

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 14.01.2019

Version number 5

Revision: 04.01.2019

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

1.1 Product identifier

· **Trade name:** Ethylenediamine tetraacetic acid-Na₂-salt-2H₂O

· **Synonyma**

EDTA.Na₂-salt*2H₂O

Versene.Na₂-salt*2H₂O

· **Article number:** 11280

· **CAS Number:**

6381-92-6

· **EC number:**

205-358-3

· **Registration number** 01-2119486775-20

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

No further relevant information available.

· **Application of the substance / the mixture** Laboratory chemicals

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

· **Manufacturer/Supplier:**

SERVA Electrophoresis GmbH

Carl-Benz-Str. 7

D-69115 Heidelberg

Tel.: +49 6221 13840-0

FAX: +49 6221 13840-10

msds.info@serva.de

· **Information department:** Product Safety department Tel.: +49 6221 13840-35

· **1.4 Emergency telephone number:**

Medical Emergency Information in case of poisoning:

Poison Information Center Mainz - Phone: +49 (0) 6131 19240

(advisory service in German or English language)

Medical Emergency Information in case of poisoning:

Poison Information Center Mainz - Phone: +49 (0) 6131 19240

(advisory service in German or English language)

SERVA
■ serving scientists ■

SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**

· **Classification according to Regulation (EC) No 1272/2008**



GHS08

STOT RE 2 H373 May cause damage to organs through prolonged or repeated exposure.



GHS07

Acute Tox. 4 H332 Harmful if inhaled.

· **2.2 Label elements**

· **Labelling according to Regulation (EC) No 1272/2008**

The substance is classified and labelled according to the CLP regulation.

· **Hazard pictograms** GHS07, GHS08

· **Signal word** Warning

· **Hazard statements**

H332 Harmful if inhaled.

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

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- **Precautionary statements**
 - P260 Do not breathe dust.
 - P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
 - P312 Call a POISON CENTER/doctor if you feel unwell.
 - P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Labelling of packages where the contents do not exceed 125 ml**
- **Hazard pictograms** GHS07, GHS08
- **Signal word** Warning
- **Hazard statements**
 - H332 Harmful if inhaled.
 - H373 May cause damage to organs through prolonged or repeated exposure.
- **Precautionary statements**
 - P260 Do not breathe dust.
 - P312 Call a POISON CENTER/doctor if you feel unwell.
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** PBT - assessment not available.
- **vPvB:** vPvB - assessment not available.

SECTION 3: Composition/information on ingredients

- **3.1 Chemical characterisation: Substances**
- **CAS No. Description:**
6381-92-6 Disodium dihydrogen ethylenediaminetetraacetate dihydrate
- **Identification number(s):**
- **EC number:** 205-358-3
- **Description:**
- **Empirical formula:** C₁₀ H₁₄ N₂ O₈ Na₂ * 2 H₂ O
- **MW:** 372.3

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information** No special measures required.
- **After inhalation** Supply fresh air and to be sure call for a doctor.
- **After skin contact**
Immediately wash with water and soap and rinse thoroughly. Consult doctor if you feel unwell.
- **After eye contact**
Rinse opened eye for several minutes under running water. Remove present contact lenses, if easy to do, and continue rinsing. Consult ophthalmologist In case of complaints.
- **After swallowing** Drink copious amounts of water and provide fresh air. Call for doctor immediately.
- **4.2 Most important symptoms and effects, both acute and delayed**
No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents**
Fire-extinguishing powder
Alcohol resistant foam
- **For safety reasons unsuitable extinguishing agents** Carbon dioxide

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- **5.2 Special hazards arising from the substance or mixture**
combustible, can form explosive dust-air mixtures.
In case of fire, the following can be formed, but not limited to:
Nitrogen oxides (NO_x)
Carbon monoxide and carbon dioxide
- **5.3 Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective clothing.
Ensure adequate ventilation
Avoid formation of dust.
- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Pick up mechanically.
Dispose contaminated material as waste according to item 13.
- **6.4 Reference to other sections**
See Section 7 for information on safe handling
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of dust.
- **Information about protection against explosions and fires:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed and store in dry conditions.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **8.1 Control parameters**
- **Components with limit values that require monitoring at the workplace:** Not required.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment**
- **General protective and hygienic measures**
Keep away from foodstuffs, beverages and feed.
Store protective clothing separately.
Immediately remove all soiled and contaminated clothing
Avoid contact with the eyes and skin.
Wash hands before breaks and at the end of work.
- **Breathing equipment:**
Short term filter device:
Filter P2.

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- **Protection of hands:**
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
- **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:**
Natural rubber, NR
- **Eye protection:** Safety glasses
- **Body protection:** Protective work clothing.

