Wolf Group **H4658 Penosil Window & Door Silicone 312 300ml White UK White**

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier: H4658 Penosil Window & Door Silicone 312 300ml White UK White

Other means of identification:

Non-applicable

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

Relevant uses: Sealant

Uses advised against: All uses not specified in this section or in section 7.3

1.3 Details of the supplier of the safety data sheet:

Wolf Group OÜ
Suur-Paala 10
13619 Tallinn - Estonia
Phone: +372 605 9300
sds@wolf-group.com
www.wolf-group.com

1.4 Emergency telephone number: 999; 111; 844 892 0111

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture:

GB CLP Regulation:

Classification of this product has been carried out in accordance with GB CLP Regulation.

Aquatic Chronic 3: Hazardous to the aquatic environment, long-term hazard, Category 3, H412
Skin Sens. 1A: Sensitisation, skin, Category 1A, H317

2.2 Label elements:

GB CLP Regulation:

Warning

Hazard statements:

H317 - May cause an allergic skin reaction.
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.
P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
P273: Avoid release to the environment.
P280: Wear protective gloves/protective clothing/respiratory protection/eye protection/protective footwear.
P302+P352: IF ON SKIN: Wash with plenty of soap and water.
P333+P313: If skin irritation or rash occurs: Get medical advice/attention.
P501: Dispose of the contents and/or its container using the separate collection system in your municipality.

Supplementary information:

Contains Butan-2-one O,O´,O´´-(methylsilylidyne)trioxime, Butan-2-one O,O´,O´´-(vinylsilylidyne)trioxime, N-(3-(trimethoxysilyl) propyl)ethylenediamine.

Substances that contribute to the classification

octhilinone (ISO)

2.3 Other hazards:

Product fails to meet PBT/vPvB criteria

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance:

Non-applicable

3.2 Mixture:

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS (continued)

Chemical description: Mixture of polymers, dispersants and organic compounds

Components:

In accordance with Annex II of The REACH etc. (Amendment etc.) (EU Exit) Regulations 2020, the product contains:

Identification	Chemical name/Classification	Concentration
CAS: 22984-54-9	**Butan-2-one O,O´,O´´-(methylsilylidyne)trioxime** Eye Irrit. 2: H319; Skin Sens. 1B: H317; STOT RE 2: H373 - Warning	**1 - <2,5 %**
CAS: Non-applicable	**O,O´,O´´-(methylsilylidyne)trioxime 2-pentanone** Acute Tox. 4: H302; Eye Irrit. 2: H319 - Warning	**1 - <2,5 %**
CAS: 1760-24-3	**N-(3-(trimethoxysilyl)propyl)ethylenediamine** Eye Dam. 1: H318; Skin Sens. 1: H317 - Danger	**0,1 - <1 %**
CAS: 2224-33-1	**Butan-2-one O,O´,O´´-(vinylsilylidyne)trioxime** Eye Dam. 1: H318; Skin Sens. 1B: H317; STOT RE 2: H373 - Danger	**0,1 - <1 %**
CAS: 26530-20-1	**octhilinone (ISO)** Acute Tox. 2: H330; Acute Tox. 3: H301+H311; Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Eye Dam. 1: H318; Skin Corr. 1: H314; Skin Sens. 1A: H317; EUH071 - Danger	**0,01 - <0,1 %**

To obtain more information on the hazards of the substances consult sections 11, 12 and 16.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures:

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

By inhalation:

This product is not classified as hazardous through inhalation. However, in case of intoxication symptoms it is recommended to remove the person affected from the area of exposure, provide clean air and keep at rest. Request medical attention if symptoms persist.

By skin contact:

May cause an allergic skin reaction. In case of contact it is recommended to clean the affected area thoroughly with water and neutral soap. In case of changes on the skin (stinging, redness, rashes, blisters,…), seek medical advice with this Safety Data Sheet

By eye contact:

Rinse eyes thoroughly with water for at least 15 minutes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case removal could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS for the product.

By ingestion/aspiration:

Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. Keep the person affected at rest. Rinse out the mouth and throat, as they may have been affected during ingestion.

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

Acute and delayed effects are indicated in sections 2 and 11.

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

Non-applicable

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media:

Suitable extinguishing media:

Product is non-flammable under normal conditions of storage, handling and use. In the case of combustion as a result of improper handling, storage or use preferably use polyvalent powder extinguishers (ABC powder), in accordance with the Regulation on fire protection systems.

Unsuitable extinguishing media:

Non-applicable

5.2 Special hazards arising from the substance or mixture:

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SECTION 5: FIREFIGHTING MEASURES (continued)

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

5.3 Advice for firefighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and self-contained breathing apparatus (SCBA). Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...).

Additional provisions:

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

For non-emergency personnel:

Isolate leaks provided that there is no additional risk for the people performing this task. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Evacuate the area and keep out those who do not have protection.

For emergency responders:

Wear protective equipment. Keep unprotected persons away. See section 8.

6.2 Environmental precautions:

Avoid at all cost any type of spillage into an aqueous medium. Contain the product absorbed appropriately in hermetically sealed containers. Notify the relevant authority in case of exposure to the general public or the environment.

6.3 Methods and material for containment and cleaning up:

It is recommended:

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

6.4 Reference to other sections:

See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:

A.- General precautions for safe use

Comply with the current legislation concerning the prevention of industrial risks with regards manually handling weights. Maintain order, cleanliness and dispose of using safe methods (section 6).

B.- Technical recommendations for the prevention of fires and explosions

Product is non-flammable under normal conditions of storage, handling and use. It is recommended to transfer at slow speeds to avoid the generation of electrostatic charges that can affect flammable products. Consult section 10 for information on conditions and materials that should be avoided.

