SDS-EDTACOMMERCI 14 Aug 2026

SAFETY DATA SHEET

EDTA (COMMERCIAL GRADE)

CAS No.: 60-00-4

This Safety Data Sheet is issued by Suraj Chemicals as the distributor/supplier of record, based on manufacturer and published GHS / regulatory reference data for this substance. Users should also consult the specific manufacturer's SDS where available.

1. IDENTIFICATION

GHS Product identifier

EDTA
Ethylenediaminetetraacetic acid; Edetic acid
CAS: 60-00-4

Other means of identification

Not relevant

Recommended use of the chemical and restrictions on use

Relevant uses: chelating agent for water treatment, cleaning/descaling formulations, textile processing, pulp & paper, and as an industrial sequestrant for metal ions. For industrial/commercial user only.

Uses advised against: All uses not specified in this section or in section 7.3.

Supplier's details

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2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

GHS:
Classification of this product has been carried out in accordance with the Globally Harmonized System of Classification and Labelling of Chemicals (GHS).

Eye Irrit. 2	Eye irritation, Category 2, H319

GHS label elements, including precautionary statements

GHS: Warning

Hazard statements

H319 – Causes serious eye irritation.

Precautionary statements

P264: Wash hands thoroughly after handling.
P280: Wear eye protection/face protection.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313: If eye irritation persists: Get medical advice/attention.
P501: Dispose of the contents/containers in accordance with local regulations.

Other hazards which do not result in classification

Commercial grade EDTA may be supplied as the free acid or as a sodium salt (e.g., disodium/tetrasodium EDTA); the exact salt form and assay of a given consignment is available on request.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Substances

Chemical description: Ethylenediaminetetraacetic acid (EDTA, free acid)

In accordance with Annex 4.3.3 of the GHS, the product contains:

Identification	Chemical Name / Classification	Concentration
CAS: 60-00-4	Ethylenediaminetetraacetic acid (EDTA, free acid) — Eye Irrit. 2: H319 – Warning	≥99% (commercial/technical grade)

To obtain more information on the hazards of the substances, consult sections 11, 12 and 16. Where supplied as a sodium salt, composition/CAS differs slightly from the free acid; consult the specific batch documentation.

Mixtures

Non-applicable

4. FIRST AID MEASURES

Description of necessary first-aid measures

Request medical assistance immediately, showing the SDS of this product.

By inhalation

Remove the person affected from the area of exposure and provide fresh air. Seek medical attention if discomfort continues.

By skin contact

Wash affected skin thoroughly with plenty of water and soap.

By eye contact

Rinse eyes thoroughly with lukewarm water for at least 15 minutes, holding eyelids open. Remove contact lenses if present and easy to do. Seek medical attention if irritation persists (H319).

By ingestion/aspiration

Rinse mouth with water. Do not induce vomiting. Seek medical attention if a large quantity is swallowed or discomfort occurs.

Most important symptoms/effects, acute and delayed	Acute and delayed effects are indicated in sections 2 and 11.
Indication of immediate medical attention and special treatment needed, if necessary	Not relevant

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Suitable: Water spray/fog, dry chemical powder, foam, carbon dioxide
Unsuitable: None known

Specific hazards arising from the chemical

Combustible organic solid. Thermal decomposition may release oxides of nitrogen and carbon.

Special protective actions for fire-fighters

Wear self-contained breathing apparatus and full protective clothing for large fires. Cool fire-exposed containers with water spray.

Additional provisions

Use water spray to cool fire-exposed containers. Prevent fire-fighting water from entering drains or watercourses. Approach the fire from upwind where possible.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Isolate leaks provided there is no additional risk for the people performing this task. Personal protection equipment must be used against potential contact with the spilt product (see section 8). Evacuate the area and keep out those who do not have protection.

For emergency responders

Wear protective equipment. Keep unprotected persons away. See section 8.

Environmental precautions

Prevent product from entering drains, watercourses or soil in large quantities as good practice; not classified as an environmental hazard.

Methods and materials for containment and cleaning up

Sweep or vacuum up dry material avoiding dust generation; collect in suitable containers for disposal or reuse.

Reference to other sections

See sections 8 and 13.

7. HANDLING AND STORAGE

Precautions for safe handling

A. General precautions for safe use

Avoid generating and inhaling dust. Avoid contact with eyes. Provide adequate ventilation.

B. Technical recommendations for the prevention of fires and explosions

Keep away from open flame and ignition sources; control dust accumulation to avoid combustible-dust hazards.

C. Technical recommendations on general occupational hygiene

Do not eat, drink or smoke while handling. Wash hands after use.

D. Technical recommendations to prevent environmental risks

Avoid unnecessary release to drains and watercourses.

Conditions for safe storage, including any incompatibilities

A. Specific storage requirements

Minimum Temp.	5°C
Maximum Temp.	30°C
Maximum time	24 Months

B. General conditions for storage

Store in a cool, dry, well-ventilated place in tightly closed original containers. For additional information see subsection 10.5.

