_GEN_US/EN)

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 subspicatus (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.

Analogous: Assessment derived from products with similar chemical character.

Soil living organisms

Toxicity to soil dwelling organisms:

LC50 (14 d) 156 mg/kg, Eisenia foetida (OECD Guideline 207, artificial soil)

Analogous: Assessment derived from products with similar chemical character.

Toxicity to terrestrial plants

No observed effect concentration (21 d) 84 mg/kg, terrestrial plants (other)

Analogous: Assessment derived from products with similar chemical character.

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)

Not readily biodegradable (by OECD criteria).

Was found to be potentially biodegradeable.

Assessment of stability in water

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

Information on Stability in Water (Hydrolysis)

Safety Data Sheet

Trilon® BX Powder

Revision date : 2019/06/10
Version: 5.0

Page: 10/12
(30043448/SDS_GEN_US/EN)

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): 602 mg/g

Other ecotoxicological advice:

Do not release untreated into natural waters.

13. Disposal considerations

Waste disposal of substance:

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

Container disposal:

Dispose of in a licensed facility. Recommend crushing, puncturing or other means to prevent unauthorized use of used containers.

14. Transport Information

Land transport

USDOT

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

Federal Regulations

Registration status:

Safety Data Sheet

Trilon® BX Powder

Revision date : 2019/06/10
Version: 5.0

Page: 11/12
(30043448/SDS_GEN_US/EN)

Cosmetic	TSCA, US	released / exempt
Chemical	TSCA, US	released / listed

EPCRA 311/312 (Hazard categories): Refer to SDS section 2 for GHS hazard classes applicable for this product.

<u>CERCLA RQ</u>	<u>CAS Number</u>	<u>Chemical name</u>
5000 LBS	67-56-1	Methanol
1000 LBS	1310-73-2; 75-07-0	Sodium Hydroxide; acetaldehyde
100 LBS	50-00-0	Formaldehyde
10 LBS	143-33-9	Sodium Cyanide

Safe Drinking Water & Toxic Enforcement Act, CA Prop. 65:

BASF Risk Assessment, CA Prop. 65:

Based on an evaluation of the product's composition and the use(s), this product does not require a California Proposition 65 Warning.

NFPA Hazard codes:

Health: 3 Fire: 1 Reactivity: 0 Special:

HMIS III rating

Health: 3 Flammability: 1 Physical hazard: 0

16. Other Information

SDS Prepared by:

BASF NA Product Regulations

SDS Prepared on: 2019/06/10

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.

Trilon® BX Powder is a registered trademark of BASF Corporation or BASF SE
IMPORTANT: WHILE THE DESCRIPTIONS, DESIGNS, DATA AND INFORMATION CONTAINED HEREIN ARE PRESENTED IN GOOD FAITH AND BELIEVED TO BE ACCURATE, IT IS PROVIDED FOR YOUR GUIDANCE ONLY. BECAUSE MANY FACTORS MAY AFFECT PROCESSING OR APPLICATION/USE, WE RECOMMEND THAT YOU MAKE TESTS TO DETERMINE THE SUITABILITY OF A PRODUCT FOR YOUR PARTICULAR PURPOSE PRIOR TO USE. NO WARRANTIES OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, DATA OR INFORMATION SET FORTH, OR THAT THE PRODUCTS, DESIGNS, DATA OR INFORMATION MAY BE USED WITHOUT INFRINGING THE INTELLECTUAL PROPERTY RIGHTS OF OTHERS. IN NO CASE

Safety Data Sheet

Trilon® BX Powder

Revision date : 2019/06/10

Page: 12/12

Version: 5.0

(30043448/SDS_GEN_US/EN)

SHALL THE DESCRIPTIONS, INFORMATION, DATA OR DESIGNS PROVIDED BE CONSIDERED A PART OF OUR TERMS AND CONDITIONS OF SALE. FURTHER, YOU EXPRESSLY UNDERSTAND AND AGREE THAT THE DESCRIPTIONS, DESIGNS, DATA, AND INFORMATION FURNISHED BY OUR COMPANY HEREUNDER ARE GIVEN GRATIS AND WE ASSUME NO OBLIGATION OR LIABILITY FOR THE DESCRIPTION, DESIGNS, DATA AND INFORMATION GIVEN OR RESULTS OBTAINED, ALL SUCH BEING GIVEN AND ACCEPTED AT YOUR RISK.
END OF DATA SHEET