
Material Safety Data Sheet

Product Name	<u>EDTA di-Sodium salt dihydrate</u>
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Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identification:**Product Description:** EDTA di-Sodium salt dihydrate**Synonyms:** (Ethylenedinitrilo)tetraacetic acid, disodium salt dihydrate; Disodium edetate dihydrate; EDTA, disodium salt dihydrate**CAS-No:** 6381-92-6**EC-No.:** 205-358-3**Molecular Formula:** $C_{10}H_{14}N_2Na_2O_8 \cdot 2H_2O$ **REACH Registration No:** A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.**1.2. Relevant identified uses of the substance or mixture and uses advised against:****Recommended Use:** Laboratory chemicals, Manufacture of substances**1.3. Details of the supplier of the safety data sheet:**

- **Company** **Finar Limited**
184-186/P, Chacharwadi Vasna,
Sarkhej-Bavla Highway,
Ta.: Sanand, Dist.: Ahmedabad,
Email: info@finarchemicals.com
Web: www.finarchemicals.com
- **E-Mail Address** safety@finarchemicals.com; info@finarchemicals.com

1.4. Emergency Telephone Number:

- For Emergency contact on: +91 - 2717 - 616 717
- Registered office No: +91 - 79 - 40040085

Material Safety Data Sheet

Product Name	<u>EDTA di-Sodium salt dihydrate</u>
---------------------	---

SECTION 2: HAZARDS IDENTIFICATION**2.1. Classification of the substance or mixture:****Classification (REGULATION (EC) No 1272/2008)**

Acute toxicity, Inhalation (Category 4), H332

Specific target organ toxicity - repeated exposure, Inhalation (Category 2), Respiratory Tract, H373

Long-term (chronic) aquatic hazard (Category 3), H412

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2. Label Elements:**Labeling according Regulation (EC) No 1272/2008****Pictogram****Signal word** **Warning****Hazard statement(s)**

H332 Harmful if inhaled.

H373 May cause damage to organs (Respiratory Tract) through prolonged or repeated exposure if inhaled.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statement(s)

P260 Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.

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

P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Call a POISON CENTER/ doctor if you feel unwell.

P314 Get medical advice/ attention if you feel unwell.

P501 Dispose of contents/ container to an approved waste disposal plant.

Supplemental Hazard Statements: None

2.3. Other Hazards:

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.

Material Safety Data Sheet

Product Name	<u>EDTA di-Sodium salt dihydrate</u>
---------------------	---

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances: EDTA di-Sodium salt dihydrate

3.2. Mixtures:

Component	CAS-No	EC-No.	Weight %
EDTA di-Sodium salt dihydrate	6381-92-6	205-358-3	>95

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures:

- **General advice**

First aider needs to protect himself.

- **If inhaled**

Move to fresh air. Get medical attention if symptoms occur. If not breathing, give artificial respiration.

- **If Contact with skin**

Wash off immediately with plenty of water for at least 15 minutes. Get medical attention if symptoms occur.

- **In case of eye contact**

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention if symptoms occur.

- **If swallowed**

Do not induce vomiting. Obtain medical attention.

4.2. 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

4.3. Indication of any immediate medical attention and special treatment needed

No data available

Material Safety Data Sheet

Product Name	<u>EDTA di-Sodium salt dihydrate</u>
---------------------	---

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media:

Suitable Extinguishing Media- Water, Foam, Carbon dioxide (CO₂), Dry powder

Unsuitable Extinguishing Media- For this substance/mixture no limitations of extinguishing agents are given.

5.2. Special hazards arising from the substance or mixture:

Combustible.

Development of hazardous combustion gases or vapours possible in the event of fire.

Fire may cause evolution of: nitrogen oxides

5.3. Advice for firefighters:

Stay in danger area only with self-contained breathing apparatus.

Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

5.4 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

6.1. Personal precautions, protective equipment and emergency procedures:

Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid inhalation of vapours/aerosols or dusts. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

Advice for emergency responders: Protective equipment see section 8.

