

Safety Data Sheet

Trilon® BX Liquid

Revision date : 2018/12/03

Version: 7.0

Page: 1/11

(30236590/SDS_GEN_US/EN)

1. Identification

Product identifier used on the label

Trilon® BX Liquid

Recommended use of the chemical and restriction on use

Recommended use*: complexing agents for the chemical industry

Recommended use*: Chelate

Suitable for use in industrial sector: 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

Synonyms: EDTA Tetrasodium Salt in Water

2. Hazards Identification

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

Classification of the product

Met. Corr.	1	Corrosive to metals
Acute Tox.	4 (Inhalation - vapour)	Acute toxicity
Eye Dam./Irrit.	2A	Serious eye damage/eye irritation
STOT RE	2 (by inhalation)	Specific target organ toxicity — repeated exposure

Safety Data Sheet

Trilon® BX Liquid

Revision date : 2018/12/03
Version: 7.0

Page: 2/11
(30236590/SDS_GEN_US/EN)

Label elements

Pictogram:



Signal Word:
Warning

Hazard Statement:

H290	May be corrosive to metals.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
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.
P260	Do not breathe dust/gas/mist/vapours.
P234	Keep only in original packaging.
P264	Wash with plenty of water and soap thoroughly after handling.

Precautionary Statements (Response):

P312	Call a POISON CENTER or doctor/physician if you feel unwell.
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.
P314	Get medical advice/attention if you feel unwell.
P337 + P311	If eye irritation persists: Call a POISON CENTER or doctor/physician.
P390	Absorb spillage to prevent material damage.

Precautionary Statements (Storage):

P406	Store in a corrosion-resistant/... container with a resistant inner liner.
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Precautionary Statements (Disposal):

P501	Dispose of contents/container to hazardous or special waste collection point.
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Hazards not otherwise classified

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

Labeling of special preparations (GHS):

The following percentage of the mixture consists of components(s) with unknown hazards regarding the acute toxicity: 39 - 42 % dermal

The following percentage of the mixture consists of components(s) with unknown hazards regarding the acute toxicity: 1 - 2 % oral

The following percentage of the mixture consists of components(s) with unknown hazards regarding the acute toxicity: 1 - 2 % Inhalation - vapour

The following percentage of the mixture consists of components(s) with unknown hazards regarding the acute toxicity: 1 - 2 % Inhalation - mist

Safety Data Sheet

Trilon® BX Liquid

Revision date : 2018/12/03

Version: 7.0

Page: 3/11

(30236590/SDS_GEN_US/EN)

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	>= 25.0 - < 50.0%	tetrasodium ethylenediaminetetraacetate
1310-73-2	>= 1.0 - < 3.0%	Sodium Hydroxide

The product contains:

<u>CAS Number</u>	<u>Weight %</u>	<u>Chemical name</u>
5064-31-3	0.05 %	trisodium nitrilotriacetate

4. First-Aid Measures

Description of first aid measures

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: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11., (Further) symptoms and / or effects are not known so far

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:
water spray, dry powder, foam

Safety Data Sheet

Trilon® BX Liquid

Revision date : 2018/12/03

Version: 7.0

Page: 4/11

(30236590/SDS_GEN_US/EN)

Special hazards arising from the substance or mixture

Hazards during fire-fighting:

harmful vapours

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 in confined areas or when exposed to combustion products.

Further information:

Contaminated extinguishing water must be disposed of in accordance with official regulations.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Use personal protective clothing. Information regarding personal protective measures see, section 8.

Environmental precautions

Do not discharge into drains/surface waters/groundwater.

Methods and material for containment and cleaning up

For small amounts: Pick up with absorbent material (e.g. sand, sawdust, general-purpose binder).

Dispose of absorbed material in accordance with regulations.

For large amounts: Pump off product.

Spills should be contained, solidified, and placed in suitable containers for disposal.

7. Handling and Storage

Precautions for safe handling

Keep container tightly closed. Protect from the effects of light.

Protection against fire and explosion:

No special precautions necessary.

Conditions for safe storage, including any incompatibilities

Suitable materials for containers: Stainless steel 1.4401, Stainless steel 1.4301 (V2), High density polyethylene (HDPE), Low density polyethylene (LDPE), Polyester resin, glass reinforced (Palatal A410), glass

Further information on storage conditions: Keep in a cool place.

Protect from temperatures below: 1 °C

8. Exposure Controls/Personal Protection

Components with occupational exposure limits

Sodium Hydroxide	OSHA PEL	PEL 2 mg/m ³ ; CLV 2 mg/m ³ ;
	ACGIH TLV	CLV 2 mg/m ³ ;

Safety Data Sheet

Trilon® BX Liquid

Revision date : 2018/12/03
Version: 7.0

Page: 5/11
(30236590/SDS_GEN_US/EN)

Advice on system design:

Provide local exhaust ventilation to control vapours/mists.

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:

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:	liquid	
Odour:	product specific	
Odour threshold:	not determined	
Colour:	yellowish	
pH value:	approx. 11 - 12 (10 g/l, 23 °C)	(DIN 19268)
Freezing point:	< -20 °C (1,013 hPa)	
Flash point:	> 100 °C	(DIN 51758)
Lower explosion limit:	For liquids not relevant for classification and labelling.	
Upper explosion limit:	For liquids not relevant for classification and labelling.	
Autoignition:	> 200 °C	(DIN 51794)
Vapour pressure:	approx. 120 mbar (50 °C)	
Density:	1.255 g/cm ³ (55 °C) 1.3 g/cm ³ (20 °C)	
Relative density:	approx. 1.3 (20 °C)	(DIN 51757)
Vapour density:	not determined	
Partitioning coefficient n- octanol/water (log Pow):	-2.6	
Thermal decomposition:	No decomposition if stored and handled as prescribed/indicated.	
Viscosity, dynamic:	approx. 30 mPa.s (23 °C)	(DIN 53018)
Viscosity, kinematic:	22 mm ² /s (23 °C)	

Safety Data Sheet

Trilon® BX Liquid

Revision date : 2018/12/03

Version: 7.0

Page: 6/11

(30236590/SDS_GEN_US/EN)

Particle size:	The substance / product is marketed or used in a non solid or granular form.
Solubility in water:	completely soluble
Evaporation rate:	Value can be approximated from Henry's Law Constant or vapor pressure.

