

Safety Data Sheet

Trilon® B liquid

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(30235589/SDS_GEN_US/EN)

1. Identification

Product identifier used on the label

Trilon® B liquid

Recommended use of the chemical and restriction on use

Recommended use*: Chemical

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

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 - mist)	Acute toxicity
Eye Dam./Irrit.	2A	Serious eye damage/eye irritation
STOT RE	2 (by inhalation)	Specific target organ toxicity — repeated exposure

Label elements

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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.
P261	Avoid breathing mist.
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: 41 % dermal

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

The following percentage of the mixture consists of components(s) with unknown hazards regarding the acute toxicity: 3 % Inhalation - vapour

The following percentage of the mixture consists of components(s) with unknown hazards regarding the acute toxicity: 3 % Inhalation - mist

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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 - 1.9%	Sodium Hydroxide
5064-31-3	0.3 - 1.0%	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.

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, 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

Special hazards arising from the substance or mixture

Hazards during fire-fighting:
harmful vapours

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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:

Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

Further information:

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

6. Accidental release measures

Further accidental release measures:

High risk of slipping due to leakage/spillage of product.

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

No special measures necessary provided product is used correctly.

Protection against fire and explosion:

No special precautions necessary.

Conditions for safe storage, including any incompatibilities

Segregate from acids and bases. Segregate from strong oxidizing agents.

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

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

8. Exposure Controls/Personal Protection

Advice on system design:

Provide local exhaust ventilation to control vapours/mists.

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Personal protective equipment

Respiratory protection:

Wear respiratory protection if ventilation is inadequate. Breathing protection if breathable aerosols/dust are formed.

Hand protection:

Chemical resistant protective gloves

Eye protection:

Tightly fitting safety goggles (chemical goggles) and face shield.

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:

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. Take off immediately all contaminated clothing. Handle in accordance with good industrial hygiene and safety practice.

9. Physical and Chemical Properties

Form:	liquid	
Odour:	odourless	
Odour threshold:	not determined	
Colour:	yellow	
pH value:	11 - 11.8	
Freezing point:	approx. 0 °C	
	Information applies to the solvent.	
Boiling point:	> 100 °C (1,013 hPa)	
Flash point:	> 100 °C	(closed cup)
Flammability:	hardly combustible	
Lower explosion limit:	Study does not need to be conducted.	
Upper explosion limit:	Study does not need to be conducted.	
Autoignition:	Based on the water content the product does not ignite.	
Vapour pressure:	< 0.35 mmHg (20 °C)	
Density:	1.29 - 1.32 g/cm ³ (20 - 25 °C)	
Relative density:	1.29 - 1.32	
Vapour density:	not determined	
Partitioning coefficient n-octanol/water (log Pow):	Study does not need to be conducted.	
Self-ignition temperature:	Based on the water content the product does not ignite.	
Thermal decomposition:	No decomposition if stored and handled as prescribed/indicated.	
Viscosity, dynamic:	not determined	
Particle size:	The substance / product is marketed or used in a non solid or granular form.	
Solubility in water:	soluble	

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Evaporation rate:	Value can be approximated from Henry's Law Constant or vapor pressure.
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.

Corrosion to metals:

Corrosive effect on metals. Corrosive effect on: brass zinc Aluminium

Oxidizing properties:

not fire-propagating

Chemical stability

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

Possibility of hazardous reactions

No hazardous reactions when stored and handled according to instructions.

The product is chemically stable.

Conditions to avoid

See MSDS section 7 - Handling and storage.

Incompatible materials

oxidizing agents, 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:

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. Virtually nontoxic after a single ingestion. Virtually nontoxic after a single skin contact.

Oral

Type of value: LD50

Species: rat

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Value: > 2,000 mg/kg

Dermal

Type of value: LD50
Species: rat
not determined

Assessment other acute effects

No data available.

Skin

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

Eye

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

Sensitization

No sensitizing effect.

Information on: Ethylenediaminetetraacetic Acid Tetrasodium Salt

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: No data available.

Information on: Ethylenediaminetetraacetic Acid Tetrasodium Salt

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.

Information on: Ethylenediaminetetraacetic Acid Tetrasodium Salt

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

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Assessment of carcinogenicity: No data available.

Information on: trisodium nitrilotriacetate

Assessment of carcinogenicity: Indication of possible carcinogenic effect in animal tests.

IARC (International Agency for Research on Cancer) has classified this substance as group 2B (The agent is possibly carcinogenic to humans).

Reproductive toxicity

Assessment of reproduction toxicity: No data available.

Teratogenicity

Assessment of teratogenicity: No data available.

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

Toxicity to fish

Information on: Ethylenediaminetetraacetic Acid Tetrasodium Salt

*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 plants

Information on: Ethylenediaminetetraacetic Acid Tetrasodium Salt

*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

Information on: Ethylenediaminetetraacetic Acid Tetrasodium Salt

*No observed effect concentration (35 d) >= 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.

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Chronic toxicity to aquatic invertebrates

Information on: Ethylenediaminetetraacetic Acid Tetrasodium Salt

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

Information on: Ethylenediaminetetraacetic Acid Tetrasodium Salt

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.

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.

Assessment biodegradation and elimination (H₂O)

Information on: Ethylenediaminetetraacetic Acid Tetrasodium Salt

Was found to be potentially biodegradeable.

Not readily biodegradable (by OECD criteria).

Assessment of stability in water

Information on: Ethylenediaminetetraacetic Acid Tetrasodium Salt

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

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.

Bioaccumulation potential

Information on: Ethylenediaminetetraacetic Acid Tetrasodium Salt

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

Mobility in soil

Assessment transport between environmental compartments

Information on: Ethylenediaminetetraacetic Acid Tetrasodium Salt

The substance will not evaporate into the atmosphere from the water surface.
Adsorption to solid soil phase is not expected.

Additional information

Sum parameter

Chemical oxygen demand (COD): 265 mg/g

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 release untreated into natural waters.

13. Disposal considerations

Waste disposal of substance:

Dispose of in accordance with national, state and local regulations. It is the waste generator's responsibility to determine if a particular waste is hazardous under RCRA.

Container disposal:

Dispose of in accordance with national, state and local regulations.

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

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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).

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:

WARNING: This product can expose you to chemicals including NITRILOTRIACETIC ACID AND ITS SALTS, which is known to the State of California to cause cancer. For more information, go to www.P65Warnings.ca.gov.

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: 2018/08/30

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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