

disodium dihydrogen ethylenediaminetetraacetate

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

1.1. Product identifier

Product form :	Substance
Trade name :	disodium dihydrogen ethylenediaminetetraacetate
CAS No. :	139-33-3

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

1.2.1. Relevant identified uses

Use of the substance/mixture :	Manufacture of cosmetic products, cleaning and maintenance products.
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For detailed information please refer to CSR.

1.2.2. Uses advised against

Restrictions on use :	No information available
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1.3. Details of the supplier of the safety data sheet

Only representative: REACH24H Consulting Group
Address: Paramount Court, Corrig Road, Sandyford, Dublin 18, Ireland
Email: reach@reach24h.com
Supplier: Shijiazhuang Jackchem Co., Ltd.
Address: Douyu Industrial Park, Luancheng County, Shijiazhuang City, Hebei Province, P. R. China
Postal Code: summer.rong@hebeichengxin.com
Phone: +86-311-84632634

1.4. Emergency telephone number

Emergency number

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute toxicity (inhal.), Category 4	H332
Specific target organ toxicity — Repeated exposure, Category 2	H373

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

No information available.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



GHS07



GHS08

Signal word (CLP) :

Warning

Hazard statements (CLP) :

H332 - Harmful if inhaled.

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

Precautionary statements (CLP) :

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 person to fresh air and keep comfortable for breathing.

P312 - Call a POISON CENTRE or doctor if you feel unwell.

P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards

This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

SECTION 3: Composition/information on ingredients

3.1. Substances

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Disodium EDTA	(CAS-No.) 139-33-3 (EC-No.) 205-358-3	99.1 - 99.2	Acute Tox. 4 H332 STOT RE 2 H373

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general :

Call a poison center or a doctor if you feel unwell.

First-aid measures after inhalation :

Remove person to fresh air and keep comfortable for breathing. Call a poison center or a doctor if you feel unwell.

First-aid measures after skin contact :

Wash off immediately with soap and plenty of water removing at the same time all contaminated clothes. Wash contaminated clothing before reuse. Get medical advice if skin irritation persists.

First-aid measures after eye contact :

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice and attention.

First-aid measures after ingestion :

Rinse mouth out with water. Call a poison center or a doctor if you feel unwell. Never give anything by mouth to an unconscious person.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects :

Harmful if inhaled. May cause damage to organs through prolonged or repeated exposure.

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

Treat symptomatically.

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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media :
Water spray. Dry powder. Foam.
Carbon dioxide.

Unsuitable extinguishing media :
No information available.

5.2. Special hazards arising from the substance or mixture

Fire hazard :
Thermal decomposition generates toxic vapours.
Hazardous decomposition products in case of fire:
Toxic fumes may be released.

5.3. Advice for firefighters

Protection during firefighting :
Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures :
Ventilate spillage area. Do not breathe dust/fume/gas/mist/vapours/spray. Evacuate personnel to a safe area. Avoid contact with skin and eyes.

6.1.2. For emergency responders

Protective equipment :
Do not attempt to take action without suitable protective equipment. For further information refer to section 8: «Exposure controls/personal protection».

6.2. Environmental precautions

Avoid release to the environment. Do not allow into drains or water courses.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up :
Collect spillage. Sweep or shovel spills into appropriate container for disposal. Avoid dust formation.

Other information :
Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling :
Wear personal protective equipment. Do not breathe dust/fume/gas/mist/vapours/spray. Use only outdoors or in a well-ventilated area. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothing. Avoid dust formation.

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Hygiene measures :

Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions :

Store in a well-ventilated place. Keep cool.

7.3. Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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DNEL/DMEL (Workers)	
Acute - local effects, inhalation	3 mg/m ³
Long-term - local effects, inhalation	1.5 mg/m ³
DNEL/DMEL (General population)	
Acute - local effects, inhalation	1.2 mg/m ³
Long-term - systemic effects, oral	25 mg/kg bodyweight/day
Long-term - local effects, inhalation	0.6 mg/m ³
PNEC (Water)	
PNEC aqua (freshwater)	2.2 mg/l
PNEC aqua (marine water)	0.22 mg/l
PNEC aqua (intermittent, freshwater)	1.2 mg/l
PNEC (Soil)	
PNEC soil	0.72 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	43 mg/l

8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Hand protection:

PPE18 - Wear chemically resistant gloves (tested to EN374) in combination with intensive management supervision controls.

Eye protection:

Wear safety glasses with side shields (or goggles).

Skin and body protection:

Wear suitable protective clothing

Respiratory protection:

[In case of inadequate ventilation] wear respiratory protection.

Environmental exposure controls:

Avoid release to the environment.