6.2. Environmental precautions:

Do not let product enter drains.

6.3. Methods and material 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 suitable equipment. Dispose of properly. Clean up affected area. Take up dry.

Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4. Reference to other sections:

Material Safety Data Sheet

Product Name	<u>EDTA di-Sodium salt dihydrate</u>
---------------------	---

For disposal see Sections 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling:

Wear personal protective equipment. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Avoid ingestion and inhalation. Avoid dust formation.

7.2. Conditions for safe storage, including any incompatibilities:

Storage conditions: Tightly closed. Dry.

7.3. 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

8.1. Control parameters

Contains no substances with occupational exposure limit values.

8.2. Exposure Controls:

- **Appropriate Engineering Controls:**

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

See section 7.1.

Personal Protective Equipment:

Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the respective supplier.

Eye & Face Protection

Safety goggles

Hand Protection

Full contact: -

Glove Material: Nitrile Rubber

Glove Thickness: 0.11 mm

Break Through Time: >480 min

Material Safety Data Sheet

Product Name	<u>EDTA di-Sodium salt dihydrate</u>
---------------------	---

Splash contact: -

Glove Material: Nitrile Rubber

Glove Thickness: 0.11 mm

Break Through Time: >480 min

The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374, for example KCL 741 Dermatril® L (full contact), KCL 741 Dermatril® L (splash contact).

The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types.

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 EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Body Protection

Protective clothing

Respiratory Protection

Required when dusts are generated.

Recommended Filter type: Filter P 2(acc. To DIN 3181) for Solid and Liquid particles of harmful substances.

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

Environmental Exposure Controls

Do not let product enter drains.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties:

- **Appearance:** White
- **Physical State:** Solid
- **Odor:** Odorless
- **pH:** 4-6 in 5% aq. solution
- **Melting Point:** 252°C

Material Safety Data Sheet

Product Name	<u>EDTA di-Sodium salt dihydrate</u>
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- **Ignition Temperature:** No data available
- **Decomposition Temperature:** > 252°C
- **Vapor Pressure:** No data available
- **Relative Vapor Density:** No data available
- **Density:** No data available
- **Volatility:** No data available
- **Bulk Density:** ca.700 kg/m³
- **Odor Threshold:** No data available
- **Viscosity, dynamic:** No data available
- **Water/Oil Dist. Co eff.:** No data available
- **Ionicity (in Water):** No data available
- **Partition Co-efficient: n-octanol/water:** No data available
- **Boiling Point/Range:** No data available
- **Flash Point:** No data available
- **Sublimation Point:** No data available
- **Specific Gravity:** No data available
- **Water Solubility:** 100 g/l at 20°C

9.2. Other information:

Molecular Formula: C₁₀H₁₄N₂Na₂O₈ · 2H₂O

Molecular Weight: 372.23 g/mol

SECTION 10: STABILITY AND REACTIVITY

10.1. 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.

10.2. Chemical stability:

Stable under normal conditions.

10.3. Possibility of hazardous reactions:

Violent reactions possible with: Strong oxidizing agents

10.4. Conditions to avoid:

Material Safety Data Sheet

Product Name	<u>EDTA di-Sodium salt dihydrate</u>
---------------------	---

Incompatible products. Excess heat. Avoid dust formation.

10.5. Incompatible materials:

Strong oxidizing agents.

10.6. Hazardous decomposition products:

Carbon monoxide (CO), Carbon dioxide (CO₂)

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:**Acute Oral toxicity**

LD50 Oral - Rat - male and female - 2.800 mg/kg
(OECD Test Guideline 401)

Acute Inhalation Toxicity

Acute toxicity estimate: 1.6 mg/l; dust/mist
Expert judgement

Acute Dermal toxicity

No data available

Skin corrosion/irritation

Rabbit

Result: No irritation

OECD Test Guideline 404.

