

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

sera O2 plus

Revision date: 18.09.2023

Product code: O2_plus_02

Page 1 of 10

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

sera O2 plus

EAN

4001942034159

4001942072106

4001942072113

Further trade names

pond O2 plus

UFI:

WV7X-5NWK-WX13-2409

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 and ponds.

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

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

Acute Tox. 4; H302

Eye Dam. 1; H318

Full text of hazard statements: see SECTION 16.

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

Disodium carbonate, compound with hydrogen peroxide (sodium percarbonate)

Signal word:

Danger

Safety Data Sheet

according to Regulation (EC) No 1907/2006

sera O2 plus

Revision date: 18.09.2023

Product code: O2_plus_02

Page 2 of 10

Pictograms:



Hazard statements

H302 Harmful if swallowed.
H318 Causes serious eye damage.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P280 Wear eye protection/face protection.
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 doctor.
P301+P312 IF SWALLOWED: Call a doctor if you feel unwell.

Special labelling of certain mixtures

Read attached instructions before use.

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

Product/Substance is inorganic. Mixture of inorganic salts.

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
15630-89-4	Disodium carbonate, compound with hydrogen peroxide (sodium percarbonate)			60 %
	239-707-6		01-2119457268-30	
	Ox. Sol. 3, Acute Tox. 4, Eye Dam. 1; H272 H302 H318			

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	
15630-89-4	239-707-6	Disodium carbonate, compound with hydrogen peroxide (sodium percarbonate)	60 %
		dermal: LD50 = > 2000 mg/kg; oral: LD50 = 1034 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

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

Safety Data Sheet

according to Regulation (EC) No 1907/2006

sera O2 plus

Revision date: 18.09.2023

Product code: O2_plus_02

Page 3 of 10

After inhalation

Provide fresh air. Immediately call a doctor. Subsequent observance for pneumonia and lung oedema.

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. Medical treatment necessary.

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

Pneumonia, Pulmonary oedema. Symptoms may develop several hours following exposure; medical observation therefore necessary for at least 48 hours.

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

Unsuitable extinguishing media

Carbon dioxide (CO₂), Dry extinguishing powder

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: Oxygen, 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. 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**

Provide adequate ventilation. Avoid dust formation. Do not breathe dust. 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

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.

sera O2 plus

Revision date: 18.09.2023

Product code: O2_plus_02

Page 4 of 10

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

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

Advice on general occupational hygiene

Take off contaminated clothing. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink. Keep away from food, drink and animal feedingstuffs.

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. Keep the packing dry and well sealed to prevent contamination and absorption of humidity.

Recommended storage temperature: at room temperature. Keep away from direct sunlight.

Hints on joint storage

Do not store near acids.

Further information on storage conditions

Decomposes in contact with water.

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			
DNEL type		Exposure route	Effect	Value
15630-89-4	Disodium carbonate, compound with hydrogen peroxide (sodium percarbonate)			
Worker DNEL, long-term		inhalation	systemic	5 mg/m ³
Worker DNEL, long-term		dermal	systemic	12,8 mg/kg bw/day
Consumer DNEL, long-term		dermal	systemic	6,4 mg/kg bw/day

sera O2 plus

Revision date: 18.09.2023

Product code: O2_plus_02

Page 5 of 10

PNEC values

CAS No	Substance	
Environmental compartment		Value
15630-89-4	Disodium carbonate, compound with hydrogen peroxide (sodium percarbonate)	
Freshwater		0,035 mg/l
Marine water		0,035 mg/l
Micro-organisms in sewage treatment plants (STP)		16,24 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

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

Hand protection

Avoid contact with skin. Wear suitable gloves.

Suitable gloves type: alkali-resistant

Suitable material: NBR (Nitrile rubber)

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

In case of inadequate ventilation wear respiratory protection. No personal respiratory protective equipment normally required. In the case of dust or aerosol formation use respirator with filter model B2-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: Oxygen, Sulphur oxides, Carbon dioxide (CO₂), Carbon monoxide.

