

EDTA 4 Na

Version number: 2.0

SECTION 1: Identification

1.1 Product identifier

Identification of the substance	tetrasodium ethylenediaminetetraacetate tetrahydrate
Trade name	EDTA 4 Na
CAS number	13235-36-4

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses	Chemicals for various applications
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1.3 Details of the supplier of the safety data sheet

Valudor Products, LLC	Telephone: +1 (760) 635 8500
179 Calle Magdalena Suite 100	e-mail: info@valudor.com
Encinitas, California CA 92024	Website: www.valudor.com
United States	

1.4 Emergency telephone number

Emergency information	800-535-5053 (Infotrac)
As above or nearest toxicological information center.	

SECTION 2: Hazard(s) identification

2.1 Classification of the substance or mixture

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

Classification				
Section	Hazard class	Category	Hazard class and category	Hazard statement
A.10	acute toxicity (oral)	4	Acute Tox. 4	H302
A.11	acute toxicity (inhal.)	4	Acute Tox. 4	H332
A.3	serious eye damage/eye irritation	1	Eye Dam. 1	H318
A.9	specific target organ toxicity - repeated exposure	2	STOT RE 2	H373
B.cD	combustible dust	Comb. Dust	cD	OSHA003

For full text of abbreviations: see SECTION 16

The most important adverse physicochemical, human health and environmental effects

Delayed or immediate effects can be expected after short or long-term exposure.

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2.2 Label elements

Labelling acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

Signal word danger

Pictograms

GHS05, GHS07, GHS08



Hazard statements

H302+H332 Harmful if swallowed or if inhaled.

H318 Causes serious eye damage.

H373 May cause damage to organs through prolonged or repeated exposure.

OSHA003 May form combustible dust concentrations in air.

Precautionary statements

P260 Do not breathe dust.

P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P330+P331 If swallowed: Rinse mouth. Do NOT induce vomiting.

P304+P340 If inhaled: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308+P311 If exposed or concerned: Call a poison center/doctor.

P310 Immediately call a poison center/doctor.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards

Dust explosion hazards.

Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB.

SECTION 3: Composition/information on ingredients

3.1 Substances

Name of substance	tetrasodium ethylenediaminetetraacetate tetrahydrate
Identifiers	
CAS No	13235-36-4
Molecular formula	C ₁₀ H ₁₂ N ₂ O ₈ Na ₄

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Molar mass

380.2 g/mol

SECTION 4: First-aid measures

4.1 Description of first-aid measures

General notes

Self-protection of the first aider.

Take off immediately all contaminated clothing.

Do not leave affected person unattended.

In all cases of doubt, or when symptoms persist, seek medical advice.

Remove affected person from the danger area and lay down.

Following inhalation

Provide fresh air.

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions.

Following skin contact

Wash with plenty of soap and water.

Following eye contact

Rinse immediately carefully and thoroughly with eye shower or water.

Remove contact lenses, if present and easy to do. Continue rinsing.

Get immediate medical advice/attention.

Following ingestion

Rinse mouth immediately and drink plenty of water.

Do NOT induce vomiting.

Get medical advice/attention.

Notes for the doctor

None.

4.2 Most important symptoms and effects, both acute and delayed

Harmful if swallowed or if inhaled.

Seriously damaging to the eye.

4.3 Indication of any immediate medical attention and special treatment needed

Symptoms may develop several hours following exposure; medical observation therefore necessary for at least 48 hours.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

water, foam, alcohol resistant foam, fire extinguishing powder

Unsuitable extinguishing media

water jet

5.2 Special hazards arising from the substance or mixture

Combustible.

Hazardous decomposition products: Section 10.

Danger of dust explosion.

Hazardous combustion products

nitrogen oxides (NO_x), carbon monoxide (CO), carbon dioxide (CO₂), toxic gases/vapours

5.3 Advice for firefighters

Keep containers cool with water spray.

In case of fire and/or explosion do not breathe fumes.

Coordinate firefighting measures to the fire surroundings.

Do not allow firefighting water to enter drains or water courses.

Collect contaminated firefighting water separately.

Fight fire with normal precautions from a reasonable distance.

Special protective equipment for firefighters

chemical protection suit, self-contained breathing apparatus (SCBA)

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety.

Ventilate affected area.

Control of dust.

Eliminate all ignition sources if safe to do so.

Do not breathe dust.

Do not get in eyes, on skin, or on clothing.

Wearing of suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing.

For emergency responders

Wear breathing apparatus if exposed to vapors/dust/aerosols/gases.

6.2 Environmental precautions

Keep away from drains, surface and ground water.

Retain contaminated washing water and dispose of it.

