

**SAFETY DATA SHEET**

Creation Date 03-Sep-2009

Revision Date 24-Dec-2021

Revision Number 6

**1. Identification**

**Product Name** Ethylenediaminetetraacetic acid, disodium salt dihydrate  
**Cat No. :** S311-10; S311-100; S311-3; S311-3LC; S311-500; S311-50KG  
**CAS No** 6381-92-6  
**Synonyms** (Ethylenedinitrilo)tetraacetic acid, disodium salt dihydrate; Disodium edetate dihydrate; EDTA, disodium salt dihydrate  
**Recommended Use** Laboratory chemicals.  
**Uses advised against** Food, drug, pesticide or biocidal product use.

**Details of the supplier of the safety data sheet**

**Company**  
Fisher Scientific Company  
One Reagent Lane  
Fair Lawn, NJ 07410  
Tel: (201) 796-7100

**Emergency Telephone Number** CHEMTREC®, Inside the USA: 800-424-9300  
CHEMTREC®, Outside the USA: 001-703-527-3887

**2. Hazard(s) identification**

**Classification**  
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute Inhalation Toxicity - Dusts and Mists	Category 4
Specific target organ toxicity - (repeated exposure)	Category 2
Target Organs - Respiratory system.	

**Label Elements**

**Signal Word**  
Warning

**Hazard Statements**  
Harmful if inhaled  
May cause damage to organs through prolonged or repeated exposure

Ethylenediaminetetraacetic acid, disodium salt dihydrate

Revision Date 24-Dec-2021



**Precautionary Statements**

**Prevention**  
Use only outdoors or in a well-ventilated area  
Do not breathe dust/fume/gas/mist/vapors/spray

**Response**  
Get medical attention/advice if you feel unwell

**Inhalation**  
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing  
Call a POISON CENTER or doctor/physician if you feel unwell

**Disposal**  
Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**  
None identified

**3. Composition/Information on Ingredients**

Component	CAS No	Weight %
Ethylenediaminetetraacetic acid, disodium salt dihydrate	6381-92-6	>95
Disodium EDTA	139-33-3	-

**4. First-aid measures**

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

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

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

**Ingestion** Do NOT induce vomiting. Get medical attention.

**Most important symptoms and effects** No information available.

**Notes to Physician** Treat symptomatically

**5. Fire-fighting measures**

**Suitable Extinguishing Media** Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam.

**Unsuitable Extinguishing Media** No information available

**Flash Point Method -** No information available

**Ethylenediaminetetraacetic acid, disodium salt dihydrate**

Revision Date 24-Dec-2021

<b>Autoignition Temperature</b>	No information available
<b>Explosion Limits</b>	
Upper	No data available
Lower	No data available
<b>Sensitivity to Mechanical Impact</b>	No information available
<b>Sensitivity to Static Discharge</b>	No information available

**Specific Hazards Arising from the Chemical**

Thermal decomposition can lead to release of irritating gases and vapors.

**Hazardous Combustion Products**Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>).**Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**NFPA**

<b>Health</b>	<b>Flammability</b>	<b>Instability</b>	<b>Physical hazards</b>
2	1	0	N/A

**6. Accidental release measures****Personal Precautions** Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation.**Environmental Precautions** Should not be released into the environment. See Section 12 for additional Ecological Information.**Methods for Containment and Clean Up** Sweep up and shovel into suitable containers for disposal. Avoid dust formation.**7. Handling and storage****Handling** Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Avoid ingestion and inhalation. Avoid dust formation.**Storage.** Keep containers tightly closed in a dry, cool and well-ventilated place. Incompatible Materials. Strong oxidizing agents.**8. Exposure controls / personal protection****Exposure Guidelines** This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.**Engineering Measures** Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation, especially in confined areas.**Personal Protective Equipment****Eye/face Protection** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.**Skin and body protection** Wear appropriate protective gloves and clothing to prevent skin exposure.**Respiratory Protection** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.**Ethylenediaminetetraacetic acid, disodium salt dihydrate**

Revision Date 24-Dec-2021

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.**9. Physical and chemical properties**

<b>Physical State</b>	Solid
<b>Appearance</b>	White
<b>Odor</b>	Odorless
<b>Odor Threshold</b>	No information available
<b>pH</b>	4-6 5% aq. solution
<b>Melting Point/Range</b>	252 °C / 485.6 °F
<b>Boiling Point/Range</b>	No information available
<b>Flash Point</b>	No information available
<b>Evaporation Rate</b>	Not applicable
<b>Flammability (solid,gas)</b>	No information available
<b>Flammability or explosive limits</b>	
Upper	No data available
Lower	No data available
<b>Vapor Pressure</b>	No information available
<b>Vapor Density</b>	Not applicable
<b>Specific Gravity</b>	No information available
<b>Solubility</b>	Soluble in water
<b>Partition coefficient; n-octanol/water</b>	No data available
<b>Autoignition Temperature</b>	No information available
<b>Decomposition Temperature</b>	> 252°C
<b>Viscosity</b>	Not applicable
<b>Molecular Formula</b>	C10 H14 N2 Na2 O8 . 2 H2 O
<b>Molecular Weight</b>	372.23

