

## VireXbuster® Additive

Version number: 1.0

Date of compilation: 30.01.2024

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifier

Trade name	<b>VireXbuster® Additive</b>
Registration number (REACH)	not relevant (mixture)
Unique formula identifier (UFI)	547X-X80A-800X-FS17
Article number	100101

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses	Industrial use Professional use Antimicrobial agent Coating and paint additive
Uses advised against	Do not use for private purposes (household)

#### 1.3 Details of the supplier of the safety data sheet

DaXem GmbH  
Steigerwaldweg 12  
65760 Eschborn  
Germany

Telephone: 06196/5232707  
info@daxem.de  
Website: <https://www.daxem.de/>

e-mail (competent person) info@daxem.de

#### 1.4 Emergency telephone number

Poison centre		
Country	Name	Telephone
Germany	Giftnotruf der Charité - Universitätsmedizin Berlin	+49 30 30 686 700 (24/7)

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 (CLP)

Section	Hazard class	Category	Hazard class and category	Hazard statement
3.1O	acute toxicity (oral)	4	Acute Tox. 4	H302
3.2	skin corrosion/irritation	2	Skin Irrit. 2	H315
3.3	serious eye damage/eye irritation	2	Eye Irrit. 2	H319
3.4S	skin sensitisation	1	Skin Sens. 1	H317
4.1A	hazardous to the aquatic environment - acute hazard	1	Aquatic Acute 1	H400
4.1C	hazardous to the aquatic environment - chronic hazard	1	Aquatic Chronic 1	H410

For full text of H-phrases: see SECTION 16

## VireXbuster® Additive

Version number: 1.0

Date of compilation: 30.01.2024

Code	Supplemental hazard information
EUH071	corrosive to the respiratory tract

The most important adverse physicochemical, human health and environmental effects  
Spillage and fire water can cause pollution of watercourses.

### 2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP)

- signal word                      Warning

- pictograms

GHS07, GHS09



- hazard statements

H302                      Harmful if swallowed.  
H315                      Causes skin irritation.  
H317                      May cause an allergic skin reaction.  
H319                      Causes serious eye irritation.  
H410                      Very toxic to aquatic life with long lasting effects.

- precautionary statements

P261                      Avoid breathing dust/fume/gas/mist/vapours/spray.  
P280                      Wear protective gloves/protective clothing/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.  
P333+P313              If skin irritation or rash occurs: Get medical advice/attention.  
P337+P313              If eye irritation persists: Get medical advice/attention.  
P391                      Collect spillage.  
P501                      Dispose of contents/container in accordance with local/regional/national/international regulations.

- supplemental hazard information

EUH071      Corrosive to the respiratory tract.

- hazardous ingredients for labelling

Contains: 2-octyl-2H-isothiazol-3-one; diethylene glycol.

### 2.3 Other hazards

Results of PBT and vPvB assessment

Does not contain a PBT-/vPvB-substance in a concentration of  $\geq 0,1\%$ .

Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) in a concentration of  $\geq 0,1\%$ .

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Not relevant (mixture).

### 3.2 Mixtures

The product does not contain (other) ingredients which are classified according to present knowledge of the supplier and contribute to the classification of the product and hence require reporting in this section.

# Safety Data Sheet




according to Regulation (EC) No. 1907/2006 (REACH)

amended by 2020/878/EU

## VireXbuster® Additive

Version number: 1.0

Date of compilation: 30.01.2024

Name of substance	Identifier	Wt%	Classification acc. to GHS	Pictograms	Notes
diethylene glycol	CAS No 111-46-6  EC No 203-872-2  Index No 603-140-00-6  REACH Reg. No 01-2119457857- 21-xxxx	50 – < 75	Acute Tox. 4 / H302		GHS-HC
Silver phosphate glass	CAS No 308069-39-8  EC No 608-534-1	25 – < 50	Aquatic Acute 1 / H400 Aquatic Chronic 1 / H410		
2-octyl-2H-isothiazol-3-one	CAS No 26530-20-1  EC No 247-761-7  Index No 613-112-00-5  REACH Reg. No 01-2120768921- 45-xxxx	1 – < 2,5	Acute Tox. 3 / H301 Acute Tox. 3 / H311 Acute Tox. 2 / H330 Skin Corr. 1 / H314 Eye Dam. 1 / H318 Skin Sens. 1A / H317 Aquatic Acute 1 / H400 Aquatic Chronic 1 / H410 EUH071		GHS-HC

### Notes

GHS-HC: Harmonised classification (the classification of the substance corresponds to the entry in the list according to 1272/2008/EC, Annex VI)