If substance has entered a water course or sewer, inform the responsible authority.

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains.

Take up mechanically.

Advice on how to clean up a spill

Collect spillage.

Other information relating to spills and releases

Place in appropriate containers for disposal.

Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5.

Personal protective equipment: see section 8.

Incompatible materials: see section 10.

Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation.

Keep away from sources of ignition - No smoking.

Take precautionary measures against static discharge.

Removal of dust deposits.

Only vacuum cleaners containing no ignition sources may be used for combustible dusts.

Use explosion-proof electrical/ventilating/lighting/equipment.

Use only non-sparking tools.

Specific notes/details

Layers, deposits and heaps of combustible dust must be considered, like any other source which can form a hazardous explosive atmosphere.

Danger of dust explosion.

Measures to protect the environment

Avoid release to the environment.

Do not empty into drains; dispose of this material and its container at hazardous or special waste collection point.

Advice on general occupational hygiene

Do not eat, drink and smoke in work areas.

Remove contaminated clothing and protective equipment before entering eating areas.

Do not breathe dust.

Do not get in eyes, on skin, or on clothing.

Wash thoroughly after handling.

Preventive skin protection (barrier creams/ointments) is recommended.

7.2 Conditions for safe storage, including any incompatibilities

Explosive atmospheres

Removal of dust deposits.

Only vacuum cleaners containing no ignition sources may be used for combustible dusts.

Flammability hazards

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Take precautionary measures against static discharge.

Ground/bond container and receiving equipment.

Incompatible substances or mixtures

Incompatible materials: see section 10.

Protect against external exposure, such as

heat, humidity

Consideration of other advice

Keep away from food, drink and animal feedingstuffs.

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Store in a dry place. Store in a closed container.
Store in a well-ventilated place. Keep cool.

Ventilation requirements

Keep any substance that emits harmful vapors or gases in a place that allows these to be permanently extracted.
Provision of sufficient ventilation.

Specific designs for storage rooms or vessels

Keep container tightly closed and in a well-ventilated place.
Keep cool.

Packaging compatibilities

Keep only in original container.

7.3 Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values (Workplace Exposure Limits)

No constituent of the product currently has a known exposure limit.

8.2 Exposure controls

Appropriate engineering controls

Use local and general ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Wear eye/face protection.

Hand protection

Protective gloves		
Material	Material thickness	Breakthrough times of the glove material
Nitrile	≥ 0,11 mm	>480 minutes (permeation: level 6)

Wear suitable gloves.

Chemical protection gloves are suitable, which are tested according to EN 374.

Check leak-tightness/impermeability prior to use.

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Body protection

Protective clothing for use against solid particulates.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Particle filter device (DIN EN 143).

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Environmental exposure controls

Use appropriate container to avoid environmental contamination.
Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state	solid (powder)
Color	white
Odor	odorless
Odor threshold	not determined

Other safety parameters

pH (value)	slightly alkaline
Melting point/freezing point	not determined
Boiling point or initial boiling point and boiling range	not determined
Flash point	not applicable
Evaporation rate	not determined
Flammability (solid, gas)	this material is combustible, but will not ignite readily
Explosive limits	not determined
Explosion limits of dust clouds	not determined
Vapor pressure	not determined
Density and/or relative density	
Density	not determined
Relative vapour density	not relevant (solid)
Solubility(ies)	
Water solubility	partially soluble
Partition coefficient	
n-octanol/water (log KOW)	not determined
Auto-ignition temperature	not determined
Decomposition temperature	not relevant
Viscosity	not relevant

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(solid)

Explosive properties

dust explosion hazards

Oxidizing properties

none

Information for relevant hazard classes according to GHS

there is no additional information

9.2 Other information

there is no additional information

SECTION 10: Stability and reactivity

10.1 Reactivity

This material is not reactive under normal ambient conditions.

10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

See below "Conditions to avoid".

10.3 Possibility of hazardous reactions

Danger of dust explosion.

10.4 Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Take precautionary measures against static discharge.
Control of dust.

10.5 Incompatible materials

strong oxidizer

10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known.
Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

If not otherwise specified the classification is based on:

Animal studies; Evidence from any other toxicity tests; Expert judgment (weight of evidence determination).

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

Acute toxicity

Harmful if swallowed.

Harmful if inhaled.

Exposure route	Endpoint	Value	Species	Method
oral	LD50	630 – 1,260	rat	-

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Exposure route	Endpoint	Value	Species	Method
		mg/kg		

Skin corrosion/irritation

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin sensitization

Skin sensitization

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

Respiratory sensitization

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

Germ cell mutagenicity

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

Carcinogenicity

IARC Monographs

not listed

National Toxicology Program (United States)

not listed

OSHA Carcinogens

Not listed.

