

**Safety Data Sheet**

according to UK REACH Regulation

Revision date: 19.09.2023

sera phosvec-clear

Product code: phosvec-clear

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

sera phosvec-clear

EAN

4001942033909
4001942033916
4001942033923
4001942033947
4001942033954
4001942033961

UFI: ETWC-JEWF-GD94-H70M

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

Water treatment chemicals: Solution 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	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	

Supplier

Company name:	sera GmbH	
Street:	Borsigstr. 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****GB CLP Regulation**

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Eye Dam. 1; H318
Skin Sens. 1; H317
Aquatic Chronic 3; H412

Full text of hazard statements: see SECTION 16.

2.2. Label elements

GB CLP Regulation

Hazard components for labelling

Lanthan(III) chloride solution

Signal word: Danger

Pictograms:



Hazard statements

H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H412 Harmful to aquatic life with long lasting effects.

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/face protection.
P302+P352 IF ON SKIN: Wash with plenty of water.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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. Aqueous solution of inorganic salts.

Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (GB CLP Regulation)			
20211-76-1	Lanthan(III) chloride solution			20 - < 25 %
	233-237-5		01-2119452063-49	
	Met. Corr. 1, Eye Dam. 1, Skin Sens. 1, Aquatic Chronic 2; H290 H318 H317 H411			

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	
20211-76-1	233-237-5	Lanthan(III) chloride solution	20 - < 25 %
		dermal: LD50 = >2000 mg/kg; oral: LD50 = 2621 mg/kg	

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

Change contaminated, saturated clothing.

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. Do NOT induce vomiting. Rinse mouth immediately and drink plenty of water. When in doubt or if symptoms are observed, get medical advice.

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: Hydrogen chloride (HCl).

5.3. Advice for firefighters

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

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. 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 to enter into surface water or drains. Do not allow to enter into soil/subsoil.

6.3. Methods and material for containment and cleaning up

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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. Clean contaminated articles and floor according to the environmental legislation.

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 the 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 locked up. Keep container tightly closed. Store in a place accessible by authorized persons only.

Keep/Store only in original container.

Recommended storage temperature: at room temperature.

Hints on joint storage

No materials to be specially mentioned

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 adjustment of water parameters in aquarium water.

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

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DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
20211-76-1	Lanthan(III) chloride solution			
Worker DNEL, long-term		dermal	local	123 mg/person/day
Worker DNEL, long-term		inhalation	systemic	108,44 mg/m ³
Worker DNEL, long-term		dermal	systemic	123 mg/kg bw/day

PNEC values

CAS No	Substance	Value
20211-76-1	Lanthan(III) chloride solution	
Freshwater		0,0176 mg/l
Marine water		0,00176 mg/l
Freshwater sediment		23,27 mg/kg
Micro-organisms in sewage treatment plants (STP)		12,5 mg/l
Soil		5-50 mg/kg

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 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

Wear suitable protective clothing. (long sleeved clothing).

Wash contaminated clothing prior to re-use.

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 B2 (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: Hydrogen chloride (HCl).

Environmental exposure controls

Avoid release to the environment.

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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 applicable
Upper explosion limits:	not applicable
Flash point:	> 100 °C
Auto-ignition temperature:	Non-flammable.
Decomposition temperature:	> 100 °C
pH-Value (at 20 °C):	6,8-7,2
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)	
Density (at 20 °C):	1,1 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:

not determined

Sublimation point:

not applicable

Softening point:

not applicable

Pour point:

not determined

Viscosity / dynamic:

not determined

Flow time:

not determined

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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.

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

Hydrogen chloride (HCl).

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
20211-76-1	Lanthan(III) chloride solution				
	oral	LD50 mg/kg	2621	Rat	
	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

May cause an allergic skin reaction. (Lanthan(III) chloride solution)

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

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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 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

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. The ecotoxicological properties of this mixture are determined by the ecotoxicological properties of the single components (see section 3). Elimination from water is possible through precipitation or flocculation.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
20211-76-1	Lanthan(III) chloride solution					
	Acute algae toxicity	ErC50 mg/l	28,2	72 h	Desmodesmus subspicatus	OECD 201
	Acute crustacea toxicity	EC50 mg/l	2,083	48 h	Daphnia carinata	OECD 202
	Fish toxicity	NOEC mg/l	0,46	21 d	Cyprinus carpio (Common Carp)	OECD 204
	Crustacea toxicity	NOEC mg/l	0,176	21 d	Daphnia magna (Big water flea)	OECD 202
	Acute bacteria toxicity	(EC50 mg/l)	390		Activated sludge	OECD 209

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

The product has not been tested.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
20211-76-1	Lanthan(III) chloride solution	5,67-6,92

BCF

CAS No	Chemical name	BCF	Species	Source
20211-76-1	Lanthan(III) chloride solution	<0,8		

12.4. Mobility in soil

The product has not been tested.

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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

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

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

160303 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; off-specification batches and unused products; inorganic wastes containing hazardous substances; hazardous waste

List of Wastes Code - used product

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 - 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 Environmental Protection (Duty of Care) Regulations 1991.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number:	UN 1760
14.2. UN proper shipping name:	CORROSIVE LIQUID, N.O.S. (Lanthan(III) chloride solution)
14.3. Transport hazard class(es):	8
14.4. Packing group:	III
Hazard label:	8
Classification code:	C9
Special Provisions:	274
Limited quantity:	5 L
Transport category:	3
Hazard No:	80
Tunnel restriction code:	E

Inland waterways transport (ADN)

14.1. UN number or ID number:	UN 1760
14.2. UN proper shipping name:	CORROSIVE LIQUID, N.O.S. (Lanthan(III) chloride solution)
14.3. Transport hazard class(es):	8
14.4. Packing group:	III
Hazard label:	8
Classification code:	C9
Special Provisions:	274

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Limited quantity: 5 L

Marine transport (IMDG)

14.1. UN number or ID number: UN 1760
14.2. UN proper shipping name: CORROSIVE LIQUID, N.O.S. (Lanthan(III) chloride solution)
14.3. Transport hazard class(es): 8
14.4. Packing group: III
Hazard label: 8
Special Provisions: 223, 274
Limited quantity: 5 L
EmS: F-A, S-B

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number: UN 1760
14.2. UN proper shipping name: CORROSIVE LIQUID, N.O.S. (Lanthan(III) chloride solution)
14.3. Transport hazard class(es): 8
14.4. Packing group: III
Hazard label: 8
Special Provisions: A3 A803
Limited quantity Passenger: 1 L
IATA-packing instructions - Passenger: 852
IATA-max. quantity - Passenger: 5 L
IATA-packing instructions - Cargo: 856
IATA-max. quantity - Cargo: 60 L

Other applicable information (air transport)

: Y841
Excepted Quantities: E1

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

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

Restrictions on use (REACH, annex XVII):

Entry 3, 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 hazardous according to regulation (EC) No 1272/2008 [CLP].

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): 2 - obviously hazardous to water
Skin resorption/Sensitization: Causes allergic hypersensitivity reactions.

15.2. Chemical safety assessment

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

SECTION 16: Other information

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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 GB CLP Regulation

Classification	Classification procedure
Eye Dam. 1; H318	Calculation method
Skin Sens. 1; H317	Calculation method
Aquatic Chronic 3; H412	Calculation method

Relevant H and EUH statements (number and full text)

H290 May be corrosive to metals.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

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.)