

# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

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

### 1.1 Product identifier

Trade name/designation:	EDTA disodium salt dihydrate U.S.P.
Product No.:	8994
Index No.:	000-000-00-0
CAS No.:	6381-92-6
EU REACH No.:	01-2119486775-20-XXXX
Other means of identification:	Disodium dihydrogen ethylenediaminetetraacetate dihydrate, Edetic acid disodium salt dihydrate, Ethylenediaminetetraacetic acid disodium salt dihydrate, Ethylenedinitrilotetra-acetic acid disodium salt dihydrate, Kestranal® 2S 2 H <sub>2</sub> O, Kestranal® 2S dihydrate, Titriplex III

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

Relevant identified uses	For Laboratory, Research or Manufacturing Use.
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### 1.3 Details of the supplier of the safety data sheet

#### Supplier

##### Avantor Performance Materials Poland S.A.

Street	Sowinskiego 11str.
Postal code/City	44-101 Gliwice
Telephone	48 32 239-20-00
Telefax	48 32 239-23-70
E-mail (competent person)	SDS@avantorsciences.com

#### Distributor

##### VWR International Ltd.

Street	Hunter Boulevard, Magna Park
Postal code/City	Lutterworth, LE17 4XN

### 1.4 Emergency phone number

Telephone	+44 (0) 1270 502894 (CareChem24)
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## SECTION 2: Hazard identification

### 2.1 Classification of the substance or mixture

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

#### Health hazards

Acute toxicity, category 4, inhalation

H332 - Harmful if inhaled.

Specific target organ toxicity (repeated exposure), category 2<sup>(1)</sup>

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

#### Target Organs

(1) respiratory tract

### 2.2 Label elements

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

#### Hazard pictograms



**Signal word:** Warning

#### Hazard statements

H332 - Harmful if inhaled.

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

#### Precautionary statements

##### Prevention:

P260 - Do not breathe dust/fume/gas/mist/vapours/spray.

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

##### Response:

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

P314 - Get medical advice/attention if you feel unwell.

### 2.3 Other hazards

This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

## SECTION 3: Composition / information on ingredients

### Substances

Substance name:	EDTA disodium salt dihydrate
Molecular formula:	C <sub>10</sub> H <sub>14</sub> N <sub>2</sub> Na <sub>2</sub> O <sub>8</sub> ·2H <sub>2</sub> O
Molecular weight:	372.24 g/mol
CAS No.:	6381-92-6
EU REACH registration No.:	01-2119486775-20-XXXX
EC No.	205-358-3

ATE, SCL and/or M-factor: none

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

#### General information

IF exposed or if you feel unwell: Call a POISON CENTRE or doctor/physician. If unconscious but breathing normally, place in recovery position and seek medical advice. Never give anything by mouth to an unconscious person or a person with cramps. Change contaminated, saturated clothing. Do not leave affected person unattended.

#### After inhalation

Call a POISON CENTRE/doctor. Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration.

#### In case of skin contact

After contact with skin, wash immediately with plenty of water and soap. Remove contaminated, saturated clothing immediately. In case of skin reactions, consult a physician.

#### After eye contact

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist. Protect uninjured eye. Remove contact lenses, if present and easy to do. Continue rinsing.

#### In case of ingestion

If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention. Do NOT induce vomiting. Give nothing to eat or drink.

#### Self-protection of the first aider

First aider: Pay attention to self-protection!

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

no data available

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

No special information on medical attention and special treatment available.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

The product itself does not burn.

Co-ordinate fire-fighting measures to the fire surroundings.

#### Extinguishing media which must not be used for safety reasons

no restriction

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

In case of fire may be liberated:

Carbon monoxide

Carbon dioxide (CO<sub>2</sub>)

Nitrogen oxides (NO<sub>x</sub>)

Sodium oxides

### 5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes.

Special protective equipment for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

### 5.4 Additional information

Do not allow run-off from fire-fighting to enter drains or water courses.

In case of fire: Evacuate area.

## SECTION 6: Accidental release measures

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

Avoid dust formation. Avoid contact with skin, eyes and clothes. Wear personal protection equipment (refer to section 8).

### 6.2 Environmental precautions

Do not allow to enter into surface water or drains.

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

Spilled product must never be returned to the original container for recycling. Take up mechanically, placing in appropriate containers for disposal. Avoid dust formation.

### 6.4 Additional information

Clear spills immediately.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Avoid dust formation.

Avoid inhalation of the product.

Use extractor hood (laboratory).

Wash hands before breaks and after work. Avoid contact with eyes and skin. When using do not eat, drink or smoke. Provide eye shower and label its location conspicuously.

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

Recommended storage temperature: 15-25°C

Keep container tightly closed and in a well-ventilated place.

### 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

Does not contain substances above concentration limits fixing an occupational exposure limit.

### 8.2 Exposure controls

#### Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment. If handled uncovered, arrangements with local exhaust ventilation have to be used.

### **Personal protection equipment**

Wear suitable protective clothing. When handling with chemical substances, protective clothing with CE-labels including the four control digits must be worn.

#### *Eye/face protection*

Eye glasses with side protection DIN-/EN-Norms DIN EN 166

#### *Skin protection*

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. Recommended glove articles DIN-/EN-Norms EN ISO 374 In the case of wanting to use the gloves again, clean them before taking off and air them well.

