

SAFETY DATA SHEET

according to 1907/2006/EC, Article 3

Version No. : 2.0
Prepared on : 28.05.2026
Revised on : -

SECTION 1: Identification of the substance/mixture and of the company/undertaking.

1.1 Product identifiers

Product name Ethylenediaminetetraacetic acid (EDTA) disodium salt dihydrate
Product Number PSR38197
Brand PureSynth research chemicals
CAS No. 6381-92-6

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

Identified uses : Laboratory Chemicals.

1.3 Details of the supplier of the safety data sheet

Company PureSynth Research Chemicals GmbH
64683 Einhausen Marie-Curie-Straße. 3, Germany

1.4 Emergency telephone number

Worldwide Helpline No.: 1800-8908-260

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Acute toxicity, (Category 4), H332

Specific target organ toxicity, repeated exposure, (Category 2), H373

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal word

Danger

Hazard statement(s)

H332

Harmful if swallowed or if inhaled

H373

May cause damage to organs through prolonged or repeated exposure

Precautionary statement(s)

P260

Do not breathe dust/fume/gas/mist/vapours/spray.

P271

Use only outdoors or in a well-ventilated area.

P304+P340

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P314

Get medical advice/ attention if you feel unwell. rinsing. Immediately call a poison center or doctor.

Supplemental Hazard Statements

none

2.3 **Other hazards:** This substance/mixture contains no components considered to be either persistent, bio accumulative and toxic (PBT), or very persistent and very bio accumulative (vPvB) at levels of 0.1% or higher

SECTION 3: Composition / information on ingredients

3.1 Substances

Common names & Synonyms	Mol. formula	CAS number
Ethylenediaminetetraacetic acid (EDTA) disodium salt dihydrate	$C_{10}H_{14}N_2Na_2O_8 \cdot 2H_2O$	6381-92-6
Component	Classification	Concentration
Edetate disodium dihydrate	Acute Tox. 4; STOT RE 2; H332, H373	<= 100 %

SECTION 4: First aid measures

Description of first aid measures

General advice	Show this safety data sheet to the doctor in attendance.
If inhaled	After inhalation: fresh air. Immediately call in physician. If breathing stops: immediately apply artificial respiration, Consult a physician..
In case of skin contact	In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Consult a physician.
In case of eye contact	After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.
If swallowed	After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.
Most important symptoms and effects, both acute and delayed	The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11
Indication of any immediate medical attention and special treatment needed	No data available

SECTION 5: Fire fighting measures

Extinguishing media	For this substance/mixture no limitations of extinguishing agents are given
Unsuitable extinguishing media	
Special hazards arising from the substance or mixture	In combustion toxic fumes may form.
Advice for fire-fighters	Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.
Further information	Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures	Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8.
Environmental precautions	Do not let product enter drains.
Methods and materials for containment and cleaning up	Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up with liquid-absorbent material. Dispose of properly. Clean up affected area.
Reference to other sections	For disposal see section 13.

SECTION 7: Handling and storage

Precautions for safe handling	Work under hood. Do not inhale substance/mixture. Avoid generation of vapours/aerosols Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance. For precautions see section 2.2.
Hygiene measures	Change contaminated clothing. Preventive skin protection recommended. Wash hands after working with substance. For precautions see section 2.2.
Conditions for safe storage, including any incompatibilities	Tightly closed. Dry. Store at Room Temperature. Storage class (TRGS 510): 11: Combustible Solids Storage class (TRGS 510): 6.1D: Non-combustible, acute toxic Cat.3 / toxic hazardous materials or hazardous materials causing chronic effects
Specific end use(s)	Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls / Personal protection

Control parameters	Ingredients with workplace control parameters
Exposure controls	Personal protective equipment
Appropriate engineering controls	
Personal protective equipment:	
Eye / face protection	Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves
Skin protection	Full contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 480 min Material tested:KCL 741 Dermatril® L This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from

those stated in EN 16523-1 please contact the supplier of CE-approved gloves

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm

Break through time: 480 min

Material tested: KCL 741 Dermatril® L

Body Protection

protective clothing

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Do not let product enter drains.

SECTION 9: Physical and chemical properties

Appearance	Form: Crystals
Odour	Colour: White
pH - Value	odourless
Density	No data available
Boiling Point	No data available
Melting Point	No data available
Solubility in water	No data available
Flash point	No data available
Vapour pressure	No data available
Auto -ignition temperature	No data available
Vapour density	No data available
Flammability (solid, gas)	No data available
Evaporation rate	No data available
Partition coefficient: n- octanol / water	No data available
Viscosity	No data available
Explosive properties	No data available
Upper / lower flammability or explosive limits	No data available
Oxidizing properties	none

Other safety information: No data available

SECTION 10: Stability and reactivity

Reactivity	The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.
Chemical stability	Stable under recommended storage conditions
Possibility of hazardous reactions	Violent reactions possible with: Strong oxidizing agents
Condition to avoid	no information available
Incompatible materials	Aluminium, Copper, Copper alloys, Nickel, Zinc
Hazardous decomposition products	In the event of fire: see section 5