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:		> 60 °C
Boiling point or initial boiling point and boiling range:		> 60 °C
Flammability:	Non-flammable.	

sera O2 plus

Revision date: 18.09.2023

Product code: O2_plus_02

Page 6 of 10

Lower explosion limits:	not determined
Upper explosion limits:	not determined
Flash point:	not applicable
Auto-ignition temperature:	Non-flammable.
Decomposition temperature:	> 60 °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):	1,79 g/cm ³
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	
Not dust explosive.	
Sustaining combustion:	Not sustaining combustion
Self-ignition temperature	
Solid:	not determined
Gas:	not applicable
Oxidizing properties	
Not oxidising.	

Other safety characteristics

Evaporation rate:	not applicable
Solvent separation test:	not applicable
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

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

Container can be pressurized by carbon dioxide due to reaction with humid air and/or water.

10.4. Conditions to avoid

Exposure to air or moisture over prolonged periods. Decomposition under influence of moisture is highly accelerated by heating. May cause decomposition by long-term light influence.

sera O2 plus

Revision date: 18.09.2023

Product code: O2_plus_02

Page 7 of 10

10.5. Incompatible materials

Reducing agent; Air, humid, Acid

10.6. Hazardous decomposition products

Oxygen, 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 Regulation (EC) No 1272/2008

Toxicokinetics, metabolism and distribution

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

Acute toxicity

Harmful if swallowed.

ATEmix calculated

ATE (oral) 1791,7 mg/kg

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
15630-89-4	Disodium carbonate, compound with hydrogen peroxide (sodium percarbonate)				
	oral	LD50 mg/kg 1034	Rat	ECHA	
	dermal	LD50 mg/kg > 2000	Rabbit	ECHA	

Irritation and corrosivity

Causes serious eye damage.

Skin corrosion/irritation: 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

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.

Safety Data Sheet

according to Regulation (EC) No 1907/2006

sera O2 plus

Revision date: 18.09.2023

Product code: O2_plus_02

Page 8 of 10

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. 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
15630-89-4	Disodium carbonate, compound with hydrogen peroxide (sodium percarbonate)					
	Acute fish toxicity	LC50 70,7 mg/l	96 h	Pimephales promelas (fathead minnow)	ECHA	
	Acute crustacea toxicity	EC50 4,9 mg/l	48 h	Daphnia pulex (water flea)	ECHA	US EPA TSCA
	Crustacea toxicity	NOEC 2 mg/l	2 d	Daphnia pulex (water flea)	ECHA	US EPA TSCA

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 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

No special environmental measures are necessary. Ecological injuries are not known or expected under normal use.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Dispose of waste according to applicable legislation.

List of Wastes Code - residues/unused products

160904 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; oxidising substances; oxidising substances, not otherwise specified; hazardous waste

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

Safety Data Sheet

according to Regulation (EC) No 1907/2006

sera O2 plus

Revision date: 18.09.2023

Product code: O2_plus_02

Page 9 of 10

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)

<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

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

No dangerous good in sense of this transport regulation.

14.7. Maritime transport in bulk according to IMO instruments

No dangerous good in sense of this transport regulation.

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

Additional information

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

National regulatory information

Safety Data Sheet

according to Regulation (EC) No 1907/2006

sera O2 plus

Revision date: 18.09.2023

Product code: O2_plus_02

Page 10 of 10

Employment restrictions:

Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

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:
Disodium carbonate, compound with hydrogen peroxide (sodium percarbonate)

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

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

Classification	Classification procedure
Acute Tox. 4; H302	Calculation method
Eye Dam. 1; H318	Calculation method

Relevant H and EUH statements (number and full text)

H272 May intensify fire; oxidiser.
H302 Harmful if swallowed.
H318 Causes serious eye damage.

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.)