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form: small crystalline

Colour: White

· **Odour:** Odourless

· **pH-value (50 g/l) at 20 °C:** 4.0 - 5.0

· **Change in condition**

Melting point/freezing point: not applicable (decomposition)

Initial boiling point and boiling range: undetermined

· **Flash point:** Not applicable

· **Flammability (solid, gaseous)** Product is not flammable.

· **Explosive properties:** Product does not present an explosion hazard.

· **Density:** Not determined

· **Bulk density at 20 °C:** ca. 700 kg/m³

· **Solubility in / Miscibility with**

Water at 20 °C: 100 g/l

· **9.2 Other information** No further relevant information available.

SECTION 10: Stability and reactivity

· **10.1 Reactivity** No further relevant informations available

· **10.2 Chemical stability**

· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

· **10.3 Possibility of hazardous reactions**

As the product is supplied it is not capable of dust explosion; however enrichment with fine dust causes risk of dust explosion

· **10.4 Conditions to avoid**

moisture

high temperatures

· **10.5 Incompatible materials:** No further relevant information available.

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· **10.6 Hazardous decomposition products:** In case of fire: See Section 5

SECTION 11: Toxicological information

· **11.1 Information on toxicological effects**

· **Acute toxicity**

Harmful if inhaled.

· **LD/LC50 values that are relevant for classification:**

LC50/4h (dust/mist, OECD test guideline 403): > 1 to 5 mg / l

· **Primary irritant effect:**

· **Skin corrosion/irritation** Based on available data, the classification criteria are not met.

· **Serious eye damage/irritation** Based on available data, the classification criteria are not met.

· **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.

· **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**

· **Germ cell mutagenicity** Based on available data, the classification criteria are not met.

· **Carcinogenicity** Based on available data, the classification criteria are not met.

· **Reproductive toxicity** Based on available data, the classification criteria are not met.

· **STOT-single exposure** Based on available data, the classification criteria are not met.

· **STOT-repeated exposure**

May cause damage to organs through prolonged or repeated exposure.

· **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:**

Toxicity to bacteria EC₅₀/8h (Pseudomonas putida): > 56 mg/l

Acute toxicity to fish LC50/96h (Poecilia reticulata): 320 mg/l

· **12.2 Persistence and degradability** No further relevant information available.

· **Other information:** The product is not easily biodegradable.

· **12.3 Bioaccumulative potential** No further relevant information available.

· **12.4 Mobility in soil** No further relevant information available.

· **Ecotoxicological effects:**

· **Remark:**

LC50 / 96 h (Poecilia reticulata): 320 mg/l

EC50 / 8 h (Pseudomonas putida): 56 mg/l

· **Additional ecological information:**

· **General notes:**

Water hazard class 2 (German Regulation) (Assessment by list): hazardous for water.

Do not allow product to reach ground water, water course or sewage system.

· **12.5 Results of PBT and vPvB assessment**

· **PBT:** PBT - assessment not available.

· **vPvB:** vPvB - assessment not available.

· **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**

· **Recommendation**

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

· **Uncleaned packagings:**

· **Recommendation:**

Disposal of uncleaned packagings must be made according to official regulations in the same manner as the product.

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· **Recommended cleansing agent:** Water, if necessary with cleansing agents.

SECTION 14: Transport information

· 14.1 UN-Number · ADR, ADN, IMDG, IATA	Void
· 14.2 UN proper shipping name · ADR, ADN, IMDG, IATA	Void
· 14.3 Transport hazard class(es) · ADR, IMDG, IATA · Class · Label · ADN/R Class:	Void - Void
· 14.4 Packing group · ADR, IMDG, IATA	Void
· 14.5 Environmental hazards: · Marine pollutant:	No
· 14.6 Special precautions for user	Not applicable.
· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable.
· Transport/Additional information:	Not dangerous according to the above specifications.
· UN "Model Regulation":	Void

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **National regulations**
- **Water hazard class:** Water hazard class 2 (Assessment by list): hazardous for water.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing SDS:** Product safety department
- **Contact:** +49 6221 13840-35
- **Abbreviations and acronyms:**
 RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
 ICAO: International Civil Aviation Organisation
 PBT: persistent, bioaccumulative, toxic substance (REACH)
 vPvB: very persistent, very bioaccumulative substance (REACH)
 REACH: Regulation concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals
 CLP: Regulation on classification, labelling and packaging of substances and mixtures
 bw: body weight
 ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 IMDG: International Maritime Code for Dangerous Goods
 IATA: International Air Transport Association
 GHS: Globally Harmonised System of Classification and Labelling of Chemicals
 EINECS: European Inventory of Existing Commercial Chemical Substances
 CAS: Chemical Abstracts Service (division of the American Chemical Society)

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LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 4: Acute toxicity – Category 4

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2

· *** Data compared to the previous version altered.**

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