Specific end use(s)

Except for the instructions already specified, it is not necessary to provide any special recommendation regarding the uses of this product.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

No specific occupational exposure limit has been established for this substance under Indian or internationally harmonized OEL lists currently referenced. Apply general dust/mist limits (e.g., 10 mg/m³ total inhalable / 3-5 mg/m³ respirable, as applicable) as good industrial hygiene practice.

Appropriate engineering controls

It is recommended to use localized extraction in the work area as a collective protection measure to avoid exceeding occupational exposure limits, in addition to individual protective equipment (PPE) as needed. Consult the manufacturer's information leaflet for storage, use, cleaning and maintenance of PPE.

B. Respiratory protection

Not normally required with adequate ventilation. Use a particulate filter respirator (FFP2/P2) where dust levels are elevated.

C. Specific protection for the hands

Protective gloves recommended for prolonged/repeated handling.

D. Eye and face protection

Safety goggles or glasses with side shields (H319).

E. Bodily protection

Standard work clothing.

F. Additional emergency measures

Emergency shower (ANSI Z358-1, ISO 3864-1:2011, ISO 3864-4:2011) and eyewash stations (DIN 12 899, ISO 3864-1:2011, ISO 3864-4:2011) should be available.

Environmental exposure controls

Avoid environmental spillage of both the product and its container. See subsection 7.1.D.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	
Physical state at 20°C	Solid (crystalline powder)
Appearance	Crystalline powder
Color	White
Odor	Odourless
Odour threshold	Not relevant *
Volatility	
Boiling point at atmospheric pressure	Decomposes before boiling (>240°C)
Vapour pressure at 20°C	Negligible
Evaporation rate at 20°C	Not relevant (solid)
Product Description	
Density / Relative density at 20°C	~0.86 g/cm³ bulk (literature)
Dynamic / Kinematic viscosity	Not applicable (solid)
Concentration	See section 3
pH	~2–3 (1% aqueous slurry, free acid; literature)
Vapour density at 20°C	Not relevant (solid)
Partition coefficient n-octanol/water 20°C	log Pow ~ –3.4 (literature)
Solubility in water at 20°C	Poorly soluble as free acid (~0.5 g/L); readily soluble as sodium salt
Decomposition temperature	>240°C
Melting point/freezing point	~240°C (decomposes)
Flammability	
Flash Point	Non-applicable (solid)
Flammability (solid, gas)	Combustible solid
Autoignition temperature	Not established
Lower / Upper flammability limit	Not relevant (solid, not gas/vapor)
Particle Characteristics	
Median equivalent diameter	Available on request (grade dependent)

** Not relevant due to the non-volatile, low-odour nature of this solid chelating agent.*

Other information

Explosive properties	Not relevant (non-explosive)
Oxidising properties	Non-oxidising
Corrosive to metals	Not corrosive
Heat of combustion	Not established
Surface tension at 20°C	Not relevant (solid)
Refraction index	Not relevant (solid)

10. STABILITY AND REACTIVITY

Reactivity Stable under normal conditions. Chelates metal ions readily in aqueous solution; may react with strong oxidising agents.

Chemical stability Chemically stable under recommended storage conditions.

Possibility of hazardous reactions Under normal conditions of use, hazardous reactions are not expected.

Conditions to avoid

Shock/Friction	Contact with Air	Increase in Temperature	Sunlight	Humidity
Not applicable	Not applicable	Avoid prolonged heating above decomposition temperature	Stable	Keep dry

Incompatible materials

Strong Oxidising Agents	Strong Acids/Bases
Avoid contact	Avoid contact

Hazardous decomposition products Thermal decomposition may release oxides of nitrogen (NOx) and carbon (CO, CO2).

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

In case of exposure that is repetitive, prolonged, or at concentrations higher than the recommended occupational exposure limits, adverse health effects may result depending on the means of exposure:

A. Ingestion (acute effect)
Considered to have low acute oral toxicity; large doses may cause gastrointestinal discomfort. EDTA can chelate essential minerals (e.g., calcium) with repeated high exposure.

B. Inhalation (acute effect)
Dust may cause irritation of the nose, throat and respiratory tract.

C. Contact with skin and eyes (acute effect)
Not classified as a skin irritant; causes serious eye irritation (H319).

D. CMR effects (carcinogenicity, mutagenicity, reproductive toxicity)
Classification criteria for carcinogenicity, mutagenicity and reproductive toxicity are not met based on available data.

E. Sensitizing effects
Classification criteria for respiratory or skin sensitisation are not met based on available data.

F. Specific target organ toxicity (STOT) – single exposure
Classification criteria are not met based on available data.

G. Specific target organ toxicity (STOT) – repeated exposure
Classification criteria are not met based on available data.

