

**Safety Data Sheet**

according to UK REACH Regulation

**sera CO2 Test**

Revision date: 05.09.2023

Product code: CO2

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

sera CO2 Test

**EAN**

4001942043205

4001942043304

4001942080606

UFI: YGQD-FPUP-P3FX-NMTW

**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****Manufacturer**Company name: sera Werke Heimtierbedarf  
J. Ravnak GmbH & Co. KGStreet: Borsigstraße 49  
Place: D-52525 HeinsbergPost-office box: 1466  
D-52518 Heinsberg

Telephone: +49 (0)2452 91260

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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

**Supplier**Company name: sera GmbH  
Street: Borsigstr. 49

Place: D-52525 Heinsberg

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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**

Flam. Liq. 2; H225

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Full text of hazard statements: see SECTION 16.

**2.2. Label elements****GB CLP Regulation****Signal word:** Danger**Pictograms:****Hazard statements**

H225 Highly flammable liquid and vapour.

**Precautionary statements**

P102 Keep out of reach of children.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233 Keep container tightly closed.

P501 Dispose of contents/container to household waste.

**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**

alcoholic solution

**Hazardous components**

none (according to UK REACH Regulation)

**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. Induce vomiting when the affected person is not unconscious. 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**

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Treat symptomatically.

**SECTION 5: Firefighting measures****5.1. Extinguishing media****Suitable extinguishing media**Water spray jet, Carbon dioxide (CO<sub>2</sub>), Foam, Extinguishing powder.**Unsuitable extinguishing media**

Full water jet

**5.2. Special hazards arising from the substance or mixture**

Flammable. Vapours can form explosive mixtures with air. In case of fire and/or explosion do not breathe fumes. In case of fire may be liberated: Hydrogen bromide (HBr), Bromine, Sulphur oxides, Carbon monoxide, Carbon dioxide (CO<sub>2</sub>).

**5.3. Advice for firefighters**

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

**Additional information**

Use water spray jet to protect personnel and to cool endangered containers. 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**

Remove all sources of ignition. Provide adequate ventilation. Do not breathe vapour. 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**

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 uncontrolled discharge of product into the environment. Danger of explosion

**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**

Take precautionary measures against static discharges.  
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**

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**Advice on safe handling**

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

**Advice on protection against fire and explosion**

Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges.

Vapours can form explosive mixtures with air.

**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 in a cool, well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Protect from direct sunlight.

Recommended storage temperature: at room temperature

**Hints on joint storage**

Do not store together with: Oxidising agent. Pyrophoric or self-heating substances. Keep away from combustible material.

**Further information on storage conditions**

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****Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
64-17-5	Ethanol	1000	1920		TWA (8 h)	WEL

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

**Hand protection**

Avoid contact with skin. Wear suitable gloves.

Suitable gloves type: solvent-resistant

Suitable material: NBR (Nitrile rubber)

Thickness of the glove material: 0,425 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

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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

Flame-retardant protective clothing. Wear anti-static footwear and clothing Not required because of small size of the container

### Respiratory protection

No personal respiratory protective equipment normally required. In case of inadequate ventilation wear respiratory protection. In the case of vapour formation use a respirator with filter model A (according to DIN 3181, 1980).

### Thermal hazards

Thermal decomposition can lead to the escape of irritating gases and vapours.  
Flammable. Vapours can form explosive mixtures with air. In case of fire may be liberated: Hydrogen bromide (HBr), Bromine, Sulphur oxides, 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:	yellow-orange
Odour:	alcoholic
Odour threshold:	18 ppm
Melting point/freezing point:	-114,5 °C
Boiling point or initial boiling point and boiling range:	78 °C
Flammability:	not applicable highly flammable
Lower explosion limits:	3,5 vol. %
Upper explosion limits:	15 vol. %
Flash point:	12 °C
Auto-ignition temperature:	400 °C
Decomposition temperature:	not determined
pH-Value:	not applicable
Viscosity / kinematic:	not determined
Water solubility: (at 20 °C)	completely miscible
Solubility in other solvents	not determined
Partition coefficient n-octanol/water:	not determined
Vapour pressure: (at 20 °C)	58 hPa
Vapour pressure: (at 50 °C)	293 hPa
Density (at 20 °C):	0,79 g/cm <sup>3</sup>
Bulk density:	not applicable
Relative vapour density:	not determined

### 9.2. Other information

#### Information with regard to physical hazard classes

##### Explosive properties

Vapours can form explosive mixtures with air.

