

**Safety Data Sheet**

according to UK REACH Regulation

sera toxivec

Revision date: 18.09.2023

Product code: toxivec

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SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

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EAN

4001942030007
4001942030014
4001942030021
4001942030038
4001942030045
4001942030069

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

Water treatment chemicals: Solution for water treatment in aquarium water.

The product is intended for consumer use.

The product is intended for professional use.

1.3. Details of the supplier of the safety data sheet**Manufacturer**

Company name:	sera Werke Heimtierbedarf	
	J. Ravnak GmbH & Co. KG	
Street:	Borsigstraße 49	
Place:	D-52525 Heinsberg	
Post-office box:	1466	
	D-52518 Heinsberg	
Telephone:	+49 (0)2452 91260	Telefax: +49 (0)2452 5922
e-mail:	info@sera.de	
Contact person:	Dr. Matthias Dahm	
e-mail:	sds.info@sera.biz	
Internet:	www.sera.de	
Responsible Department:	Labor	

Supplier

Company name:	sera GmbH	
Street:	Borsigstr. 49	
Place:	D-52525 Heinsberg	
Post-office box:	1466	
	D-52518 Heinsberg	
Telephone:	+49 (0)2452 91260	Telefax: +49 (0)2452 5922
e-mail:	info@sera.de	
Contact person:	Dr. Matthias Dahm	
e-mail:	sds.info@sera.biz	
Internet:	www.sera.de	
Responsible Department:	Labor	

1.4. Emergency telephone number:

+49 (0)2452 91260 (Only available during office hours.)
+49 (0)2452 9126555

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****GB CLP Regulation**

This mixture is not classified as hazardous in accordance with GB CLP Regulation.

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2.2. Label elements

Additional advice on labelling

According to EC directives or the corresponding national regulations the product does not have to be labelled.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Aqueous solution of organic and inorganic salts.

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (GB CLP Regulation)			
6381-92-6	Ethylendiamintetraessigsäure-Dinatriumsalz-Dihydrat (EDTA)			< 5 %
	205-358-3		01-2119486775-20	
	Acute Tox. 4, STOT RE 2; H332 H373			

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
6381-92-6	205-358-3	Ethylendiamintetraessigsäure-Dinatriumsalz-Dihydrat (EDTA)	< 5 %
		inhalation: ATE = 11 mg/l (vapours); inhalation: LC50 = 1,6 mg/l (dusts or mists); oral: LD50 = 2800 mg/kg	

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Change contaminated, saturated clothing.

After inhalation

Provide fresh air. When in doubt or if symptoms are observed, get medical advice.

After contact with skin

Wash with plenty of water. Take off contaminated clothing and wash it before reuse. In case of skin reactions, consult a physician.

After contact with eyes

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.

After ingestion

Observe risk of aspiration if vomiting occurs. Do NOT induce vomiting. Rinse mouth immediately and drink plenty of water. Call a physician immediately.

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

No known symptoms to date.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

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Suitable extinguishing media

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

Unsuitable extinguishing media

no restriction

5.2. Special hazards arising from the substance or mixture

Non-flammable. The product itself does not burn. In case of fire may be liberated: Sulphur oxides, Nitrogen oxides (NO_x), Carbon monoxide, Carbon dioxide (CO₂).

5.3. Advice for firefighters

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

Additional information

Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water. Fire fighting water forms corrosive alkaline solutions - slip hazard!

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures****General advice**

Provide adequate ventilation. Do not breathe vapour. Avoid contact with skin, eyes and clothes.

For non-emergency personnel

First aider: Pay attention to self-protection! Remove persons to safety.

For emergency responders

Use personal protection equipment.

Cover drains. Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up**For containment**

Make sure spills can be contained, e.g. in sump pallets or kerbed areas. Contain leaks or spills within cabinets with removable trays.

For cleaning up

Large amounts of spillages: Use approved industrial vacuum cleaner for removal.

Small amounts of spillages: Wipe up with absorbent material (eg. cloth, fleece).

Clear contaminated areas thoroughly. Clean contaminated articles and floor according to the environmental legislation.

Other information

Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

SECTION 7: Handling and storage**7.1. Precautions for safe handling****Advice on safe handling**

Do not breathe vapour. Keep out of the reach of children.

Advice on protection against fire and explosion

No special fire protection measures are necessary.

Advice on general occupational hygiene

Avoid contact with skin, eyes and clothes. Remove contaminated, saturated clothing immediately.

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Keep away from food, drink and animal feedingstuffs. Do not eat, drink or smoke when using this product.
Wash hands and face before breaks and after work and take a shower if necessary. Draw up and observe skin protection programme.