Reproductive toxicity

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

Specific target organ toxicity - single exposure

Classification could not be established because:

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

Specific target organ toxicity - repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

11.2 Other information

There is no additional information.

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SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity (acute)

Based on available data, the classification criteria are not met.

Data on similar substances were used.

Endpoint	Exposure time	Value	Species	Method
LC50	96 h	486 mg/l	bluegill (<i>Lepomis macrochirus</i>)	-

Aquatic toxicity (chronic)

No data available.

12.2 Persistence and degradability

Biodegradation

No data available.

Persistence

No data available.

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

Data are lacking, inconclusive, or conclusive but not sufficient for classification.

12.5 Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB.

12.6 Other adverse effects

Data are not available.

Remarks

Keep away from drains, surface and ground water.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Dispose of contents/container in accordance with local/regional/national/international regulations.

Sewage disposal-relevant information

Do not empty into drains.

Waste treatment of containers/packages

Completely emptied packages can be recycled.

Handle contaminated packages in the same way as the substance itself.

Remarks

Please consider the relevant national or regional provisions.

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SECTION 14: Transport information

- | | | |
|------|--|--------------------------------------|
| 14.1 | UN number | not subject to transport regulations |
| 14.2 | UN proper shipping name | - |
| 14.3 | Transport hazard class(es) | - |
| 14.4 | Packing group | - |
| 14.5 | Environmental hazards | - |
| 14.6 | Special precautions for user | - |
| 14.7 | Transport in bulk according to IMO instruments | - |

14.8 Information for each of the UN Model Regulations

Transport of dangerous goods by road or rail (49 CFR US DOT) Additional information

Not subject to transport regulations.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

National regulations (United States)

Toxic Substance Control Act (TSCA) Substance is listed (ACTIVE)

Superfund Amendment and Reauthorization Act (SARA TITLE III)

The List of Extremely Hazardous Substances and Their Threshold Planning Quantities (EPCRA Section 302, 304)

Not listed

Specific Toxic Chemical Listings (EPCRA Section 313)

Not listed

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

List of Hazardous Substances and Reportable Quantities (CERCLA section 102a) (40 CFR 302.4)

Not listed

Clean Air Act

Not listed

Right to Know Hazardous Substance List

Toxic or Hazardous Substance List (MA-TURA)

Not listed

Hazardous Substances List (MN-ERTK)

Not listed

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Hazardous Substance List (NJ-RTK)

Not listed

Hazardous Substance List (Chapter 323) (PA-RTK)

Not listed

Hazardous Substance List (RI-RTK)

Not listed

California Environmental Protection Agency (Cal/EPA): Proposition 65 - Safe Drinking Water and Toxic Enforcement Act of 1987

Not listed

Drug precursors, Chemicals designated within the Controlled Substances Act, 21 U.S.C. § 802, paragraphs 34 (list I) and 35 (list II)

Not listed

SECTION 16: Other information, including date of preparation or last revision

Date of preparation: 2023-03-31

Date of last revision: 2025-07-09.

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
49 CFR US DOT	49 CFR U.S. Department of Transportation
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
DGR	Dangerous Goods Regulations (see IATA/DGR)
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IARC	International Agency for Research on Cancer
IARC Mono-graphs	IARC Monographs on the Evaluation of Carcinogenic Risks to Humans
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
IMDG	International Maritime Dangerous Goods Code
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval
LD50	Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval
OSHA	Occupational Safety and Health Administration (United States)
PBT	Persistent, Bioaccumulative and Toxic
vPvB	Very Persistent and very Bioaccumulative

Key literature references and sources for data

OSHA Hazard Communication Standard (HCS), 29 CFR 1910.1200 (May 20, 2024 eff. July 19, 2024).

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Transport of dangerous goods by road or rail (49 CFR US DOT).
International Maritime Dangerous Goods Code (IMDG).
Dangerous Goods Regulations (DGR) for the air transport (IATA).

List of relevant phrases (code and full text as stated in section 2 and 3)

Code	Text
H302	Harmful if swallowed.
H318	Causes serious eye damage.
H332	Harmful if inhaled.
H373	May cause damage to organs through prolonged or repeated exposure.
OSHA003	May form combustible dust concentrations in air.

Responsible for the safety data sheet

Chemical Regulatory Compliance Com- Telephone: +1 (630) 410-1660
pany e-Mail: GHS@crc-us.com
Jasper, GA Website: www.crc-us.com
USA

Disclaimer

This information is based upon the present state of our knowledge.
This SDS has been compiled and is solely intended for this product.