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state :	Solid, crystalline
Colour :	White.
Odour :	Odorless
Odour threshold :	No data available
pH :	No data available
Relative evaporation rate (butylacetate=1) :	No data available
Melting point :	Decomposed at 252 °C
Freezing point :	No data available
Boiling point :	Substance decomposes before boiling.
Flash point :	Not Relevant
Auto-ignition temperature :	> 400 °C
Decomposition temperature :	252 °C
Flammability (solid, gas) :	Non flammable
Vapour pressure :	2E-012 hPa at 25°C
Relative vapour density at 20 °C :	No data available
Relative density :	No data available
Density :	1.767 g/cm ³ at 20°C
Solubility :	Water: 108 g/l at 20 °C
Log Pow :	-4.3 at 25 °C / pH = 4.5
Viscosity, kinematic :	Not applicable
Viscosity, dynamic :	Not applicable
Explosive properties :	Non explosive
Oxidising properties :	no oxidising properties
Explosive limits :	No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid dust formation.

10.5. Incompatible materials

Strong oxidizing agent.

10.6. Hazardous decomposition products

Ammonia. Carbon oxides. Nitrogen oxides.

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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) :	Not classified
Acute toxicity (dermal) :	Not classified
Acute toxicity (inhalation) :	Inhalation: Harmful if inhaled.

Disodium EDTA (139-33-3)

LD50 oral rat	2800 mg/kg bw (male/female)
LOAEC inhalation rat	ca. 30 mg/m ³ air(male) based on: act. ingr. (Na ₂ H ₂ EDTA)
Skin corrosion/irritation :	Not classified
Serious eye damage/irritation :	Not classified
Respiratory or skin sensitisation :	Not classified
Germ cell mutagenicity :	Not classified
Carcinogenicity :	Not classified
Reproductive toxicity :	Not classified
STOT-single exposure :	Not classified
STOT-repeated exposure : prolonged or repeated exposure.	May cause damage to organs through
Aspiration hazard :	Not classified

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

Acute aquatic toxicity :	Not classified
Chronic aquatic toxicity :	Not classified

Disodium EDTA (139-33-3)

Short-term effects on fish

Lepomis macrochirus freshwater static The static water acute toxicity tests followed the methods described in the EPA publication, «Methods for Acute Toxicity Tests with Fish, Macroinvertebrates, and Amphibians» (COMMITTEE ON METHODS FOR TOXICITY WITH AQUATIC ORGANISMS, 1975).	LC50 (96 h): 41 mg/L test mat. (nominal) based on: mortality (34 - 62 mg/L, very soft water) LC50 (96 h): 159 mg/L test mat. (nominal) based on: mortality (136-204 mg/L, medium hard water) LC50 (96 h): 532 mg/L test mat. (nominal) based on: mortality (473-598 mg/L, very hard water)
Lepomis macrochirus freshwater static The static water acute toxicity tests followed the methods described in the EPA publication, «Methods for Acute Toxicity Tests with Fish, Macroinvertebrates, and Amphibians» (COMMITTEE ON METHODS FOR TOXICITY WITH AQUATIC ORGANISMS, 1975).	LC50 (96 h): 121 mg/L act. ingr. (Na ₄ EDTA) (nominal) based on: mortality (113-130, very soft water) LC50 (96 h): 792 mg/L act. ingr. (Na ₄ EDTA) (nominal) based on: mortality (754-831, medium hard water) LC50 (96 h): 1592 mg/L act. ingr. (Na ₄ EDTA) (nominal) based on: mortality (1493-1678, hard water)

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<p>Lepomis macrochirus freshwater static The static water acute toxicity tests followed the methods described in the EPA publication, «Methods for Acute Toxicity Tests with Fish, Macroinvertebrates, and Amphibians» (COMMITTEE ON METHODS FOR TOXICITY WITH AQUATIC ORGANISMS, 1975).</p>	<p>LC50 (96 h): 705 mg/L test mat. (nominal) based on: mortality (623-795)</p>
<p>Salmo gairdneri (new name: Oncorhynchus mykiss) freshwater static Method: other Fish, Acute Toxicity Test</p>	<p>LC100 (24 h): 860 mg/L test mat. (nominal) based on: mortality</p>
<p>Long-term effects on fish</p>	
<p>Brachydanio rerio (new name: Danio rerio) freshwater early-life stage: reproduction, (sub)lethal effects flow-through OECD Guideline 210 (Fish, Early-Life Stage Toxicity Test)</p>	<p>NOEC (35 d): \geq 25.7 mg/L act. ingr. (H4EDTA) (meas. (not specified))</p>
<p>Short-term effects on aquatic invertebrates</p>	
<p>Daphnia magna freshwater static DIN 38412, part 11</p>	<p>EC50 (48 h): 140 mg/L test mat. (nominal) based on: mobility (100-180 mg/L)</p>
<p>Disodium EDTA (139-33-3)</p>	
<p>Daphnia magna freshwater static ISO 6341 15 (Water quality - Determination of the Inhibition of the Mobility of Daphnia magna Straus (Cladocera, Crustacea))</p>	<p>EC50 (24 h): 610 mg/L test mat. (nominal) based on: mobility</p>
<p>Daphnia magna freshwater static equivalent or similar to DIN 38412, part 11</p>	<p>EC50 (24 h): 625 mg/L test mat. (nominal) based on: mobility</p>
<p>Long-term effects on aquatic invertebrates</p>	
<p>Daphnia magna freshwater semi-static EEC Guideline XI/681/86, Draft 4: «Prolonged toxicity study with Daphnia magna: Effects on reproduction»</p>	<p>NOEC (21 d): 25 mg/L test mat. (nominal) based on: reproduction LOEC (21 d): 50 mg/L test mat. (nominal)</p>

