

**Safety Data Sheet**

according to UK REACH Regulation

sera GH/KH-plus

Revision date: 15.09.2023

Product code: GH-KH-plus

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

sera GH/KH-plus

EAN

4001942038188

4001942038195

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

Water treatment chemicals: Mixture of inorganic salts for adjustment of water parameters 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

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Contact person: Dr. Matthias Dahm

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Internet: www.sera.de

Responsible Department: Labor

Supplier

Company name: sera GmbH

Street: Borsigstr. 49

Place: D-52525 Heinsberg

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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

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

number:

+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.

2.2. Label elements

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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**

Product/Substance is inorganic. Mixture of inorganic salts.

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (GB CLP Regulation)			
10035-04-8	calcium chloride dihydrate			5 - < 10 %
	233-140-8	017-013-00-2	01-2119494219-28	
	Eye Irrit. 2; H319			

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	
10035-04-8	233-140-8	calcium chloride dihydrate	5 - < 10 %
	dermal: LD50 = > 6600 mg/kg; oral: LD50 = 3050 mg/kg		

SECTION 4: First aid measures**4.1. Description of first aid measures****General information**

Brush off contaminated clothing. Wash contaminated clothing prior to re-use.

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.

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

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

Nausea, Vomiting

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.

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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: Hydrogen chloride (HCl), Sulphur oxides, Carbon dioxide (CO₂), Carbon monoxide

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.

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

Avoid dust formation. Do not breathe dust. 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. Avoid dust formation.

6.2. Environmental precautions

No special environmental measures are necessary.

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

Retain contaminated washing water and dispose it.

For cleaning up

Large amounts of spillages: Use approved industrial vacuum cleaner for removal.
Small amounts of spillages: Take up dust-free and set down dust-free.
Clear contaminated areas thoroughly. Clean contaminated articles and floor according to the environmental legislation.

Other information

Take up mechanically. 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 the 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

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Requirements for storage rooms and vessels

Keep the packing dry and well sealed to prevent contamination and absorption of humidity. Moisture-sensitive.
Recommended storage temperature: at room temperature.
Protect from moisture. Keep away from direct sunlight.

Hints on joint storage

Never allow product to get in contact with water during storage.

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)

Mixture of inorganic salts for adjustment of water parameters in aquarium water.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
DNEL type				
10035-04-8	calcium chloride dihydrate			
Worker DNEL, long-term		inhalation	local	6,6 mg/m ³
Worker DNEL, acute		inhalation	local	13,2 mg/m ³
Consumer DNEL, long-term		inhalation	local	3,3 mg/m ³
Consumer DNEL, acute		inhalation	local	6,6 mg/m ³

PNEC values

CAS No	Substance	Value
Environmental compartment		
10035-04-8	calcium chloride dihydrate	
Soil		150 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

Eye protection: not required. Avoid contact with eyes.

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. In the case of dust or aerosol formation use respirator with filter model P2 (according to DIN 3181, 1980).

Thermal hazards

Thermal decomposition can lead to the escape of irritating gases and vapours. In case of fire may be liberated: Hydrogen chloride (HCl), Sulphur oxides, Carbon dioxide (CO₂), Carbon monoxide.

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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:	solid
Colour:	white
Odour:	odourless
Odour threshold:	not applicable
Melting point/freezing point:	> 100 °C
Boiling point or initial boiling point and boiling range:	> 127 °C
Flammability:	Non-flammable.
Lower explosion limits:	not determined
Upper explosion limits:	not determined
Flash point:	not applicable
Auto-ignition temperature:	Non-flammable.
Decomposition temperature:	> 100 °C
pH-Value:	not applicable
Viscosity / kinematic:	not applicable
Water solubility:	easily soluble
Solubility in other solvents	
not determined	
Partition coefficient n-octanol/water:	not applicable
Vapour pressure:	not determined
Density (at 20 °C):	2,25 g/cm³
Relative density:	not determined
Bulk density:	not determined
Relative vapour density:	not applicable
Particle characteristics:	not determined

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

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

Sustaining combustion:

Not sustaining combustion

Self-ignition temperature

Solid:

not determined

Gas:

not applicable

Oxidizing properties

Not oxidising.

Other safety characteristics

Evaporation rate:	not determined
Solvent separation test:	No data available
Solvent content:	0 %
Solid content:	100,00 %
Sublimation point:	No data available
Softening point:	not applicable
Pour point:	not applicable
Viscosity / dynamic:	not applicable
Flow time:	not applicable

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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.
Moisture-sensitive.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

Exposure to air or moisture over prolonged periods. Decomposition under influence of moisture is highly accelerated by heating.

10.5. Incompatible materials

Humidity, Acid

10.6. Hazardous decomposition products

Hydrogen chloride (HCl), Sulphur oxides, Carbon dioxide (CO₂), Carbon monoxide
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.
This mixture does not contain further substances fulfilling the criteria of hazard class "acute toxicity" according to CLP regulation.

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
10035-04-8	calcium chloride dihydrate				
	oral	LD50 3050 mg/kg	Rat	SDS	
	dermal	LD50 > 6600 mg/kg	Rabbit	SDS	

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 of dust/particles, Skin contact, Eye contact, Ingestion

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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

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
10035-04-8	calcium chloride dihydrate					
	Acute fish toxicity	LC50 mg/l	6100	96 h	Pimephales promelas (fathead minnow)	SDS
	Acute algae toxicity	ErC50 mg/l	5300		Selenastrum capricornutum	SDS
	Acute crustacea toxicity	EC50 mg/l	3180	48 h	Daphnia magna (Big water flea)	SDS

12.2. Persistence and degradability

The product has not been tested. The methods for determining the biological degradability are not applicable to inorganic substances.

12.3. Bioaccumulative potential

No indication of bioaccumulation potential.

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

No special environmental measures are necessary.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

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Disposal recommendations

Dispose of waste according to applicable legislation.

List of Wastes Code - residues/unused products

160509 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; discarded chemicals other than those mentioned in 16 05 06, 16 05 07 or 16 05 08

List of Wastes Code - used product

160509 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; discarded chemicals other than those mentioned in 16 05 06, 16 05 07 or 16 05 08

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

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

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Restrictions on use (REACH, annex XVII):

Entry 75

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

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information**Changes**

This data sheet contains changes from the previous version in section(s): 4,12,16.

Abbreviations and acronymsADR: 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)

H319 Causes serious eye irritation.

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.)