10. Stability and Reactivity

Reactivity

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

Corrosion to metals:

Corrosive effect on: Aluminium

Chemical stability

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

Possibility of hazardous reactions

Reacts with aluminum, with evolution of hydrogen.

Conditions to avoid

See MSDS section 7 - Handling and storage.

Incompatible materials

None known during use and storage if used according to instructions.

Hazardous decomposition products

Decomposition products:

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

Thermal decomposition:

No decomposition if stored and handled as prescribed/indicated.

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: Of moderate toxicity after short-term inhalation.

Oral

Type of value: LD50

Species: rat

Value: > 2,000 mg/kg

Dermal

Safety Data Sheet

Trilon® BX Liquid

Revision date : 2018/12/03

Version: 7.0

Page: 7/11

(30236590/SDS_GEN_US/EN)

Type of value: ATE
Value: > 5,000 mg/kg

Assessment other acute effects

No data available.

Irritation / corrosion

Assessment of irritating effects: Irritating to eyes. May cause slight irritation to the skin. May cause slight irritation to the respiratory tract.

Skin

Species: rabbit
Result: non-irritant
Method: BASF-Test

Eye

Species: rabbit
Result: Irritant.
Method: BASF-Test

Sensitization

Assessment of sensitization: Skin sensitizing effects were not observed in animal studies.

Information on: tetrasodium ethylenediaminetetraacetate

Assessment of sensitization:

Skin sensitizing effects were not observed in animal studies.

No sensitizing effect.

Information on: tetrasodium ethylenediaminetetraacetate

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

No aspiration hazard expected.

Chronic Toxicity/Effects

Repeated dose toxicity

Assessment of repeated dose toxicity: Repeated exposure may affect certain organs.

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: No data available.

Carcinogenicity

Safety Data Sheet

Trilon® BX Liquid

Revision date : 2018/12/03
Version: 7.0

Page: 8/11
(30236590/SDS_GEN_US/EN)

Assessment of carcinogenicity: No data available.

Reproductive toxicity

Assessment of reproduction toxicity: No data available.

Teratogenicity

Assessment of teratogenicity: No data available.

Other Information

The product has not been tested. The statement has been derived from the properties of the individual components.

Symptoms of Exposure

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11., (Further) symptoms and / or effects are not known so far

12. Ecological Information

Toxicity

Toxicity to fish

LC50 (96 h) > 500 mg/l, *Leuciscus idus*

Aquatic invertebrates

EC50 (48 h) > 100 mg/l

Chronic toxicity to fish

No data available.

Chronic toxicity to aquatic invertebrates

No data available.

Microorganisms/Effect on activated sludge

Toxicity to microorganisms

DEV-L2 : > 100 mg/l

Inhibition of degradation activity in activated sludge is not to be anticipated during correct introduction of low concentrations.

Persistence and degradability

Assessment biodegradation and elimination (H₂O)

Experience has shown that the product is difficult to eliminate in effluent treatment plants. Was found to be potentially biodegradeable.

Bioaccumulative potential

Assessment bioaccumulation potential

The product has not been tested.

Bioaccumulation potential

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

Mobility in soil

Safety Data Sheet

Trilon® BX Liquid

Revision date : 2018/12/03

Version: 7.0

Page: 9/11

(30236590/SDS_GEN_US/EN)

Assessment transport between environmental compartments

No data available.

Additional information

Sum parameter

Chemical oxygen demand (COD): 265 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.

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

USDOT

May be transported as non hazardous under USDOT in approved packaging.

Sea transport

IMDG

Hazard class:	8
Packing group:	III
ID number:	UN 3267
Hazard label:	8
Marine pollutant:	NO
Proper shipping name:	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (contains ETHYLENEDIAMINETETRAACETIC ACID NA4-SALT) SOLUTION CORROSIVE ON ALUMINIUM

Air transport

IATA/ICAO

Hazard class:	8
Packing group:	III
ID number:	UN 3267
Hazard label:	8
Proper shipping name:	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (contains ETHYLENEDIAMINETETRAACETIC ACID NA4-SALT) SOLUTION CORROSIVE ON ALUMINIUM

Further information

Not Class 8 for USDOT as per 49 CFR 173.154 (d).

Safety Data Sheet

Trilon® BX Liquid

Revision date : 2018/12/03
Version: 7.0

Page: 10/11
(30236590/SDS_GEN_US/EN)

15. Regulatory Information

Federal Regulations

Registration status:

Chemical TSCA, US released / listed

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

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: 2 Fire: 1 Reactivity: 0 Special:

HMIS III rating

Health: 2 Flammability: 1 Physical hazard: 0

16. Other Information

SDS Prepared by:

BASF NA Product Regulations
SDS Prepared on: 2018/12/03

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Safety Data Sheet

Trilon® BX Liquid

Revision date : 2018/12/03

Page: 11/11

Version: 7.0

(30236590/SDS_GEN_US/EN)

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