Name of substance	Identifier	Specific Conc. Limits	M-Factors	ATE	Exposure route
diethylene glycol	CAS No 111-46-6  EC No 203-872-2	-	-	500 mg/kg	oral
Silver phosphate glass	CAS No 308069-39-8  EC No 608-534-1	-	M-factor (acute) = 100 M-factor (chronic) = 100	-	
2-octyl-2H-isothiazol-3-one	CAS No 26530-20-1  EC No 247-761-7	Skin Sens. 1A; H317: C ≥ 0,0015 %	M-factor (acute) = 100 M-factor (chronic) = 100	125 mg/kg 311 mg/kg 0,5 mg/l/4h 0,27 mg/l/4h	oral dermal inhalation: vapour inhalation: dust/ mist

### Remarks

All the percentages given are percentages by weight unless stated otherwise. For full text of H-phrases: see SECTION 16.

## VireXbuster® Additive

Version number: 1.0

Date of compilation: 30.01.2024

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

##### General notes

Do not leave affected person unattended. Remove victim out of the danger area. In case of unconsciousness place person in the recovery position. Never give anything by mouth. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice.

##### Following inhalation

Provide fresh air. If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. In case of respiratory tract irritation, consult a physician.

##### Following skin contact

Wash with plenty of soap and water. Call a POISON CENTER/doctor.

##### Following eye contact

Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. Call a POISON CENTER/doctor.

##### Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting. Call a POISON CENTER/doctor.

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

Symptoms and effects are not known to date.

#### 4.3 Indication of any immediate medical attention and special treatment needed

For specialist advice physicians should contact the poison centre.

### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

##### Suitable extinguishing media

Water spray; Dry extinguishing powder; Carbon dioxide (CO<sub>2</sub>);  
Co-ordinate firefighting measures to the fire surroundings.

##### Unsuitable extinguishing media

Water jet.

#### 5.2 Special hazards arising from the substance or mixture

##### Hazardous combustion products

During fire hazardous fumes/smoke could be produced. Nitrogen oxides (NO<sub>x</sub>). Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).

#### 5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

##### Special protective equipment for firefighters

Self-contained breathing apparatus (EN 133). Standard protective clothing for firefighters.

## VireXbuster® Additive

Version number: 1.0

Date of compilation: 30.01.2024

### SECTION 6: Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety. Ventilate affected area.

For emergency responders

Wear breathing apparatus if exposed to vapours/dust/spray/gases. Use personal protective equipment as required.

#### 6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it. If substance has entered a water course or sewer, inform the responsible authority.

#### 6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains.

Advice on how to clean up a spill

Absorb with liquid-binding material (sand, diatomite, diatomaceous earth, acid binder, universal binder, sawdust).

Appropriate containment techniques

Use of adsorbent materials.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

#### 6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

### SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling

Recommendations

- measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Use only in well-ventilated areas.

- measures to protect the environment

Avoid release to the environment. Do not empty into drains; dispose of this material and its container at hazardous or special waste collection point.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

#### 7.2 Conditions for safe storage, including any incompatibilities

Managing of associated risks

- flammability hazards

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

- incompatible substances or mixtures

Keep away from alkalis, oxidising substances, acids.

## VireXbuster® Additive

Version number: 1.0

Date of compilation: 30.01.2024

### Control of effects

Protect against external exposure, such as

High temperatures. UV-radiation/sunlight. Frost.

### Consideration of other advice

Store in a well-ventilated place. Keep container tightly closed.

- specific designs for storage rooms or vessels

- storage temperature

Recommended storage temperature: 5 – 25 °C

- maximum storage period

12 ms

- packaging compatibilities

Only packagings which are approved (e.g. acc. to ADR) may be used.

### 7.3 Specific end use(s)

There is no additional information.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### National limit values

Occupational exposure limit values (Workplace Exposure Limits)									
Country	Name of agent	CAS No	Identifier	TWA [ppm]	TWA [mg/m <sup>3</sup> ]	STEL [ppm]	STEL [mg/m <sup>3</sup> ]	Notation	Source
DE	2,2'-oxydiethanol	111-46-6	AGW	10	44	40	176	va, Y	TRGS 900
DE	diethylene glycol	111-46-6	MAK	10	44	40	176	va	DFG
DE	2-octyl-2H-isothiazol-3-one	26530-20-1	AGW		0,05		0,1	i, H, Y	TRGS 900

#### Notation

H absorbed through the skin

i inhalable fraction

STEL short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)

TWA time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)

va as vapours and aerosols

Y a risk of developmental toxicity does not need to be expected if the occupational exposure limit value and the biological limit value (BGW) are adhered to