#### By short-term hand contact

Suitable material:	NBR (Nitrile rubber)
Thickness of the glove material:	0,12 mm
Breakthrough time:	> 480 min

#### By long-term hand contact

Suitable material:	NBR (Nitrile rubber)
Thickness of the glove material:	0,38 mm
Breakthrough time:	> 480 min

#### *Respiratory protection*

Usually no personal respirative protection necessary. Required when dusts are generated.

Generation/formation of dust

Suitable respiratory protection apparatus:	Full-/half-/quarter-face masks (DIN EN 136/140)
Recommendation	VWR 111-0206
Suitable material	P1
Recommendation	no data available

#### *Additional information*

Wash hands before breaks and after work. Avoid contact with eyes and skin. When using do not eat, drink or smoke. Provide eye shower and label its location conspicuously.

#### *Environmental exposure controls*

no data available

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

(a) Appearance	
Physical state:	solid
Colour:	white
(b) Odour:	no data available
(c) Odour threshold:	no data available

### Safety relevant basic data

(d) pH:	4-5 (50 g/l; H <sub>2</sub> O; 20 °C)
(e) Melting point/freezing point:	248 °C
(f) Initial boiling point and boiling range:	no data available
(g) Flash point:	100 °C
(h) Evaporation rate:	no data available
(i) Flammability (solid, gas):	not applicable
(j) Flammability or explosive limits	
Lower explosion limit:	no data available
Upper explosion limit:	no data available
(k) Vapour pressure:	no data available
(l) Vapour density:	no data available
(m) Density:	no data available
(n) Solubility(ies)	
Water solubility:	100 g/l (20 °C)
(o) Partition coefficient: n-octanol/water:	-11.7 (20 °C; calculated)
(p) Auto-ignition temperature:	no data available
(q) Decomposition temperature:	not applicable
(r) Viscosity	
Kinematic viscosity:	no data available
Dynamic viscosity:	no data available
(s) Explosive properties:	not applicable
(t) Oxidising properties:	not applicable
(u) Particle characteristics	not applicable - no nanoform/not combustible

### 9.2 Other information

Bulk density:	no data available
Refraction index:	no data available
Dissociation constant:	no data available
Surface tension:	no data available
Henry's Law Constant:	no data available

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

The product in the delivered form is not dust explosion capable; the enrichment of fine dust however leads to the danger of dust explosion.

### 10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature).

### 10.3 Possibility of hazardous reactions

Reacts with strong oxidizing agents.

### 10.4 Conditions to avoid

Keep away from heat.

### 10.5 Incompatible materials

No information available.

### 10.6 Hazardous decomposition products

no data available

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute effects

*Acute oral toxicity:*

LD50: < 2000 mg/kg - Rat - (Merck KGaA)

*Acute dermal toxicity:*

no data available

*Acute inhalation toxicity:*

no data available

#### Irritant and corrosive effects

*Primary irritation to the skin:*

not applicable

*Irritation to eyes:*

not applicable

*Irritation to respiratory tract:*

not applicable

#### Respiratory or skin sensitisation

In case of skin contact: not sensitising

After inhalation: not sensitising

#### STOT-single exposure

not applicable

#### STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure.

#### CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

##### Carcinogenicity

No indication of human carcinogenicity.

##### Germ cell mutagenicity

No indications of human germ cell mutagenicity exist.

**Reproductive toxicity**

No indications of human reproductive toxicity exist.

**Aspiration hazard**

not applicable

**Other adverse effects**

no data available

<b>SECTION 12: Ecological information</b>
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**12.1 Ecotoxicity****Fish toxicity:**

no data available

**Daphnia toxicity:**

no data available

**Algae toxicity:**

no data available

**Bacteria toxicity:**

no data available

**12.2 Persistence and degradability**

no data available

**12.3 Bioaccumulative potential**

Partition coefficient: n-octanol/water: -11.7 (20 °C; berechnet)

**12.4 Mobility in soil:**

no data available

**12.5 Results of PBT/vPvB assessment**

This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.

**12.6 Other adverse effects**

no data available



## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### **Appropriate disposal / Product**

Dispose according to local legislation. Consult the appropriate local waste disposal expert about waste disposal. Send to a hazardous waste incinerator facility under observation of official regulations.

#### **Appropriate disposal / Package**

Dispose according to local legislation. Handle contaminated packages in the same way as the substance itself.

## SECTION 14: Transport information

### **Land transport (ADR/RID)**

No dangerous good in sense of this transport regulation.

### **Sea transport (IMDG)**

No dangerous good in sense of this transport regulation.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code not relevant

### **Air transport (ICAO-TI / IATA-DGR)**

No dangerous good in sense of this transport regulation.

## SECTION 15: Regulatory information

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

#### EU legislation

- Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC (Text with EEA relevance)
- 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 (Text with EEA relevance)
- Commission Regulation (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (Text with EEA relevance)
- Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

#### National regulations

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Water hazard class: hazardous to water (WGK 2)

### 15.2 Chemical Safety Assessment

For this substance a chemical safety assessment has not been carried out.



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