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Effects on algae and aquatic plants

<p>Pseudokirchnerella subcapitata (algae) freshwater static OECD Guideline 201 (Alga, Growth Inhibition Test) (1984)</p>	<p>EC50 (72 h): > 100 mg/L test mat. (nominal) based on: growth rate EC50 (72 h): > 60 mg/L test mat. (meas. (geom. mean)) based on: growth rate NOEC (72 h): 79.4 mg/L test mat. (nominal) based on: growth rate NOEC (72 h): 48.4 mg/L test mat. (meas. (geom. mean)) based on: growth rate LOEC (72 h): 99.9 mg/L test mat. (nominal) based on: growth rate LOEC (72 h): 60.6 mg/L test mat. (meas. (geom. mean)) based on: growth rate</p>
<p>Pseudokirchnerella subcapitata (algae) freshwater static OECD Guideline 201 (Alga, Growth Inhibition Test)</p>	<p>EC50 (72 h): > 1000 mg/L test mat. (nominal) based on: growth rate NOEC (72 h): 100 mg/L test mat. (nominal) based on: growth rate LOEC (72 h): 1000 mg/L test mat. (nominal) based on: growth rate EC10 (72 h): 307.63 mg/L test mat. (nominal) based on: growth rate</p>
<p>Scenedesmus subspicatus (new name: Desmodesmus subspicatus) (algae) freshwater static EU Method C.3 (Algal Inhibition test)</p>	<p>EC50 (72 h): > 100 mg/L test mat. (nominal) based on: growth rate NOEC (72 h): 100 mg/L test mat. (nominal) based on: growth rate LOEC (72 h): > 100 mg/L test mat. (nominal) based on: growth rate EC10 (72 h): > 100 mg/L test mat. (nominal) based on: growth rate</p>
<p>Scenedesmus subspicatus (new name: Desmodesmus subspicatus) (algae) freshwater static EEC guideline 79/831/EEC, Annexe V, part C: Methods for the determination of ecotoxicity, algae: Test of growth inhibition, May 1988</p>	<p>EC50 (72 h): 2.77 mg/L test mat. based on: growth rate NOEC (72 h): 0.39 mg/L test mat. based on: growth rate LOEC (72 h): 0.78 mg/L test mat. based on: growth rate EC10 (72 h): 0.7 mg/L test mat. based on: growth rate</p>

12.2. Persistence and degradability

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Persistence and degradability	EDTA is not readily biodegradable according to OECD criteria.
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12.3. Bioaccumulative potential

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Log Pow	-4.3
Bioaccumulative potential	Material does not bioaccumulate.

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12.4. Mobility in soil

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Ecology - soil

No information available.

12.5. Results of PBT and vPvB assessment

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This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII

This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects

Other adverse effects :

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods :

Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

14.6. Special precautions for user

Overland transport :

Not applicable

Transport by sea :

Not applicable

Air transport :

Not applicable

Inland waterway transport :

Not applicable

Rail transport :

Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

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15.1.1. EU-Regulations

No REACH Annex XVII restrictions

disodium dihydrogen ethylenediaminetetraacetate is not on the REACH Candidate List

disodium dihydrogen ethylenediaminetetraacetate is not on the REACH Annex XIV List

15.1.2. National regulations

Germany

12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV:

Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Netherlands

SZW-lijst van kankerverwekkende stoffen :

The substance is not listed

SZW-lijst van mutagene stoffen :

The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding :

The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid :

The substance is not listed

NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling :

The substance is not listed

Denmark

Recommendations Danish Regulation :

Young people below the age of 18 years are not allowed to use the product
Pregnant/breastfeeding women working with the product must not be in direct contact with the product

International Inventories

Component	TSCA	DSL/ NDSL	EINECS/ ELI NCS	ENCS	IECSC	KECL	PICCS	AICS
Disodium EDTA 139-33-3	X	X	X	X	X	X	X	X

«-» Not Listed

«X» Listed

15.2. Chemical safety assessment

A chemical safety assessment has been carried out

SECTION 16: Other information

Data sources :

ECHA reference.

Training advice :

Normal use of this product shall imply use in accordance with the instructions on the packaging.

Full text of H- and EUH-statements:

H332

Harmful if inhaled.

H373

May cause damage to organs through prolonged or repeated exposure.

SDS EU (REACH Annex II)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product