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Safety Data Sheet (SDS)

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers

Product Name: EDTA, Disodium Salt, Dihydrate, Molecular Biology Grade
Product Code: EDD05, EDD10
Synonyms:
CAS Number: 6381-92-6
Molecular Formula: $C_{10}H_{14}N_2Na_2O_8 \cdot 2H_2O$
Molar mass: 372.24 g/mol

1.2 Details of the supplier of the safety data sheet

Company: EcoTech Biotechnology
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Turkiye
Telephone: 0090 544 327 34 97
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Emergency
Phone Number: 0090 544 327 34 97

1.3 Product use

For research use only. Not intended for diagnostic or therapeutic use.

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

CLP Classification - According to GB-CLP Regulations UK SI 2019/720 and UK SI 2020/1567

Physical hazards

Based on available data, the classification criteria are not met

Health hazards

Acute Inhalation Toxicity - Dusts and Mists Category 4 (H332)

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

Environmental hazards

Based on available data, the classification criteria are not met

2.2 Label elements

Signal word:

Warning

Pictograms



Hazard Statements

H332 - Harmful if inhaled

H373 - May cause damage to organs through prolonged or repeated exposure if inhaled

Precautionary Statements

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P304 + P312 - IF INHALED: Call a POISON CENTER or doctor if you feel unwell

2.3 Other hazards

Substance is not considered persistent, bioaccumulative and toxic (PBT) / very persistent and very bioaccumulative(vPvB) This product does not contain any known or suspected endocrine disruptors

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Name of substance: EDTA, Disodium Salt, Dihydrate, Molecular Biology Grade
Molecular formula: $C_{10}H_{14}N_2Na_2O_8 \cdot 2H_2O$
Molar mass: 372.24 g/mol
CAS No: 6381-92-6

SECTION 4. FIRST AID MEASURES

4.1 Description of first aid measures

Eye contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing, consult a physician.
Skin Contact	Rinse skin with water/shower. In case of skin irritation, consult a physician.
Inhalation	Provide fresh air. In all cases of doubt, or when symptoms persist, seek medical advice.
Ingestion	Rinse mouth immediately and drink plenty of water. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Do NOT induce vomiting. Get medical attention.
Self-protection of the first aider	Use personal protective equipment as required. No special handling advices are necessary.

Most important symptoms and effects, both acute and delayed

No information available.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing Media	Water spray. Carbon dioxide (CO ₂). Foam. Dry chemical.
Unsuitable Extinguishing	No information available

5.2 Special hazards arising from the substance or mixture

Specific hazards arising from the chemical	Thermal decomposition can lead to release of irritating gases and vapors.
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5.3 Explosion data

Sensitivity to Mechanical Impact	No information available.
Sensitivity to Static Discharge	No information available.

5.4 Protective equipment and precautions for firefighters

Advice for firefighters	Standard procedure for chemical fires. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.
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SECTION 6: ACCIDENTAL RELEASE MEASURES

Ventilate the area. Wear appropriate protective equipment. Sweep and place in a closed container. In the event of a fire always wear self-contained breathing apparatus, NIOSH/MSHA approved or equivalent.

Leak and Spill Procedures: Ventilate the area. Wear appropriate protective equipment. Cover with dry lime or soda. Sweep and place in a closed container. Avoid generating dust.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact. Do not get in eyes, on skin, or clothing. Wash thoroughly after handling. Wash contaminated clothing before reuse. Minimize dust generation.

7.2 Conditions for safe storage, including any incompatibilities

Keep tightly closed. Store in a cool, dry, well-ventilated area away from incompatible substances. Keep in properly labelled containers.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Engineering measures

Ensure adequate ventilation, especially in confined areas.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. When using, do not eat, drink or smoke. Wash hands, forearms and face after handling.

Personal protective equipment

Eye/face protection: Tight sealing safety goggles.

Hand protection: Wear suitable gloves Glove material: Compatible chemical-resistant gloves.

Skin and body protection: Wear laboratory coat or impervious clothing. Choose appropriate body protection according to the amount and concentration of the substance at the work place.