SECTION 11: Toxicological information

	LD50 Oral - Rat - male and female - 2.800 mg/kg (OECD Test Guideline 401)
	Remarks: The value is given in analogy to the following substances:
Acute toxicity	Ethylenedinitrilotetraacetic acid disodium salt Acute toxicity estimate Inhalation - 1,6 mg/l - dust/mist (Expert judgement) Dermal: No data available Skin – Rabbit Result: No skin irritation (OECD Test Guideline 404)
Skin corrosion/irritation	Remarks: (ECHA) The value is given in analogy to the following substances: Ethylenedinitrilotetraacetic acid disodium salt Eyes – Rabbit Result: No eye irritation (OECD Test Guideline 405)
Serious eye damage/eye irritation	Remarks: (ECHA) The value is given in analogy to the following substances: Ethylenedinitrilotetraacetic acid disodium salt Maximisation Test - Guinea pig Result: negative (OECD Test Guideline 406)
Respiratory or skin sensitization	Remarks: (ECHA) The value is given in analogy to the following substances: Ethylenedinitrilotetraacetic acid disodium salt Test Type: Chromosome aberration test in vitro Test system: Chinese hamster ovary cells Metabolic activation: with and without metabolic activation Result: negative Remarks: (ECHA)
Germ cell mutagenicity	The value is given in analogy to the following substances: Ethylenedinitrilotetraacetic acid trisodium salt Test Type: In vitro mammalian cell gene mutation test Test system: mouse lymphoma cells Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 476 Result: negative Remarks: (ECHA)

	The value is given in analogy to the following substances: Ethylenedinitrilotetraacetic acid disodium salt
	The value is given in analogy to the following substances: Ethylenedinitrilotetraacetic acid trisodium salt
	Test Type: Ames test
	Metabolic activation: with and without metabolic activation
	Method: OECD Test Guideline 471
	Result: negative Remarks: (ECHA)
	The value is given in analogy to the following substances: Ethylenedinitrilotetraacetic acid trisodium salt
	Test Type: In vivo micronucleus test
	Species: Mouse
	Application Route: Oral Method:
	OECD Test Guideline 474
	Remarks: (ECHA)
	The value is given in analogy to the following substances: Ethylenedinitrilotetraacetic acid disodium salt
Carcinogenicity	No data available
Reproductive toxicity	No data available .
Specific target organ toxicity - single exposure	No data available
Specific target organ toxicity - repeated exposure	No data available
Aspiration hazard	No data available
Additional Information	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. Vomiting, Cough, irritant effects, Shortness of breath, respiratory arrest, narcosis, Dizziness, Nausea, agitation, spasms, inebriation, Headache, Stomach/intestinal disorders, ataxia (impaired locomotor coordination), cardiovascular disorders Drying-out effect resulting in rough and chapped skin. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12: Ecological information

Toxicity

Toxicity to fish	semi-static test LC50 - Oncorhynchus mykiss (rainbow trout) - > 100 mg/l - 96 h (OECD Test Guideline 203) Remarks: (ECHA) The value is given in analogy to the following substances: Sodium ferredetate
Toxicity to daphnia and other aquatic invertebrates	static test EC50 - Daphnia magna (Water flea) - 140 mg/l - 48 h (DIN 38412) Remarks: (ECHA) The value is given in analogy to the following substances: Ethylenedinitrilotetraacetic acid disodium salt NOEC - Daphnia magna (Water flea) - 25 mg/l - 21 d Remarks: (ECHA) The value is given in analogy to the following substances: Ethylenedinitrilotetraacetic acid disodium salt
Toxicity to bacteria	NOEC - activated sludge - > 640 mg/l - 3 h (OECD Test Guideline 209) Remarks: (ECHA) The value is given in analogy to the following substances: Sodium ferredetate
Toxicity to algae	static test - Pseudokirchneriella subcapitata (green algae) - > 60 mg/l - 72 h (OECD Test Guideline 201) Remarks: (ECHA) The value is given in analogy to the following substances: Sodium ferredetate

Persistence and degradability

Biodegradability

Result: 2 % - Not readily biodegradable. (OECD Test Guideline 301D)

Remarks: The value is given in analogy to the following substances:

Ethylenedinitrilotetraacetic acid disodium salt

Bio accumulative potential

Lepomis macrochirus (Bluegill sunfish) - 28 d at 21 °C - 0,08

mg/l(Edetate disodium dihydrate) Bioconcentration factor (BCF): 1,8

(OECD Test Guideline 305) Remarks: The value is given in analogy to

the following substances: Ethylenedinitrilotetraacetic

acid,Tetrasodiumsalt

Mobility in soil

No data available

Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Endocrine disrupting properties

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Other adverse effects

No data available

SECTION 13: Disposal considerations

Waste treatment methods

Products

No data available

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information

	UN no.	UN proper shipping name	Hazard Class(es)	Packaging group	Marine Pollutant
ADR / RID	-	Not dangerous goods	-	-	no
IMDG	-	Not dangerous goods	-	-	no
IATA	-	Not dangerous goods	-	-	no

SECTION 15: Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

Chemical safety assessment

A Chemical Safety Assessment has been carried out for this substance.

SECTION 16: Other information

The information in this SDS is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. The user must be determined suitability of this information for his application.