

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

sera Glass Cleaner

Revision date: 24.05.2024

Product code: Glass_Cleaner

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

sera Glass Cleaner

EAN

4001942540636

UFI: 0DQD-Y7YA-UE5K-1DW8

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

Cleaning agent

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**

Skin Corr. 1; H314

Eye Dam. 1; H318

STOT SE 3; H335

Full text of hazard statements: see SECTION 16.

2.2. Label elements**Regulation (EC) No 1272/2008****Hazard components for labelling**

citric acid

Signal word: Danger

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Pictograms:



Hazard statements

- H314 Causes severe skin burns and eye damage.
H335 May cause respiratory irritation.

Precautionary statements

- P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P280 Wear protective gloves and eye protection/face protection.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER/doctor.

Additional advice on labelling

The product is classified and labelled according to EC directives or corresponding national laws.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

citric acid in aqueous solution.

Relevant ingredients

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
77-92-9	citric acid			30 - < 35 %
	201-069-1	607-750-00-3	01-2119457026-42	
	Eye Irrit. 2, STOT SE 3; H319 H335			

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	
77-92-9	201-069-1	citric acid	30 - < 35 %
	dermal: LD50 = > 2000 mg/kg; oral: LD50 = 5400 mg/kg		

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove contaminated, saturated clothing immediately.

After inhalation

Provide fresh air.

After contact with skin

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

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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

Serious eye damage/eye irritation

Skin corrosion/irritation

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**

Water spray, Foam, Extinguishing powder, Carbon dioxide (CO₂)

Unsuitable extinguishing media

no restriction

5.2. Special hazards arising from the substance or mixture

Non-flammable. The product itself does not burn. Wear breathing apparatus if exposed to vapours/dusts/aerosols.

In case of fire may be liberated: 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.

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

Do not breathe vapour/aerosol. Avoid contact with skin, eyes and clothes.

Use personal protection equipment.

For non-emergency personnel

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

For emergency responders

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. The product is an acid. Before discharge into sewage plants the product normally needs to be neutralised. Suitable material for diluting or neutralizing: Water, Lime, Soda.

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.

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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 Neutralize with chalk, alkali solution or ammonia.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Do not breathe vapour/aerosol. 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

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

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 locked up. Store in a place accessible by authorized persons only.

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

Do not mix with alkali.

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)

Cleaning agent

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

PNEC values

CAS No	Substance	
Environmental compartment		Value
77-92-9	citric acid	
Freshwater		0,44 mg/l
Marine water		0,044 mg/l
Freshwater sediment		34,6 mg/kg
Marine sediment		3,46 mg/kg
Micro-organisms in sewage treatment plants (STP)		1000 mg/l
Soil		33,1 mg/kg

Additional advice on limit values

To date, no national critical limit values exist.

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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**

Wear eye protection/face protection. Suitable eye protection: goggles.

Hand protection

Wear protective gloves.

Suitable material: NBR (Nitrile rubber)

Thickness of the glove material: 0,11 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 A-P (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: 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:	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.
Lower explosion limits:	not determined
Upper explosion limits:	not determined
Flash point:	> 100 °C
Auto-ignition temperature:	not determined
Decomposition temperature:	no decomposition observed up to: 100 °C
pH-Value (at 20 °C):	0,9-1,1
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)	

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Density (at 20 °C):	1,14 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.

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:

30,00 %

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

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

10.3. Possibility of hazardous reactions

Exothermic reaction with: Base, 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: Base, Oxidising agent, Alkali metals, Light metals, Peroxides.

May cause strong formation of hydrogen by contact with amphoteric metals (e.g. alumina, lead, zinc) - danger of explosion.

10.6. Hazardous decomposition productsCarbon monoxide, Carbon dioxide (CO₂).

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

Further information

Corrodes base metals.

SECTION 11: Toxicological information**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**

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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 (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
77-92-9	citric acid				
	oral	LD50 mg/kg 5400	Mouse	ECHA	OECD 401
	dermal	LD50 mg/kg > 2000	Rat	ECHA	OECD 402

Irritation and corrosivity

Skin corrosion/irritation: Causes severe skin burns and eye damage. (On basis of test data)

Serious eye damage/eye irritation: Causes serious eye damage. (On basis of test data)

Sensitising effects

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

Carcinogenic/mutagenic/toxic effects 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

May cause respiratory irritation. (citric acid)

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 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

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The product is an acid. Before discharge into sewage plants the product normally needs to be neutralised. Suitable material for diluting or neutralizing: Neutralize with chalk, alkali solution or ammonia. After neutralisation, toxicity is no longer observed. Ecological injuries are not known or expected under normal use.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
77-92-9	citric acid					
	Acute fish toxicity	LC50 440-760 mg/l	96 h	Leuciscus idus (golden orfe)	ECHA	OECD 203
	Acute crustacea toxicity	EC50 120 - 1535 mg/l	48 h	Daphnia magna (Big water flea)	ECHA	
	Algae toxicity	NOEC 425 mg/l	8 d	Scenedesmus quadricauda	ECHA	

12.2. Persistence and degradability

The product has not been tested. The organic part of the product is biodegradable.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
77-92-9	citric acid			
	OECD 301B	97%	28	ECHA
	Readily biodegradable (according to OECD criteria).			
	OECD 301E	100%	19	ECHA
	Readily biodegradable (according to OECD criteria).			

12.3. Bioaccumulative potential

No indication of bioaccumulation potential.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
77-92-9	citric acid	-1,57

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.

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

Dispose of waste according to applicable legislation. The product is an acid. Before discharge into sewage plants the product normally needs to be neutralised. Suitable material for diluting or neutralizing: Neutralize with chalk, alkali solution or ammonia.

List of Wastes Code - residues/unused products

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160305 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; off-specification batches and unused products; organic 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. If recycling is not practicable, dispose of in compliance with the European Communities (Toxic and Dangerous Waste) Regs 1982, SI 33 of 1982.

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

Warning: The product causes irritation of eyes, skin and mucous membranes.

Safe handling: see section 7

Personal protection equipment: see section 8

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 3, Entry 75

Directive 2004/42/EC on VOC in paints and varnishes: 30 % (342 g/l)

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

Additional information

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

The mixture is classified as 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): 1,2.

Abbreviations and acronyms

Skin Corr: Skin corrosion

Eye Dam: Eye damage

Eye Irrit: Eye irritation

STOT SE: Specific target organ toxicity - single exposure

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

Classification for mixtures and used evaluation method according to Regulation (EC) No 1272/2008 [CLP]

Classification	Classification procedure
Skin Corr. 1; H314	On basis of test data
Eye Dam. 1; H318	On basis of test data
STOT SE 3; H335	Calculation method

Relevant H and EUH statements (number and full text)

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

H335 May cause respiratory 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



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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 relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)