

# Ethylenediaminetetraacetate (EDTA) disodium dihydrate

## Safety Data Sheet

**E0511**

according to Regulation (EU) 2015/830

Version: 2.0

Date of issue: 13/09/2011 Revision date: 14/04/2017

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

#### 1.1. Product identifier

Product form : Substance  
 Substance name : Ethylenediaminetetraacetate (EDTA) disodium dihydrate  
 EC-No. : 205-358-3  
 CAS-No. : 6381-92-6  
 REACH registration No : 01-2119486775-20-XXXX  
 Product code : E0511  
 Formula : C<sub>10</sub>H<sub>14</sub>N<sub>2</sub>O<sub>2</sub>Na<sub>2</sub> · 2H<sub>2</sub>O  
 Synonyms : EDTA · Na<sub>2</sub> salt dihydrate / EDTA disodium salt / Edetate disodium salt dihydrate

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

##### 1.2.1. Relevant identified uses

Main use category : Professional use  
 Industrial/Professional use spec : For professional use only. Duchefa Biochemie B.V. products are intended only for "in vitro laboratory" research purposes

##### 1.2.2. Uses advised against

No additional information available

#### 1.3. Details of the supplier of the safety data sheet

##### Supplier

Duchefa Biochemie B.V.  
 A. Hofmanweg 71  
 2031 BH Haarlem - The Netherlands  
 T +31(0)23-5319093 - F +31(0)23-5318027  
[info@duchefa.nl](mailto:info@duchefa.nl)

#### 1.4. Emergency telephone number

Emergency number : Supplier contact information:  
 +31(0)23-5319093 (M-F 09:00-17:00)  
 +31(0)6-30109355 (outside office hours)

Organisation/Company	Address	Comment
World Health Organization world directory of poison centres	<a href="http://apps.who.int/poisoncentres/">http://apps.who.int/poisoncentres/</a>	Consult website for a local poison centre

### 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 hazard classes and H-statements : see section 16

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### Adverse physicochemical, human health and environmental effects

No additional 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  
H373 - May cause damage to organs through prolonged or repeated exposure

Precautionary statements (CLP)

: P260 - Do not breathe dust, fume, gas, mist, spray, vapours  
P304+P340 - IF INHALED: remove victim to fresh air and keep at rest in a position comfortable for breathing  
P312 - Call a POISON CENTER or doctor/physician if you feel unwell

### 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Name : Ethylenediaminetetraacetate (EDTA) disodium dihydrate

CAS-No. : 6381-92-6

EC-No. : 205-358-3

Name	Product identifier	%
Ethylenediaminetetraacetate disodium dihydrate	(CAS-No.) 6381-92-6 (EC-No.) 205-358-3	>= 99

Full text of H-statements: see section 16

### 3.2. Mixtures

Not applicable

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures after inhalation : Move to fresh air. Get medical advice/attention if you feel unwell.

First-aid measures after skin contact : Wash with plenty of soap and water.

First-aid measures after eye contact : Rinse with plenty of water.

First-aid measures after ingestion : Rinse mouth. Do not induce vomiting. Seek medical attention if ill effect or irritation develops.

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

No additional information available

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

No additional information available

## SECTION 5: Fire-fighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Water spray, carbon dioxide (CO<sub>2</sub>), dry chemical powder, foam.

Unsuitable extinguishing media : Do not use a heavy water stream.

### 5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Under fire conditions, hazardous fumes will be present. CO<sub>x</sub>. NO<sub>x</sub>.

### 5.3. Advice for firefighters

Precautionary measures fire : Wear proper protective equipment.

Firefighting instructions : Prevent fire fighting water from entering the environment.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

#### 6.1.1. For non-emergency personnel

Measures in case of dust release : Use good housekeeping practices to avoid rendering dust airborne.

#### 6.1.2. For emergency responders

No additional information available

### 6.2. Environmental precautions

Prevent entry to sewers and public waters.

### 6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Sweep up dry powder and dispose properly.

### 6.4. Reference to other sections

No additional information available

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Precautions for safe handling : Open only in well ventilated area.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in dry, well-ventilated area. Store at room temperature.

### 7.3. Specific end use(s)

For professional use only. Duchefa Biochemie B.V. products are intended only for "in vitro laboratory" research purposes.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

<b>Ethylenediaminetetraacetate (EDTA) disodium dihydrate (6381-92-6)</b>
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DNEL/DMEL (Workers)
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<b>Ethylenediaminetetraacetate (EDTA) disodium dihydrate (6381-92-6)</b>	
Acute - local effects, inhalation	3 mg/m <sup>3</sup>
Long-term - local effects, inhalation	1,5 mg/m <sup>3</sup>
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

#### Hand protection:

Type	Material	Permeation	Thickness (mm)	Standard
Gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	0,11	EN 374

#### Eye protection:

Chemical goggles or safety glasses

#### Skin and body protection:

Wear suitable protective clothing

#### Respiratory protection:

Where excessive dust may result, wear approved mask. Type P1 (EN 143)