**10. Stability and reactivity****Reactive Hazard** None known, based on information available**Stability** Stable under normal conditions.**Conditions to Avoid** Incompatible products. Excess heat. Avoid dust formation.**Incompatible Materials** Strong oxidizing agents**Hazardous Decomposition Products** Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>)**Hazardous Polymerization** Hazardous polymerization does not occur.**Hazardous Reactions** None under normal processing.**11. Toxicological information****Acute Toxicity****Product Information****Component Information**

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Disodium EDTA	LD50 > 2 g/kg ( Rat )	Not listed	Not listed

**Toxicologically Synergistic Products** No information available**Delayed and immediate effects as well as chronic effects from short and long-term exposure****Irritation** No information available**Sensitization** No information available

**Ethylenediaminetetraacetic acid, disodium salt dihydrate**

Revision Date 24-Dec-2021

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS No	IARC	NTP	ACGIH	OSHA	Mexico
Ethylenediaminetetraacetic acid, disodium salt dihydrate	6381-92-6	Not listed	Not listed	Not listed	Not listed	Not listed
Disodium EDTA	139-33-3	Not listed	Not listed	Not listed	Not listed	Not listed

**Mutagenic Effects** No information available

**Reproductive Effects** No information available.

**Developmental Effects** No information available.

**Teratogenicity** No information available.

**STOT - single exposure** None known

**STOT - repeated exposure** Respiratory system

**Aspiration hazard** No information available

**Symptoms / effects, both acute and delayed** No information available

**Endocrine Disruptor Information** No information available

**Other Adverse Effects** The toxicological properties have not been fully investigated.

## 12. Ecological information

**Ecotoxicity**

Do not empty into drains. .

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Disodium EDTA	Not listed	Leuciscus idus: LC50 > 500 mg/L 96h	EC50 = 56 mg/L 8 h	> 100 mg/L 24h

**Persistence and Degradability** Soluble in water Persistence is unlikely based on information available.

**Bioaccumulation/ Accumulation** No information available.

**Mobility** Will likely be mobile in the environment due to its water solubility.

## 13. Disposal considerations

**Waste Disposal Methods** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

## 14. Transport information

DOT	Not regulated
TDG	Not regulated
IATA	Not regulated
IMDG/IMO	Not regulated

## 15. Regulatory information

**United States of America Inventory**

Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive	TSCA - EPA Regulatory Flags
Ethylenediaminetetraacetic acid,	6381-92-6	-	-	-

**Ethylenediaminetetraacetic acid, disodium salt dihydrate**

Revision Date 24-Dec-2021

disodium salt dihydrate				
Disodium EDTA	139-33-3	X	ACTIVE	-

**Legend:**

TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

'-' - Not Listed

**TSCA 12(b)** - Notices of Export Not applicable

**International Inventories**

Canada (DSL/NDL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

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

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

**U.S. Federal Regulations**

**SARA 313** Not applicable

**SARA 311/312 Hazard Categories** See section 2 for more information

**CWA (Clean Water Act)** Not applicable

**Clean Air Act** Not applicable

**OSHA - Occupational Safety and Health Administration** Not applicable

**CERCLA** Not applicable

**California Proposition 65** This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations** Not applicable

**U.S. Department of Transportation**

Reportable Quantity (RQ): N  
DOT Marine Pollutant N  
DOT Severe Marine Pollutant N

**U.S. Department of Homeland Security** This product does not contain any DHS chemicals.

**Other International Regulations**

**Mexico - Grade** No information available

**Authorisation/Restrictions according to EU REACH**

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

Component	CAS No	OECD HPV	Persistent Organic Pollutant	Ozone Depletion Potential	Restriction of Hazardous Substances (RoHS)
Ethylenediaminetetraacetic acid, disodium salt dihydrate	6381-92-6	Not applicable	Not applicable	Not applicable	Not applicable
Disodium EDTA	139-33-3	Listed	Not applicable	Not applicable	Not applicable

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	Rotterdam Convention (PIC)	Basel Convention (Hazardous Waste)
Ethylenediaminetetraacetic acid, disodium salt dihydrate	6381-92-6	Not applicable	Not applicable	Not applicable	Not applicable
Disodium EDTA	139-33-3	Not applicable	Not applicable	Not applicable	Not applicable

## 16. Other information

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**Revision Summary** This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

### Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

**End of SDS**