#### Relevant DNELs/DMELs/PNECs and other threshold levels

Relevant DNELs of components of the mixture						
Name of substance	CAS No	End-point	Threshold level	Protection goal, route of exposure	Used in	Exposure time
diethylene glycol	111-46-6	DNEL	44 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	chronic - systemic effects
diethylene glycol	111-46-6	DNEL	60 mg/m <sup>3</sup>	human, inhalatory	worker (industry)	chronic - local effects
diethylene glycol	111-46-6	DNEL	43 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects

## VireXbuster® Additive

Version number: 1.0

Date of compilation: 30.01.2024

Relevant DNELs of components of the mixture						
Name of substance	CAS No	End-point	Threshold level	Protection goal, route of exposure	Used in	Exposure time
diethylene glycol	111-46-6	DNEL	12 mg/m <sup>3</sup>	human, inhalatory	consumer (private households)	chronic - systemic effects
diethylene glycol	111-46-6	DNEL	12 mg/m <sup>3</sup>	human, inhalatory	consumer (private households)	chronic - local effects
diethylene glycol	111-46-6	DNEL	21 mg/kg bw/day	human, dermal	consumer (private households)	chronic - systemic effects

Relevant PNECs of components						
Name of substance	CAS No	End-point	Threshold level	Organism	Environmental compartment	Exposure time
diethylene glycol	111-46-6	PNEC	10 mg/l	aquatic organisms	water	intermittent release
diethylene glycol	111-46-6	PNEC	10 mg/l	aquatic organisms	freshwater	short-term (single instance)
diethylene glycol	111-46-6	PNEC	1 mg/l	aquatic organisms	marine water	short-term (single instance)
diethylene glycol	111-46-6	PNEC	199,5 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
diethylene glycol	111-46-6	PNEC	20,9 mg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
diethylene glycol	111-46-6	PNEC	2,09 mg/kg	aquatic organisms	marine sediment	short-term (single instance)
diethylene glycol	111-46-6	PNEC	1,53 mg/kg	terrestrial organisms	soil	short-term (single instance)
2-octyl-2H-isothiazol-3-one	26530-20-1	PNEC	2,2 µg/l	aquatic organisms	freshwater	short-term (single instance)
2-octyl-2H-isothiazol-3-one	26530-20-1	PNEC	0,22 µg/l	aquatic organisms	marine water	short-term (single instance)
2-octyl-2H-isothiazol-3-one	26530-20-1	PNEC	47,5 µg/kg	aquatic organisms	freshwater sediment	short-term (single instance)
2-octyl-2H-isothiazol-3-one	26530-20-1	PNEC	4,75 µg/kg	aquatic organisms	marine sediment	short-term (single instance)
2-octyl-2H-isothiazol-3-one	26530-20-1	PNEC	8,2 µg/kg	terrestrial organisms	soil	short-term (single instance)

## 8.2 Exposure controls

### Appropriate engineering controls

General ventilation. Provide eyewash stations and safety showers at the workplace.

### Individual protection measures (personal protective equipment)

#### Eye/face protection



Use safety goggle with side protection (EN 166).

## VireXbuster® Additive

Version number: 1.0

Date of compilation: 30.01.2024

### Skin protection



Protective clothing (EN 340 & EN ISO 13688).

### Hand protection



Wear suitable gloves. Check leak-tightness/impermeability prior to use. 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. Chemical protection gloves are suitable, which are tested according to EN 374. **ATTENTION:** Wearing moisture-proof gloves (occlusion) for longer than 4 hours is defined as a risk in Germany. The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

#### - type of material

Nitrile rubber

#### - material thickness

Use gloves with a minimum material thickness:  $\geq 0,38$  mm.

#### - breakthrough time of the glove material

Use gloves with a minimum breakthrough time of the glove material: >480 minutes (permeation: level 6).

#### - other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

### Respiratory protection

In case of inadequate ventilation wear respiratory protection. Full face mask/half mask/quarter mask (EN 136/140).