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Sustaining combustion:	No data available
Self-ignition temperature	
Solid:	not applicable
Gas:	not applicable
Oxidizing properties	
Not oxidising.	
<b>Other safety characteristics</b>	
Evaporation rate:	not determined
Solvent separation test:	No data available
Solvent content:	99,94 %
Solid content:	not determined
Sublimation point:	not applicable
Softening point:	not applicable
Pour point:	not determined
Viscosity / dynamic: (at 20 °C)	1,2 mPa·s
Flow time:	not determined

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

Flammable, Ignition hazard.

**10.2. Chemical stability**

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

**10.3. Possibility of hazardous reactions**

Vapours can form explosive mixtures with air.

**10.4. Conditions to avoid**

Keep away from sources of heat (e.g. hot surfaces), sparks and open flames.

**10.5. Incompatible materials**

Oxidising agent, Alkali metals, Light metals

**10.6. Hazardous decomposition products**Hydrogen bromide (HBr), Bromine, Sulphur oxides, 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 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.

**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.

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**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**

Substance caused a mild irritation of eyes and skin in animal experiments.

**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**

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. Ecological injuries are not known or expected under normal use.

**12.2. Persistence and degradability**

According to the results of tests of biodegradability this product is considered as being readily biodegradable.

**12.3. Bioaccumulative potential**

The product has not been tested.

**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.

**SECTION 13: Disposal considerations****13.1. Waste treatment methods****Disposal recommendations**

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

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

160305 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; off-specification batches and unused products; organic wastes containing hazardous substances; hazardous waste

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### 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. Dispose of waste according to applicable legislation.

## SECTION 14: Transport information

### Land transport (ADR/RID)

**14.1. UN number or ID number:** UN 1170  
**14.2. UN proper shipping name:** ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)  
**14.3. Transport hazard class(es):** 3  
**14.4. Packing group:** III  
Hazard label: 3  
Classification code: F1  
Special Provisions: 144 601  
Limited quantity: 5 L  
Excepted quantity: E1  
Transport category: 3  
Hazard No: 30  
Tunnel restriction code: D/E

### Inland waterways transport (ADN)

**14.1. UN number or ID number:** UN 1170  
**14.2. UN proper shipping name:** ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)  
**14.3. Transport hazard class(es):** 3  
**14.4. Packing group:** III  
Hazard label: 3  
Classification code: F1  
Special Provisions: 144 601  
Limited quantity: 5 L  
Excepted quantity: E1

### Marine transport (IMDG)

**14.1. UN number or ID number:** UN 1170  
**14.2. UN proper shipping name:** ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)  
**14.3. Transport hazard class(es):** 3  
**14.4. Packing group:** III  
Hazard label: 3  
Special Provisions: 144, 223  
Limited quantity: 5 L  
Excepted quantity: E1  
EmS: F-E, S-D

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

**14.1. UN number or ID number:** UN 1170  
**14.2. UN proper shipping name:** ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)  
**14.3. Transport hazard class(es):** 3  
**14.4. Packing group:** III



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Hazard label:	3	
Special Provisions:	A3 A58 A180	
Limited quantity Passenger:	10 L	
Passenger LQ:	Y344	
Excepted quantity:	E1	
IATA-packing instructions - Passenger:	355	
IATA-max. quantity - Passenger:	60 L	
IATA-packing instructions - Cargo:	366	
IATA-max. quantity - Cargo:	220 L	

### Other applicable information (air transport)

Special Provisions: A58

### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

### 14.6. Special precautions for user

Warning: Combustible liquid.

### 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 3, Entry 40

2010/75/EU (VOC): 99,938 % (789,506 g/l)

2004/42/EC (VOC): 99,94 % (789,526 g/l)

Information according to 2012/18/EU (SEVESO III): P5c FLAMMABLE LIQUIDS

#### Additional information

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

#### National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

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): 4,8,10,15.

### 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%

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LD50: Lethal dose, 50%

**Key literature references and sources for data**

Safety Data Sheet, ECHA

**Classification for mixtures and used evaluation method according to GB CLP Regulation**

Classification	Classification procedure
Flam. Liq. 2; H225	On basis of test data

**Relevant H and EUH statements (number and full text)**

H225 Highly flammable liquid and vapour.

**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.

**Identified uses**

No	Short title	LCS	SU	PC	PROC	ERC	AC	TF	Specification
1	Teste	-	-	-	-	-	-	-	

LCS: Life cycle stages

PC: Product categories

ERC: Environmental release categories

TF: Technical functions

SU: Sectors of use

PROC: Process categories

AC: Article categories

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