

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**sera Ca Test, Reagenz 3**

Revision date: 06.09.2023

Product code: Ca-R3

Page 1 of 10

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

sera Ca Test, Reagenz 3

**EAN**

4001942040044

4001942049207

4001942049221

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

Solution for monitoring water parameters in aquarium and tap 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**

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	

**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****Regulation (EC) No 1272/2008**

This mixture is not classified as hazardous in accordance with Regulation (EC) No 1272/2008.

**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.

# Safety Data Sheet

according to Regulation (EC) No 1907/2006

## sera Ca Test, Reagenz 3

Revision date: 06.09.2023

Product code: Ca-R3

Page 2 of 10

### Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
6381-92-6	ethylenediaminetetraacetic acid disodium salt dihydrate (EDTA disodium)			< 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	ethylenediaminetetraacetic acid disodium salt dihydrate (EDTA disodium)	< 5 %
	inhalation: ATE = 11 mg/l (vapours); inhalation: LC50 = 1,6 mg/l (dusts or mists); oral: LD50 = 2800 mg/kg		

### Further Information

Contains no further substance with acute toxicity.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### General information

Remove contaminated, saturated clothing immediately.

#### 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. Rinse mouth immediately and drink plenty of water. Do NOT induce vomiting. Call a doctor if you feel unwell.

### 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

#### 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: Nitrogen oxides (NOx), Carbon monoxide, Carbon dioxide (CO2).

### 5.3. Advice for firefighters

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**sera Ca Test, Reagenz 3**

Revision date: 06.09.2023

Product code: Ca-R3

Page 3 of 10

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.

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

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**

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

**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. Wash with plenty of water.

**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**

Keep out of reach of children.

**Advice on protection against fire and explosion**

No special fire protection measures are necessary.

**Advice on general occupational hygiene**

Keep away from food, drink and animal feedingstuffs. Do not eat, drink or smoke when using this product.  
Wash hands before breaks and after work.

**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 locked up. Keep/Store only in original container. Protect from direct sunlight.  
Do not store at temperatures below 0°C. Recommended storage temperature: at room temperature.

**Hints on joint storage**

No materials to be specially mentioned

**sera Ca Test, Reagenz 3**

Revision date: 06.09.2023

Product code: Ca-R3

Page 4 of 10

**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 monitoring water parameters in aquarium and tap water.

**SECTION 8: Exposure controls/personal protection**
**8.1. Control parameters**
**DNEL/DMEL values**

CAS No	Substance	Exposure route	Effect	Value
6381-92-6	ethylenediaminetetraacetic acid disodium salt dihydrate (EDTA disodium)			
Worker DNEL, long-term		inhalation	local	1,5 mg/m <sup>3</sup>
Worker DNEL, acute		inhalation	local	3 mg/m <sup>3</sup>

**PNEC values**

CAS No	Substance	Value
6381-92-6	ethylenediaminetetraacetic acid disodium salt dihydrate (EDTA disodium)	
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. Suitable eye protection: goggles. not required under normal use.

**Hand protection**

Avoid contact with skin. Hand protection is not required..

**Skin protection**

Body protection: not required.

**Respiratory protection**

Usually no personal respiratory protection necessary.

**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: Nitrogen oxides (NO<sub>x</sub>), Carbon monoxide, Carbon dioxide (CO<sub>2</sub>).

**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

## sera Ca Test, Reagenz 3

Revision date: 06.09.2023

Product code: Ca-R3

Page 5 of 10

Colour:	colourless
Odour:	odourless
Odour threshold:	not applicable
Melting point/freezing point:	0 °C
Boiling point or initial boiling point and boiling range:	100 °C
Flammability:	Non-flammable. not applicable
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):	4-5
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)	
Vapour pressure:	not determined
Density:	1,01 g/cm <sup>3</sup>
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.

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 determined

##### 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

## sera Ca Test, Reagenz 3

Revision date: 06.09.2023

Product code: Ca-R3

Page 6 of 10

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

### 10.3. Possibility of hazardous reactions

No known hazardous reactions.

### 10.4. Conditions to avoid

Protect from direct sunlight.

### 10.5. Incompatible materials

none

### 10.6. Hazardous decomposition products

Nitrogen oxides (NOx), Carbon monoxide, Carbon dioxide (CO<sub>2</sub>).

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 Regulation (EC) No 1272/2008

#### 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) 492,57 mg/l; ATE (inhalation dust/mist) 71,646 mg/l

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
6381-92-6	ethylenediaminetetraacetic acid disodium salt dihydrate (EDTA disodium)				
	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

Skin contact, Eye contact, Ingestion, Inhalation

#### 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].

**sera Ca Test, Reagenz 3**

Revision date: 06.09.2023

Product code: Ca-R3

Page 7 of 10

**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**

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. According to the criteria of the European classification and labelling system, the substance/the product has not to be labelled as "dangerous for the environment". Ecological injuries are not known or expected under normal use.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
6381-92-6	ethylenediaminetetraacetic acid disodium salt dihydrate (EDTA disodium)					
	Acute fish toxicity	LC50 41 mg/l	96 h	Lepomis macrochirus (Bluegill)	SDS	
	Acute algae toxicity	ErC50 > 60 mg/l	72 h	Pseudokirchneriella subcapitata	ECHA	OECD 201
	Acute crustacea toxicity	EC50 140 mg/l	48 h	Daphnia magna (Big water flea)	SDS	DIN 38412 / part 11
	Fish toxicity	NOEC > 25,7 mg/l	35 d	Danio rerio (zebrafish)	SDS	OECD 210
	Crustacea toxicity	NOEC > 25 mg/l	21 d	Daphnia magna (Big water flea)	SDS	
	Acute bacteria toxicity	(EC50 > 640 mg/l)	3 h	Activated sludge	SDS	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	ethylenediaminetetraacetic acid disodium salt dihydrate (EDTA disodium)	-4,3

**BCF**

CAS No	Chemical name	BCF	Species	Source
6381-92-6	ethylenediaminetetraacetic acid disodium salt dihydrate (EDTA disodium)	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 REACH, annex XIII.

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### sera Ca Test, Reagenz 3

Revision date: 06.09.2023

Product code: Ca-R3

Page 8 of 10

#### 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.

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

##### Disposal recommendations

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

##### List of Wastes Code - residues/unused products

161001 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; aqueous liquid wastes destined for off-site treatment; aqueous liquid wastes containing hazardous substances; hazardous waste

##### List of Wastes Code - used product

160508 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; discarded organic chemicals consisting of or containing hazardous substances; hazardous waste

##### List of Wastes Code - contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

##### Contaminated packaging

Wash with plenty of water. Completely emptied packages can be recycled.

### SECTION 14: Transport information

#### Land transport (ADR/RID)

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

#### Inland waterways transport (ADN)

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

#### Marine transport (IMDG)

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

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

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

#### 14.5. Environmental hazards



**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**sera Ca Test, Reagenz 3**

Revision date: 06.09.2023

Product code: Ca-R3

Page 9 of 10

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**

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

**Additional information**

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

**National regulatory information**

Water hazard class (D): 1 - slightly hazardous to water

**15.2. Chemical safety assessment**For the following substances of this mixture a chemical safety assessment has been carried out:  
ethylenediaminetetraacetic acid disodium salt dihydrate (EDTA disodium)**SECTION 16: Other information****Changes**

This data sheet contains changes from the previous version in section(s): 2,4,5,7,8,9,12,15,16.

**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.



## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### **sera Ca Test, Reagenz 3**

Revision date: 06.09.2023

Product code: Ca-R3

Page 10 of 10

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