### Environmental exposure controls

Take appropriate precautions to avoid uncontrolled release into the environment. Keep away from drains, surface and ground water.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical state	liquid
Colour	transparent - white
Odour	like solvents
Melting point/freezing point	-8,5 °C at 1.013 hPa
Boiling point or initial boiling point and boiling range	245 °C at 1.013 hPa
Flammability	this material is combustible, but will not ignite readily
Lower and upper explosion limit	LEL: <1,8 vol% / UEL: >12,2 vol%
Flash point	>140 °C
Auto-ignition temperature	225 °C (auto-ignition temperature (liquids and gases))
Decomposition temperature	no data available



## VireXbuster® Additive

Version number: 1.0

Date of compilation: 30.01.2024

pH (value)	4,2
Kinematic viscosity	not determined
Solubility	soluble in water & solvents

Partition coefficient n-octanol/water (log value)	this information is not available
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Vapour pressure	4,9 hPa at 25 °C calculated value, referring to a component of the mixture
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### Density and/or relative density

Density	1,1 g/cm <sup>3</sup> (DIN EN ISO 20811-1)
Relative vapour density	information on this property is not available

Particle characteristics	not relevant (liquid)
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## 9.2 Other information

Information with regard to physical hazard classes	hazard classes acc. to GHS (physical hazards): not relevant
Other safety characteristics	there is no additional information

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

This material is not reactive under normal ambient conditions.

### 10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

### 10.3 Possibility of hazardous reactions

No known hazardous reactions.

### 10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

### 10.5 Incompatible materials

Oxidisers.

### 10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

## VireXbuster® Additive

Version number: 1.0

Date of compilation: 30.01.2024

### SECTION 11: Toxicological information

#### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Test data are not available for the complete mixture.

##### Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

##### Classification according to GHS (1272/2008/EC, CLP)

##### Acute toxicity

Harmful if swallowed.

##### - acute toxicity estimate (ATE)

Exposure route	ATE
Oral	651 mg/kg

##### Acute toxicity estimate (ATE) of components

Name of substance	CAS No	Exposure route	ATE
diethylene glycol	111-46-6	oral	500 mg/kg
2-octyl-2H-isothiazol-3-one	26530-20-1	oral	125 mg/kg
2-octyl-2H-isothiazol-3-one	26530-20-1	dermal	311 mg/kg
2-octyl-2H-isothiazol-3-one	26530-20-1	inhalation: vapour	0,5 mg/l/4h
2-octyl-2H-isothiazol-3-one	26530-20-1	inhalation: dust/mist	0,27 mg/l/4h

##### Acute toxicity of components

Name of substance	CAS No	Exposure route	Endpoint	Value	Species
diethylene glycol	111-46-6	inhalation: dust/ mist	LC50	>4,6 mg/l/4h	rat
diethylene glycol	111-46-6	dermal	LD50	13.300 mg/kg	rabbit
2-octyl-2H-isothiazol-3-one	26530-20-1	oral	LD50	125 mg/kg	rat

##### Skin corrosion/irritation

Causes skin irritation.

##### Serious eye damage/eye irritation

Causes serious eye irritation.

##### Respiratory or skin sensitisation

May cause an allergic skin reaction.

##### Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

##### Carcinogenicity

Shall not be classified as carcinogenic.

## VireXbuster® Additive

Version number: 1.0

Date of compilation: 30.01.2024

### Reproductive toxicity

Shall not be classified as a reproductive toxicant.

### Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

### Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

### Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

### Other information

Corrosive to the respiratory tract.

## 11.2 Information on other hazards

### Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) in a concentration of  $\geq 0,1\%$ .

### Other information

There is no additional information.

## SECTION 12: Ecological information

### 12.1 Toxicity

Acc. to 1272/2008/EC: Very toxic to aquatic life with long lasting effects.

Aquatic toxicity (acute) of components of the mixture					
Name of substance	CAS No	Endpoint	Value	Species	Exposure time
diethylene glycol	111-46-6	EC50	>10.000 mg/l	aquatic invertebrates	24 h
diethylene glycol	111-46-6	LC50	75.222 mg/l	fish	96 h
diethylene glycol	111-46-6	NOEC	>100 mg/l	algae	72 h
2-octyl-2H-isothiazol-3-one	26530-20-1	LC50	0,122 mg/l	fish	96 h
2-octyl-2H-isothiazol-3-one	26530-20-1	ErC50	0,15 mg/l	algae	96 h

Aquatic toxicity (chronic) of components of the mixture					
Name of substance	CAS No	Endpoint	Value	Species	Exposure time
diethylene glycol	111-46-6	LC50	>1.500 mg/l	fish	28 d
diethylene glycol	111-46-6	EC50	33.911 mg/l	aquatic invertebrates	21 d
diethylene glycol	111-46-6	NOEC	>40 mg/l	fish	28 d
diethylene glycol	111-46-6	growth (EbCx) 20%	>1.995 mg/l	microorganisms	30 min

## VireXbuster® Additive

Version number: 1.0

Date of compilation: 30.01.2024

### 12.2 Persistence and degradability

Degradability of components					
Name of substance	CAS No	Process	Degradation rate	Time	Method
diethylene glycol	111-46-6	DOC removal	102 %	28 d	
diethylene glycol	111-46-6	carbon dioxide generation	71 %	28 d	
diethylene glycol	111-46-6	oxygen depletion	≥83 %	14 d	

### 12.3 Bioaccumulative potential

Bioaccumulative potential of components				
Name of substance	CAS No	BCF	Log KOW	BOD5/COD
diethylene glycol	111-46-6	100	-1,98	
2-octyl-2H-isothiazol-3-one	26530-20-1		2,61 (pH value: 7, 25 °C)	

### 12.4 Mobility in soil

Data are not available.