(anhydrous substance)

Serious eye damage/eye irritation

Rabbit

Result: No eye irritations

(ECHA) (anhydrous substance)

Sensitisation

No data available

Germ cell mutagenicity

Genotoxicity in vitro

Ames test

Salmonella typhimurium

Material Safety Data Sheet

Product Name	<u>EDTA di-Sodium salt dihydrate</u>
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Result: negative

(anhydrous substance) (Lit.)

Mouse lymphoma test

Result: negative

(ECHA) (anhydrous substance)

Carcinogenicity

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Exposure routes: Inhalation

Target Organs: Respiratory Tract

Repeated dose toxicity

Rat

male

Inhalation

aerosol

5 d

daily

LOAEL: 0.03 mg/l

OECD Test Guideline 412

Target Organs: Lungs, larynx

Rat

male and female

Inhalation

dust/mist

90 d

daily

NOAEL: 0.003 mg/l

Material Safety Data Sheet

Product Name	<u>EDTA di-Sodium salt dihydrate</u>
---------------------	---

OECD Test Guideline 413

Target Organs: larynx

Rat

male

Oral

13 Weeks

daily

NOAEL: \geq 500 mg/kg

(ECHA)

Aspiration hazard

No data available

11.2 Further Information

After absorption: disturbed electrolyte balance.

After uptake of large quantities:

Damage to:

Kidney

Other dangerous properties cannot be excluded.

Handle in accordance with good industrial hygiene and safety practice.

SECTION 12: ECOLOGICAL INFORMATION**12.1. Toxicity:**

Toxicity to fish:

LC50 *Poecilia reticulata* (guppy): ca. 320 mg/l; 96 h

(anhydrous substance) (IUCLID)

Toxicity to daphnia and other aquatic invertebrates:

No data available

Toxicity to algae:

No data available

Toxicity to bacteria:

EC50 activated sludge: 403 mg/l; 3 h

OECD Test Guideline 209

Material Safety Data Sheet

Product Name	<u>EDTA di-Sodium salt dihydrate</u>
---------------------	---

EC50 Pseudomonas putida: 56 mg/l; 8 h
(anhydrous substance) (IUCLID)

12.2 Persistence and degradability:

No data available

12.3 Bioaccumulate potential:

No data available

12.4 Mobility in soil:

No data available

12.5 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.

12.6 Other adverse effects

Discharge into the environment must be avoided.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the national and local regulations.

Leave chemicals in original containers. No mixing with other waste.

Handle uncleaned containers like the product itself.

SECTION 14: Transport information

	Land transport (ADR/RID)	Air transport (IATA)	Sea transport (IMDG)
14.1 UN number	Not classified as dangerous in the meaning of transport regulations.		
14.2 Proper shipping name	Not classified as dangerous in the meaning of transport regulations.		
14.3 Class	Not classified as dangerous in the meaning of transport regulations.		
14.4 Packing group	Not classified as dangerous in the meaning of transport regulations.		
14.5 Environmentally hazardous	Not classified as dangerous in the meaning of transport regulations.		
14.6 Special precautions for user	Not classified as dangerous in the meaning of transport regulations.		

Material Safety Data Sheet

Product Name	<u>EDTA di-Sodium salt dihydrate</u>
---------------------	---

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	
Not Relevant	

SECTION 15: Regulatory information

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

National Legislation

Storage class 10-13

15.2 Chemical safety assessment:

For this product a chemical safety assessment was not carried out

SECTION 16: Other information

Full text of H-Statements referred to under sections 2 and 3.

H332 Harmful if inhaled.

H373 Causes damage to organs through prolonged or repeated exposure if inhaled.

Training advice

Provide adequate information, instruction and training for operators.

Labeling

Hazard pictograms



Signal word: Warning

Hazard statements

H332 Harmful if inhaled.

H373 May cause damage to organs (Respiratory Tract) through prolonged or repeated exposure if inhaled.

Precautionary statements

Response

P314 Get medical advice/ attention if you feel unwell.

Material Safety Data Sheet

Product Name	<u>EDTA di-Sodium salt dihydrate</u>
---------------------	---

References: Not available

Created: 22/04/2021

Disclaimer:

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