Further information on handling

Handle and open container with care. Put lids on containers immediately after use.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Keep/Store only in original container. Store in a place accessible by authorized persons only. Protect from direct sunlight.

Do not store at temperatures below 0°C. Recommended storage temperature: at room temperature

Hints on joint storage

Incompatible with strong acids and oxidising agents.

Further information on storage conditions

No special measures are necessary. The product is stable under storage at normal ambient temperatures.

7.3. Specific end use(s)

Solution for water treatment in aquarium water.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
6381-92-6	Ethylendiamintetraessigsäure-Dinatriumsalz-Dihydrat (EDTA)			
Worker DNEL, long-term		inhalation	local	1,5 mg/m ³
Worker DNEL, acute		inhalation	local	3 mg/m ³

PNEC values

CAS No	Substance	Value
6381-92-6	Ethylendiamintetraessigsäure-Dinatriumsalz-Dihydrat (EDTA)	
Freshwater		2,2 mg/l
Marine water		0,22 mg/l
Micro-organisms in sewage treatment plants (STP)		43 mg/l

Additional advice on limit values

To date, no national critical limit values exist.

When using do not eat, drink, smoke, sniff.

8.2. Exposure controls

Appropriate engineering controls

No special technical protective measures are necessary.

Individual protection measures, such as personal protective equipment

Eye/face protection

Avoid contact with eyes. If splashes are likely to occur, wear: safety glasses

Suitable eye protection: goggles.

Hand protection

Avoid contact with skin. Wear suitable gloves.

Suitable gloves type: alkali-resistant

Suitable material: NBR (Nitrile rubber)

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Thickness of the glove material: 0,2-0,3 mm

Permeation time (maximum wear duration): > 8 h

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Skin protection

Body protection: not required.

Respiratory protection

Usually no personal respirative protection necessary. In case of inadequate ventilation wear respiratory protection. In the case of vapour formation use a respirator with filter model B2 (according to DIN 3181, 1980).

Thermal hazards

Non-flammable. The product itself does not burn. Thermal decomposition can lead to the escape of irritating gases and vapours. In case of fire may be liberated: Sulphur oxides, Nitrogen oxides (NO_x), Carbon monoxide, Carbon dioxide (CO₂).

Environmental exposure controls

Avoid release to the environment.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Physical state:	Liquid
Colour:	colourless
Odour:	characteristic
Odour threshold:	not determined
Melting point/freezing point:	< 0 °C
Boiling point or initial boiling point and boiling range:	100 °C
Flammability:	Non-flammable.
Lower explosion limits:	not determined
Upper explosion limits:	not determined
Flash point:	> 100 °C
Auto-ignition temperature:	Non-flammable.
Decomposition temperature:	not determined
pH-Value (at 20 °C):	9-10
Viscosity / kinematic:	not determined
Water solubility:	completely miscible
Solubility in other solvents	
not determined	
Partition coefficient n-octanol/water:	not applicable
Vapour pressure:	23 hPa
(at 20 °C)	
Density (at 20 °C):	1,03 g/cm ³
Relative density:	not determined
Bulk density:	not applicable
Relative vapour density:	not determined
Particle characteristics:	not applicable

9.2. Other information**Information with regard to physical hazard classes****Explosive properties**

No ignition, explosion, self-heating or visible decomposition.

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The product is not: Explosive
Sustaining combustion: Not sustaining combustion
Self-ignition temperature
Solid: not applicable
Gas: not applicable
Oxidizing properties
Not oxidising.

Other safety characteristics

Evaporation rate: not determined
Solvent separation test: No data available
Solvent content: not determined
Solid content: not determined
Sublimation point: not applicable
Softening point: not applicable
Pour point: not applicable
Viscosity / dynamic: not determined
Flow time: not determined

SECTION 10: Stability and reactivity**10.1. Reactivity**

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

10.3. Possibility of hazardous reactions

Exothermic reaction with: Acid, Peroxides, Oxidising agent. No hazardous reaction when handled and stored according to provisions.

10.4. Conditions to avoid

Protect from direct sunlight.

10.5. Incompatible materials

Keep away from: Acid, Oxidising agent, Peroxides.

10.6. Hazardous decomposition products

Non-flammable. The product itself does not burn. In case of fire may be liberated: Sulphur oxides, Nitrogen oxides (NO_x), Carbon monoxide, Carbon dioxide (CO₂).

Thermal decomposition can lead to the escape of irritating gases and vapours.