### 12.5 Results of PBT and vPvB assessment

Does not contain a PBT-/vPvB-substance in a concentration of ≥ 0,1%.

### 12.6 Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) in a concentration of ≥ 0,1%.

### 12.7 Other adverse effects

Data are not available.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment.

Waste treatment of containers/packagings

It is a dangerous waste; only packagings which are approved (e.g. acc. to ADR) may be used. Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

#### Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

## VireXbuster® Additive

Version number: 1.0

Date of compilation: 30.01.2024

### SECTION 14: Transport information

#### 14.1 UN number or ID number

ADR/RID/ADN	UN 3082
IMDG-Code	UN 3082
ICAO-TI	UN 3082

#### 14.2 UN proper shipping name

ADR/RID/ADN	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
IMDG-Code	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
ICAO-TI	Environmentally hazardous substance, liquid, n.o.s.
Technical name (Hazardous ingredients)	Silver phosphate glass, 2-octyl-2H-isothiazol-3-one

#### 14.3 Transport hazard class(es)

ADR/RID/ADN	9
IMDG-Code	9
ICAO-TI	9

#### 14.4 Packing group

ADR/RID/ADN	III
IMDG-Code	III
ICAO-TI	III

#### 14.5 Environmental hazards

	hazardous to the aquatic environment
Environmentally hazardous substance (aquatic environment)	Silver phosphate glass, 2-octyl-2H-isothiazol-3-one

#### 14.6 Special precautions for user



Provisions for dangerous goods (ADR) should be complied within the premises.

#### 14.7 Maritime transport in bulk according to IMO instruments

No data available.

### Additional information for each of the UN Model Regulations



#### **Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN) - additional information**

Classification code	M6
Danger label(s)	9, fish and tree
 	
Environmental hazards	yes (hazardous to the aquatic environment)
Special provisions (SP)	274, 335, 375, 601
Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 L
Transport category (TC)	3
Tunnel restriction code (TRC)	-

## VireXbuster® Additive

Version number: 1.0

Date of compilation: 30.01.2024

Hazard identification No	90
<b>International Maritime Dangerous Goods Code (IMDG) - additional information</b>	
Marine pollutant	yes (hazardous to the aquatic environment) (Silver phosphate glass)
Danger label(s)	9, fish and tree
	
Special provisions (SP)	274, 335, 969
Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 L
EmS	F-A, S-F
Stowage category	A
<b>International Civil Aviation Organization (ICAO-IATA/DGR) - additional information</b>	
Environmental hazards	yes (hazardous to the aquatic environment)
Danger label(s)	9, fish and tree
	
Special provisions (SP)	A97, A158, A197, A215
Excepted quantities (EQ)	E1
Limited quantities (LQ)	30 kg

### SECTION 15: Regulatory information

#### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

##### Relevant provisions of the European Union (EU)

##### Restrictions according to REACH, Annex XVII

Name	Name acc. to inventory	Restriction	No
VireXbuster® Additive	this product meets the criteria for classification in accordance with Regulation No 1272/2008/EC	R3	3
2-octyl-2H-isothiazol-3-one	substances in tattoo inks and permanent make-up	R75	75

##### Legend

R3

- Shall not be used in:
  - ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ash-trays,
  - tricks and jokes,
  - games for one or more participants, or any article intended to be used as such, even with ornamental aspects,
- Articles not complying with paragraph 1 shall not be placed on the market.
- Shall not be placed on the market if they contain a colouring agent, unless required for fiscal reasons, or perfume, or both, if they:
  - can be used as fuel in decorative oil lamps for supply to the general public, and
  - present an aspiration hazard and are labelled with H304.
- Decorative oil lamps for supply to the general public shall not be placed on the market unless they conform to the European Standard on Decorative oil lamps (EN 14059) adopted by the European Committee for Standardisation (CEN).
- Without prejudice to the implementation of other Union provisions relating to the classification, labelling and packaging of substances and mixtures, suppliers shall ensure, before the placing on the market, that the following requirements are met:
  - lamp oils, labelled with H304, intended for supply to the general public are visibly, legibly and indelibly marked as follows: "Keep lamps filled with this liquid out of the reach of children"; and, by 1 December 2010, "Just a sip of lamp oil – or even sucking the wick of lamps – may lead to life-threatening lung damage";
  - grill lighter fluids, labelled with H304, intended for supply to the general public are legibly and indelibly marked by 1 December 2010 as follows: "Just a sip of grill lighter fluid may lead to life threatening lung damage";
  - lamps oils and grill lighters, labelled with H304, intended for supply to the general public are packaged in black opaque containers not



# Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

amended by 2020/878/EU



## VireXbuster® Additive

Version number: 1.0

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### Legend

exceeding 1 litre by 1 December 2010.;

## VireXbuster® Additive

Version number: 1.0

Date of compilation: 30.01.2024

### Legend

R75

1. Shall not be placed on the market in mixtures for use for tattooing purposes, and mixtures containing any such substances shall not be used for tattooing purposes, after 4 January 2022 if the substance or substances in question is or are present in the following circumstances:

(a) in the case of a substance classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 as carcinogen category 1A, 1B or 2, or germ cell mutagen category 1A, 1B or 2, the substance is present in the mixture in a concentration equal to or greater than 0,00005 % by weight;

(b) in the case of a substance classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 as reproductive toxicant category 1A, 1B or 2, the substance is present in the mixture in a concentration equal to or greater than 0,001 % by weight;

(c) in the case of a substance classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 as skin sensitiser category 1, 1A or 1B, the substance is present in the mixture in a concentration equal to or greater than 0,001 % by weight;

(d) in the case of a substance classified in Part 3 of Annex VI to Regulation (EC) No 1272/2008 as skin corrosive category 1, 1A, 1B or 1C or skin irritant category 2, or as serious eye damage category 1 or eye irritant category 2, the substance is present in the mixture in a concentration equal to or greater than:

(i) 0,1 % by weight, if the substance is used solely as a pH regulator;

(ii) 0,01 % by weight, in all other cases;

(e) in the case of a substance listed in Annex II to Regulation (EC) No 1223/2009 (\*1), the substance is present in the mixture in a concentration equal to or greater than 0,00005 % by weight;

(f) in the case of a substance for which a condition of one or more of the following kinds is specified in column g (Product type, Body parts) of the table in Annex IV to Regulation (EC) No 1223/2009, the substance is present in the mixture in a concentration equal to or greater than 0,00005 % by weight:

(i) "Rinse-off products";

(ii) "Not to be used in products applied on mucous membranes";

(iii) "Not to be used in eye products";

(g) in the case of a substance for which a condition is specified in column h (Maximum concentration in ready for use preparation) or column i (Other) of the table in Annex IV to Regulation (EC) No 1223/2009, the substance is present in the mixture in a concentration, or in some other way, that does not accord with the condition specified in that column;

(h) in the case of a substance listed in Appendix 13 to this Annex, the substance is present in the mixture in a concentration equal to or greater than the concentration limit specified for that substance in that Appendix.

2. For the purposes of this entry use of a mixture "for tattooing purposes" means injection or introduction of the mixture into a person's skin, mucous membrane or eyeball, by any process or procedure (including procedures commonly referred to as permanent make-up, cosmetic tattooing, micro-blading and micro-pigmentation), with the aim of making a mark or design on his or her body.

3. If a substance not listed in Appendix 13 falls within more than one of points (a) to (g) of paragraph 1, the strictest concentration limit laid down in the points in question shall apply to that substance. If a substance listed in Appendix 13 also falls within one or more of points (a) to (g) of paragraph 1, the concentration limit laid down in point (h) of paragraph 1 shall apply to that substance.

4. By way of derogation, paragraph 1 shall not apply to the following substances until 4 January 2023:

(a) Pigment Blue 15:3 (CI 74160, EC No 205-685-1, CAS No 147-14-8);

(b) Pigment Green 7 (CI 74260, EC No 215-524-7, CAS No 1328-53-6).

5. If Part 3 of Annex VI to Regulation (EC) No 1272/2008 is amended after 4 January 2021 to classify or re-classify a substance such that the substance then becomes caught by point (a), (b), (c) or (d) of paragraph 1 of this entry, or such that it then falls within a different one of those points from the one within which it fell previously, and the date of application of that new or revised classification is after the date referred to in paragraph 1 or, as the case may be, paragraph 4 of this entry, that amendment shall, for the purposes of applying this entry to that substance, be treated as taking effect on the date of application of that new or revised classification.