Respiratory protection: In case of insufficient ventilation wear respirators and components tested and approved under appropriate government standards.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

a) Appearance:	White powder solid
b) Odor:	No odor
c) Odor Threshold:	No data available
d) pH:	4-6
e) Melting point/freezing point:	252 °C / 485.6 °F
f) Initial boiling point and boiling range:	No data available
g) Flash point:	No data available
h) Evaporation rate:	No data available
i) Flammability (solid, gas):	No data available
j) Upper / lower flammability or explosive limits:	No data available
k) Vapor pressure:	No data available
l) Vapor density:	No data available
m) Relative density:	No data available
n) Solubility(ies):	water soluble
o) Partition coefficient: <i>n</i> -octanol / water:	No data available
p) Auto-ignition temperature:	No data available
q) Decomposition temperature:	No data available
r) Viscosity:	No data available
s) Explosive properties:	No data available
t) Oxidizing properties:	No data available

SECTION 10. STABILITY AND REACTIVITY

Stability:	Stable under normal temperatures and pressure
Conditions to avoid:	Dust generation. Excess heat
Incompatibility:	Strong oxidizing agents
Hazardous Decomposition Products:	carbon monoxide, carbon dioxide,
Hazardous Polymerization:	Will not occur

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

acute toxicity;

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

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

Inhalation Category 4

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Disodium EDTA	LD50 > 2 g/kg (Rat)	-	-

Epidemiology:	No data available
Teratogenicity:	No data available
Reproductive Effects:	No data available
Neurotoxicity:	Neurotoxic have been noted in animal studies.
Mutagenicity:	No data available
Carcinogenicity:	Not listed by ACGIH, IARC, NTP, or OSHA

SECTION 12. ECOLOGICAL INFORMATION

Component	Freshwater Fish	Water Flea	Freshwater Algae
Disodium EDTA	Leuciscus idus: LC50 > 500 mg/L 96h	> 100 mg/L 24h	

Component	Microtox	M-Factor
Disodium EDTA	EC50 = 56 mg/L 8 h	

SECTION 13. DISPOSAL CONSIDERATIONS

Waste Disposal: Waste is classified as hazardous. Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in accordance with local regulations. Observe all Federal, provincial and local regulations.

Section 14. TRANSPORT INFORMATION

14.1 DOT (US)

Not regulated in the meaning of transport regulations.

14.2 IMDG

Not regulated in the meaning of transport regulations

14.3 IATA

Not regulated in the meaning of transport regulations

UN number	Not Applicable
UN proper shipping name	Not Applicable
Transport hazard class(es)	Not Applicable
Packing group	Not Applicable

SECTION 15. REGULATORY INFORMATION

International Inventories

Europe (EINECS/ELINCS/NLP), China (IECSC), Taiwan (TCSI), Korea (KECL), Japan (ENCS), Japan (ISHL), Canada (DSL/NDSL), Australia (AICS), New Zealand (NZIoC), Philippines (PICCS). US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

Component	CAS No	EINECS	ELINCS	NLP	IECSC	TCSI	KECL	ENCS	ISHL
Ethylenediaminetetraacetic acid, disodium salt dihydrate	6381-92-6	-	-	-	X	X	-	-	-
Disodium EDTA	139-33-3	205-358-3	-	-	X	X	KE-13651	X	X

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	DSL	NDSL	AICS	NZIoC	PICCS
Ethylenediaminetetraacetic acid, disodium salt dihydrate	6381-92-6	-	-	X	-	X	X	X
Disodium EDTA	139-33-3	X	ACTIVE	X	-	X	X	X

Legend: X - Listed '-' - Not Listed

KECL - NIER number or KE number (<http://ncis.nier.go.kr/en/main.do>)

Authorisation/Restrictions according to EU REACH

Not applicable

Component	CAS No	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization	REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances	REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC)
Ethylenediaminetetraacetic acid, disodium salt dihydrate	6381-92-6	-	-	-
Disodium EDTA	139-33-3	-	-	-

Component	CAS No	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements
Ethylenediaminetetraacetic acid, disodium salt dihydrate	6381-92-6	Not applicable	Not applicable
Disodium EDTA	139-33-3	Not applicable	Not applicable

Regulation (EC) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of dangerous chemicals

Not applicable

Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)?

Not applicable

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work .

National Regulations

UK - Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002 and 2005 Amendment

WGK Classification

See table for values

Component	Germany - Water Classification (AwSV)	Germany - TA-Luft Class
Ethylenediaminetetraacetic acid, disodium salt dihydrate	WGK2	
Disodium EDTA	WGK2	

SECTION 16. OTHER INFORMATION

The information provided on this Material Safety Data Sheet is furnished in good faith and without warranty of any kind. The above information is believed to be correct and should be used only as a guide. Ecotech Biotechnology shall not be held liable for any damage resulting from the handling or from the contact with the above product. Observe all federal, provincial and state laws concerning health, safety and pollution.