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Crystals. Powder.
Molecular mass	: 372,2 g/mol
Colour	: White.
Odour	: Characteristic.
Odour threshold	: No data available
pH	: 4 (≥ 5) (aqueous solution 1%, 20 °C)
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: 252 °C
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: > 400 °C (EU Method A.16)
Decomposition temperature	: > 200 °C
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: 1,77 g/cm <sup>3</sup> at 20 °C

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Solubility : Water: 108 g/l at 20 °C

Log Pow : No data available

Viscosity, kinematic : No data available

Viscosity, dynamic : No data available

Explosive properties : No data available

Oxidising properties : No data available

Explosive limits : No data available

### 9.2. Other information

Bulk density : 618 kg/m<sup>3</sup>

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Stable under normal conditions of storage, handling and use.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

Stable under normal conditions of storage, handling and use.

### 10.4. Conditions to avoid

Direct sunlight. Avoid dust formation. Take precautionary measures against static discharges.

### 10.5. Incompatible materials

Metals. Strong acids. Strong bases. Oxidising agents.

### 10.6. Hazardous decomposition products

Carbon oxides (CO, CO<sub>2</sub>).

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

Acute toxicity : Inhalation: Harmful if inhaled.

#### Ethylenediaminetetraacetate (EDTA) disodium dihydrate (6381-92-6)

LD50 oral rat	> 2000 mg/kg
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Skin corrosion/irritation : Not classified  
pH: 4 (≥ 5) (aqueous solution 1%, 20 °C)

Serious eye damage/irritation : Not classified  
pH: 4 (≥ 5) (aqueous solution 1%, 20 °C)

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 : May cause damage to organs through prolonged or repeated exposure.

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Aspiration hazard : Not classified

## SECTION 12: Ecological information

### 12.1. Toxicity

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LC50 fish 1	> 100 mg/l <i>Lepomis macrochirus</i> (Bluegill)
EC50 Daphnia 1	> 100 mg/l EC50 48h - <i>Daphnia magna</i> [mg/l]
EC50 72h algae (1)	> 100 mg/l ( <i>scenedemus subspicatus</i> )

### 12.2. Persistence and degradability

No additional information available

### 12.3. Bioaccumulative potential

Ethylenediaminetetraacetate (EDTA) disodium dihydrate (6381-92-6)	
Bioconcentration factor (BCF REACH)	1,8

### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste treatment methods : Dispose in a safe manner in accordance with local/national regulations.  
Avoid release to the environment.

## SECTION 14: Transport information

In accordance with ADR / IATA / IMDG

ADR	IMDG	IATA
<b>14.1. UN number</b>		
Not applicable	Not applicable	Not applicable
<b>14.2. UN proper shipping name</b>		
Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable
<b>14.3. Transport hazard class(es)</b>		
Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable
<b>14.4. Packing group</b>		
Not applicable	Not applicable	Not applicable
<b>14.5. Environmental hazards</b>		
Not applicable	Not applicable	Not applicable
No supplementary information available		

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### 14.6. Special precautions for user

#### - Overland transport

Not applicable

#### - Transport by sea

Not applicable

#### - Air 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

#### 15.1.1. EU-Regulations

No REACH Annex XVII restrictions

Ethylenediaminetetraacetate (EDTA) disodium dihydrate is not on the REACH Candidate List

Ethylenediaminetetraacetate (EDTA) disodium dihydrate is not on the REACH Annex XIV List

#### 15.1.2. National regulations

Ensure all national/local regulations are observed

#### Germany

VwVwS Annex reference : Water hazard class (WGK) 2, hazard to waters (KBwS-Beschluss; ID No. 104)

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

### 15.2. Chemical safety assessment

No additional information available

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### SECTION 16: Other information

Indication of changes:

1.1	REACH registration No	Added	
2.2	Hazard pictograms (CLP)	Added	
2.2	Signal word (CLP)	Added	
2.2	Hazard statements (CLP)	Added	
2.2	Precautionary statements (CLP)	Added	
8.2	Hand protection	Modified	Specified material, thickness, et cetera of gloves
9.1	Auto-ignition temperature	Added	

Abbreviations and acronyms:

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DPD	Dangerous Preparations Directive 1999/45/EC
DSD	Dangerous Substances Directive 67/548/EEC
LD50	Median lethal dose
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
SDS	Safety Data Sheet
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
PBT	Persistent Bioaccumulative Toxic
EC50	Median effective concentration
LC50	Median lethal concentration
NOAEL	No-Observed Adverse Effect Level
LOAEL	Lowest Observed Adverse Effect Level
BCF	Bioconcentration factor

Data sources

: Supplier. Manufacturer. REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Full text of H- and EUH-statements:

Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
H332	Harmful if inhaled
H373	May cause damage to organs through prolonged or repeated exposure

SDS Biochemicals version 2017

*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*