6. If Annex II or Annex IV to Regulation (EC) No 1223/2009 is amended after 4 January 2021 to list or change the listing of a substance such that the substance then becomes caught by point (e), (f) or (g) of paragraph 1 of this entry, or such that it then falls within a different one of those points from the one within which it fell previously, and the amendment takes effect after the date referred to in paragraph 1 or, as the case may be, paragraph 4 of this entry, that amendment shall, for the purposes of applying this entry to that substance, be treated as taking effect from the date falling 18 months after entry into force of the act by which that amendment was made.

7. Suppliers placing a mixture on the market for use for tattooing purposes shall ensure that, after 4 January 2022, the mixture is marked with the following information:

(a) the statement "Mixture for use in tattoos or permanent make-up";

(b) a reference number to uniquely identify the batch;

(c) the list of ingredients in accordance with the nomenclature established in the glossary of common ingredient names pursuant to Article 33 of Regulation (EC) No 1223/2009, or in the absence of a common ingredient name, the IUPAC name. In the absence of a common ingredient name or IUPAC name, the CAS and EC number. Ingredients shall be listed in descending order by weight or volume of the ingredients at the time of formulation. "Ingredient" means any substance added during the process of formulation and present in the mixture for use for tattooing purposes. Impurities shall not be regarded as ingredients. If the name of a substance, used as ingredient within the meaning of this entry, is already required to be stated on the label in accordance with Regulation (EC) No 1272/2008, that ingredient does not need to be marked in accordance with this Regulation;

(d) the additional statement "pH regulator" for substances falling under point (d)(i) of paragraph 1;

(e) the statement "Contains nickel. Can cause allergic reactions." if the mixture contains nickel below the concentration limit specified in Appendix 13;

(f) the statement "Contains chromium (VI). Can cause allergic reactions." if the mixture contains chromium (VI) below the concentration limit specified in Appendix 13;

(g) safety instructions for use insofar as they are not already required to be stated on the label by Regulation (EC) No 1272/2008.

The information shall be clearly visible, easily legible and marked in a way that is indelible.

The information shall be written in the official language(s) of the Member State(s) where the mixture is placed on the market, unless the Member State(s) concerned provide(s) otherwise.

Where necessary because of the size of the package, the information listed in the first subparagraph, except for point (a), shall be included instead in the instructions for use.

Before using a mixture for tattooing purposes, the person using the mixture shall provide the person undergoing the procedure with the information marked on the package or included in the instructions for use pursuant to this paragraph.

8. Mixtures that do not contain the statement "Mixture for use in tattoos or permanent make-up" shall not be used for tattooing purposes.

9. This entry does not apply to substances that are gases at temperature of 20 °C and pressure of 101,3 kPa, or generate a vapour pressure of more than 300 kPa at temperature of 50 °C, with the exception of formaldehyde (CAS No 50-00-0, EC No 200-001-8).

10. This entry does not apply to the placing on the market of a mixture for use for tattooing purposes, or to the use of a mixture for tattoo-



## VireXbuster® Additive

Version number: 1.0

Date of compilation: 30.01.2024

### Legend

ing purposes, when placed on the market exclusively as a medical device or an accessory to a medical device, within the meaning of Regulation (EU) 2017/745, or when used exclusively as a medical device or an accessory to a medical device, within the same meaning. Where the placing on the market or use may not be exclusively as a medical device or an accessory to a medical device, the requirements of Regulation (EU) 2017/745 and of this Regulation shall apply cumulatively.

### List of substances subject to authorisation (REACH, Annex XIV) / SVHC - candidate list

None of the ingredients are listed.

### Seveso Directive

2012/18/EU (Seveso III)				
No	Dangerous substance/hazard categories	Qualifying quantity (tonnes) for the application of lower and upper-tier requirements		Notes
E1	environmental hazards (hazardous to the aquatic environment, cat. 1)	100	200	56)

### Notation

56) hazardous to the Aquatic Environment in category Acute 1 or Chronic 1

### Regulation concerning the establishment of a European Pollutant Release and Transfer Register (PRTR)

None of the ingredients are listed.

### Water Framework Directive (WFD)

List of pollutants (WFD)				
Name of substance	Name acc. to inventory	CAS No	Listed in	Remarks
2-octyl-2H-isothiazol-3-one	Substances and preparations, or the breakdown products of such, which have been proved to possess carcinogenic or mutagenic properties or properties which may affect steroidogenic, thyroid, reproduction or other endocrine-related functions in or via the aquatic environment		a)	
diethylene glycol	Substances and preparations, or the breakdown products of such, which have been proved to possess carcinogenic or mutagenic properties or properties which may affect steroidogenic, thyroid, reproduction or other endocrine-related functions in or via the aquatic environment		a)	

### Legend

a) Indicative list of the main pollutants

### Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 on the marketing and use of explosives precursors, amending Regulation (EC) No 1907/2006 and repealing Regulation (EU) No 98/2013

None of the ingredients are listed.