SECTION 11: Toxicological information**11.1. Information on hazard classes as defined in GB CLP Regulation****Toxicokinetics, metabolism and distribution**

There are no data available on the preparation/mixture itself.

Acute toxicity

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

ATEmix calculated

ATE (inhalation vapour) 1100,00 mg/l; ATE (inhalation dust/mist) 100,000 mg/l

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CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
6381-92-6	Ethylenediaminetetraessigsäure-Dinatriumsalz-Dihydrat (EDTA)				
	oral	LD50 2800 mg/kg	Rat	ECHA	OECD 401
	inhalation vapour	ATE 11 mg/l			
	inhalation (4 h) dust/mist	LC50 1,6 mg/l	Rat	SDS	OECD 412

Irritation and corrosivity

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

Sensitising effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

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

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

Aspiration hazard

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

Information on likely routes of exposure

Inhalation, Skin contact, Eye contact, Ingestion

Specific effects in experiment on an animal

There are no data available on the preparation/mixture itself.

Additional information on tests

The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

Practical experience

There are no data available on the preparation/mixture itself.

11.2. Information on other hazards

Endocrine disrupting properties

There are no data available on the preparation/mixture itself.

Other information

There are no data available on the preparation/mixture itself.

Further information

Description of possible hazardous to health effects is based on experience and/or toxicological characteristics of several components.

Handle in accordance with good industrial hygiene and safety practice.

Health injuries are not known or expected under normal use.

SECTION 12: Ecological information

12.1. Toxicity

There are no data available on the preparation/mixture itself. The product is an alkali. Before discharge into sewage plants the product normally needs to be neutralised. Suitable material for diluting or neutralizing:

Water, Hydrochloric acid, Sulphuric acid and sulphurous acid.

Ecological injuries are not known or expected under normal use.

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CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
6381-92-6	Ethyldiamintetraessigsäure-Dinatriumsalz-Dihydrat (EDTA)					
	Acute fish toxicity	LC50	41 mg/l	96 h	Lepomis macrochirus (Bluegill)	SDS
	Acute algae toxicity	ErC50	> 60	72 h	Pseudokirchneriella subcapitata	ECHA
	Acute crustacea toxicity	EC50	140 mg/l	48 h	Daphnia magna (Big water flea)	SDS
	Fish toxicity	NOEC	> 25,7	35 d	Danio rerio (zebrafish)	SDS
	Crustacea toxicity	NOEC	> 25	21 d	Daphnia magna (Big water flea)	SDS
	Acute bacteria toxicity	(EC50	> 640	3 h	Activated sludge	SDS
		mg/l)				OECD 209

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
6381-92-6	Ethyldiamintetraessigsäure-Dinatriumsalz-Dihydrat (EDTA)	-4,3

BCF

CAS No	Chemical name	BCF	Species	Source
6381-92-6	Ethyldiamintetraessigsäure-Dinatriumsalz-Dihydrat (EDTA)	1,8	Lepomis macrochirus (Bluegill)	SDS

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

No information available.

Further information

Avoid release to the environment. Ecological injuries are not known or expected under normal use.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Avoid release to the environment. Dispose of waste according to applicable legislation.

List of Wastes Code - residues/unused products

161002 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; aqueous liquid wastes destined for off-site treatment; aqueous liquid wastes other than those mentioned in 16 10 01

List of Wastes Code - used product

161002 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; aqueous liquid wastes destined for off-site treatment; aqueous liquid wastes other than those mentioned in 16 10 01

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List of Wastes Code - contaminated packaging

150102 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); plastic packaging

Contaminated packaging

Wash with plenty of water. Completely emptied packages can be recycled. If recycling is not practicable, dispose of in compliance with the Environmental Protection (Duty of Care) Regulations 1991.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

No information available.

14.7. Maritime transport in bulk according to IMO instruments

not applicable

SECTION 15: Regulatory information

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

EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 75

Information according to 2012/18/EU (SEVESO III):	Not subject to 2012/18/EU (SEVESO III)
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Additional information

To follow: 850/2004/EC, 79/117/EEC, 689/2008/EC

National regulatory information

Water hazard class (D):	1 - slightly hazardous to water
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15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out:
Ethylenediaminetetraessigsäure-Dinatriumsalz-Dihydrat (EDTA)

SECTION 16: Other information**Abbreviations and acronyms**

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 Harmonized System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%

Key literature references and sources for data

Safety Data Sheet, ECHA

Relevant H and EUH statements (number and full text)

H332	Harmful if inhaled.
H373	May cause damage to organs (Respiratory tract) through prolonged or repeated exposure if inhaled.

Further Information

Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP].
The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)