H. Aspiration hazard
Not relevant (solid).

Product-specific toxicological information

Identification	Acute Toxicity	Genus
EDTA (free acid) CAS: 60-00-4	LD50 oral: ~2,000 mg/kg (literature)	Rat

12. ECOLOGICAL INFORMATION

Not classified as hazardous to the aquatic environment under core GHS criteria based on available data.

Toxicity

Identification	Acute Toxicity	Genus
EDTA (free acid) CAS: 60-00-4	Available on request (grade/salt-form dependent)	Fish / Crustacean

Persistence and degradability

Reported in the literature as poorly biodegradable under standard aerobic conditions (strong metal-chelating agents generally resist microbial breakdown).

Bioaccumulative potential

Low bioaccumulation potential expected (low log Pow).

Mobility in soil

Koc	Henry	Dry Soil	Moist Soil
Not established	Low	Mobile (as soluble salt form)	Mobile

Results of PBT and vPvB assessment

Not formally assessed against PBT/vPvB criteria for this product.

Other adverse effects

May mobilise heavy metals from soils/sediments due to strong chelating action; avoid large-scale environmental release.

13. DISPOSAL CONSIDERATIONS

Disposal methods

Dispose of via a licensed waste contractor in accordance with local regulations. Where possible, recover or recycle process solutions containing this product. Avoid uncontrolled discharge to drains/watercourses given its metal-chelating properties.

Refer to national and local regulations on waste management (Hazardous and Other Wastes (Management & Transboundary Movement) Rules, 2016, as amended).

14. TRANSPORT INFORMATION

Transport of dangerous goods by land (ADR 2023 / RID 2023)

14.1 UN number	Not regulated
14.2 UN proper shipping name	Not classified as dangerous goods for transport
14.3 Transport hazard class(es)	–
14.4 Packing group	–
14.5 Environmental hazard	No
14.6 Special precautions for user	Physico-chemical properties: see section 9
14.7 Transport in bulk (Annex II MARPOL 73/78, IBC Code)	Not relevant

Transport of dangerous goods by sea (IMDG 41-22)

14.1 UN number	Not regulated
14.2 UN proper shipping name	Not classified as dangerous goods for transport
14.3 Transport hazard class(es)	–
14.4 Packing group	–
14.5 Environmental hazard	No
14.6 Special precautions for user	Physico-chemical properties: see section 9
14.7 Transport in bulk (Annex II MARPOL 73/78, IBC Code)	Not relevant

Transport of dangerous goods by air (IATA/ICAO 2024)

14.1 UN number	Not regulated
14.2 UN proper shipping name	Not classified as dangerous goods for transport
14.3 Transport hazard class(es)	–
14.4 Packing group	–
14.5 Environmental hazard	No
14.6 Special precautions for user	Physico-chemical properties: see section 9
14.7 Transport in bulk (Annex II MARPOL 73/78, IBC Code)	Not relevant

15. REGULATORY INFORMATION

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

It is recommended to use the information included in this safety data sheet as data used in a risk evaluation of local circumstances, in order to establish the necessary risk prevention measures for the manipulation, use, storage and disposal of this product.

Other legislation

Manufacture, Storage and Import of Hazardous Chemicals Rules 1989
The Factories Act, 1948 (Act No. 63 of 1948), as amended by the Factories (Amendment) Act, 1987 (Act 20 of 1987)
The Chemical Accidents (Emergency Planning, Preparedness, and Response) Rules, 1996
Public Liability Insurance Act, 1991

16. OTHER INFORMATION

Legislation related to safety data sheets

This safety data sheet has been designed in accordance with Annex 4 – Guidance on the preparation of Safety Data Sheets of the Globally Harmonized System of Classification and Labelling of Chemicals (GHS).

Texts of the legislative phrases mentioned in sections 2 and 3

H319: Causes serious eye irritation.

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3.

Advice related to training

Minimal training is recommended to prevent industrial risks for staff using this product, in order to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

Principal bibliographical sources

United Nations GHS (Rev. 8); ECHA Classification & Labelling Inventory; publicly available peer-reviewed and regulatory toxicological/ecotoxicological literature for this CAS number.

Abbreviations and acronyms

ADR: European agreement concerning the international carriage of dangerous goods by road | IMDG: International maritime dangerous goods code | IATA: International Air Transport Association | ICAO: International Civil Aviation Organisation | COD: Chemical Oxygen Demand | BOD5: 5-day biochemical oxygen demand | BCF: Bioconcentration factor | LD50: Lethal Dose 50 | LC50: Lethal Concentration 50 | EC50: Effective Concentration 50 | Log-POW: Octanol-water partition coefficient | Koc: Partition coefficient of organic carbon | IARC: International Agency for Research on Cancer

Disclaimer: The information contained in this safety data sheet is based on sources, technical knowledge and current legislation, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product; it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within Suraj Chemicals' awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.

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