### Regulation on persistent organic pollutants (POP)

None of the ingredients are listed.

## VireXbuster® Additive

Version number: 1.0

Date of compilation: 30.01.2024

### Regulation 528/2012/EU concerning the making available on the market and use of biocidal products

National authorisation	
Country	Number
Germany	N-111372

### National regulations (Germany)

#### Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (Ordinance on facilities for handling substances hazardous to water) (AwSV)

Wassergefährdungsklasse, WGK 3 highly hazardous to water  
(water hazard class)

### Technical instructions on air quality control (Germany)

Number	Group of substances	Class	Conc.	Mass flow	Mass concentration	Notation
5.2.5	organic substances	class I	1 – < 5 wt%	0,1 kg/h	20 mg/m <sup>3</sup>	3)
5.2.5	organic substances		≥ 25 wt%	0,5 kg/h	50 mg/m <sup>3</sup>	3)

#### Notation

3) a total mass flow of 0.50 kg/h or a total mass concentration of 50 mg/m<sup>3</sup>, each of which to be indicated as total carbon, shall not be exceeded (except organic particulate matter)

### Storage of hazardous substances in non-stationary containers (TRGS 510) (Germany)

Storage class (LGK) 10 (combustible liquids)

## 15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out for this mixture by the supplier.

## SECTION 16: Other information

### Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
Acute Tox.	Acute toxicity
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord relatif au transport international des marchandises dangereuses par route (Agreement concerning the International Carriage of Dangerous Goods by Road)
ADR/RID/ADN	Agreements concerning the International Carriage of Dangerous Goods by Road/Rail/Inland Waterways (ADR/RID/ADN)
AGW	Workplace exposure limit
Aquatic Acute	Hazardous to the aquatic environment - acute hazard
Aquatic Chronic	Hazardous to the aquatic environment - chronic hazard
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BOD	Biochemical Oxygen Demand
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)

## VireXbuster® Additive

Version number: 1.0

Date of compilation: 30.01.2024

Abbr.	Descriptions of used abbreviations
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
COD	Chemical oxygen demand
DFG	Deutsche Forschungsgemeinschaft MAK-und BAT-Werte-Liste, Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe, Wiley-VCH, Weinheim
DGR	Dangerous Goods Regulations (see IATA/DGR)
DMEL	Derived Minimal Effect Level
DNEL	Derived No-Effect Level
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)
ED	Endocrine disruptor
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
EmS	Emergency Schedule
ErC50	= EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control
Eye Dam.	Seriously damaging to the eye
Eye Irrit.	Irritant to the eye
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
ICAO-TI	Technical instructions for the safe transport of dangerous goods by air
IMDG	International Maritime Dangerous Goods Code
IMDG-Code	International Maritime Dangerous Goods Code
index No	The Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval
LD50	Lethal Dose 50 %: the LD50 corresponds to the dose of a tested substance causing 50 % lethality during a specified time interval
LEL	Lower explosion limit (LEL)
LGK	Lagerklasse (storage class according to TRGS 510, Germany)
log KOW	n-Octanol/water
M-factor	Means a multiplying factor. It is applied to the concentration of a substance classified as hazardous to the aquatic environment acute category 1 or chronic category 1, and is used to derive by the summation method the classification of a mixture in which the substance is present
NLP	No-Longer Polymer
NOEC	No Observed Effect Concentration

## VireXbuster® Additive

Version number: 1.0

Date of compilation: 30.01.2024

Abbr.	Descriptions of used abbreviations
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
ppm	Parts per million
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
Skin Corr.	Corrosive to skin
Skin Irrit.	Irritant to skin
Skin Sens.	Skin sensitisation
STEL	Short-term exposure limit
SVHC	Substance of Very High Concern
TRGS	Technische Regeln für Gefahrstoffe (technical rules for hazardous substances, Germany)
TRGS 900	Arbeitsplatzgrenzwerte (TRGS 900)
TWA	Time-weighted average
UEL	Upper explosion limit (UEL)
vPvB	Very Persistent and very Bioaccumulative

### Key literature references and sources for data

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures. Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU.

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

### Classification procedure

Physical and chemical properties: The classification is based on tested mixture.

Health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

### List of relevant phrases (code and full text as stated in section 2 and 3)

Code	Text
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H400	Very toxic to aquatic life.

## VireXbuster® Additive

Version number: 1.0

Date of compilation: 30.01.2024

Code	Text
H410	Very toxic to aquatic life with long lasting effects.

### Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.