C.- Technical recommendations on general occupational hygiene

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

D.- Technical recommendations to prevent environmental risks

Due to the danger of this product for the environment it is recommended to use it within an area containing contamination control barriers in case of spillage, as well as having absorbent material in close proximity.

7.2 Conditions for safe storage, including any incompatibilities:

A.- Technical measures for storage

Store in a cool, dry, well-ventilated location

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

7.3 Specific end use(s):

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SECTION 7: HANDLING AND STORAGE (continued)

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

Substances whose occupational exposure limits have to be monitored in the workplace:

There are no applicable occupational exposure limits for the substances contained in the product

DNEL (Workers):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Butan-2-one O,O´,O´´-(methylsilylidyne)trioxime	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 22984-54-9	Dermal	Non-applicable	Non-applicable	0.145 mg/kg	Non-applicable
EC: 245-366-4	Inhalation	Non-applicable	Non-applicable	1.02 mg/m³	Non-applicable
O,O´,O´´-(methylsilylidyne)trioxime 2-pentanone	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: Non-applicable	Dermal	Non-applicable	Non-applicable	0.065 mg/kg	Non-applicable
EC: 484-460-1	Inhalation	Non-applicable	Non-applicable	0.229 mg/m³	Non-applicable
Butan-2-one O,O´,O´´-(vinylsilylidyne)trioxime	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 2224-33-1	Dermal	Non-applicable	Non-applicable	0.15 mg/kg	Non-applicable
EC: 218-747-8	Inhalation	Non-applicable	Non-applicable	1.06 mg/m³	Non-applicable

DNEL (General population):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Butan-2-one O,O´,O´´-(methylsilylidyne)trioxime	Oral	Non-applicable	Non-applicable	0.072 mg/kg	Non-applicable
CAS: 22984-54-9	Dermal	Non-applicable	Non-applicable	0.072 mg/kg	Non-applicable
EC: 245-366-4	Inhalation	Non-applicable	Non-applicable	0.25 mg/m³	Non-applicable
O,O´,O´´-(methylsilylidyne)trioxime 2-pentanone	Oral	Non-applicable	Non-applicable	0.033 mg/kg	Non-applicable
CAS: Non-applicable	Dermal	Non-applicable	Non-applicable	0.033 mg/kg	Non-applicable
EC: 484-460-1	Inhalation	Non-applicable	Non-applicable	0.057 mg/m³	Non-applicable
Butan-2-one O,O´,O´´-(vinylsilylidyne)trioxime	Oral	Non-applicable	Non-applicable	0.075 mg/kg	Non-applicable
CAS: 2224-33-1	Dermal	Non-applicable	Non-applicable	0.075 mg/kg	Non-applicable
EC: 218-747-8	Inhalation	Non-applicable	Non-applicable	0.26 mg/m³	Non-applicable

PNEC:

Identification				
Butan-2-one O,O´,O´´-(methylsilylidyne)trioxime	STP	3.9 mg/L	Fresh water	0.018 mg/L
CAS: 22984-54-9	Soil	65.63 mg/kg	Marine water	0.002 mg/L
EC: 245-366-4	Intermittent	Non-applicable	Sediment (Fresh water)	557.543 mg/kg
	Oral	0.00322 g/kg	Sediment (Marine water)	55.754 mg/kg
O,O´,O´´-(methylsilylidyne)trioxime 2-pentanone	STP	2.15 mg/L	Fresh water	0.1 mg/L
CAS: Non-applicable	Soil	0.044 mg/kg	Marine water	0.01 mg/L
EC: 484-460-1	Intermittent	Non-applicable	Sediment (Fresh water)	0.569 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0.057 mg/kg
N-(3-(trimethoxysilyl)propyl)ethylenediamine	STP	25 mg/L	Fresh water	0.062 mg/L
CAS: 1760-24-3	Soil	0.009 mg/kg	Marine water	0.006 mg/L
EC: 217-164-6	Intermittent	0.62 mg/L	Sediment (Fresh water)	0.22 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0.022 mg/kg
Butan-2-one O,O´,O´´-(vinylsilylidyne)trioxime	STP	4.06 mg/L	Fresh water	0.019 mg/L
CAS: 2224-33-1	Soil	133.8 mg/kg	Marine water	0.002 mg/L
EC: 218-747-8	Intermittent	Non-applicable	Sediment (Fresh water)	1136.562 mg/kg
	Oral	0.003333 g/kg	Sediment (Marine water)	113.656 mg/kg

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Identification				
octhilinone (ISO)	STP	Non-applicable	Fresh water	0.0022 mg/L
CAS: 26530-20-1	Soil	0.0082 mg/kg	Marine water	0.00022 mg/L
EC: 247-761-7	Intermittent	0.00122 mg/L	Sediment (Fresh water)	0.0475 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0.00475 mg/kg

8.2 Exposure controls:

A.- Individual protection measures, such as personal protective equipment

As a preventative measure it is recommended to use basic Personal Protective Equipment, with the corresponding <<UKCA marking>>. For more information on Personal Protective Equipment (storage, use, cleaning, maintenance, class of protection,…) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1. All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

B.- Respiratory protection

Pictogram	PPE	Remarks
 Mandatory respiratory tract protection	Filter mask for gases and vapours	Replace when there is a taste or smell of the contaminant inside the face mask. If the contaminant comes with warnings it is recommended to use isolation equipment.

C.- Specific protection for the hands

Pictogram	PPE	Remarks
 Mandatory hand protection	Protective gloves against minor risks	Replace gloves in case of any sign of damage. For prolonged periods of exposure to the product for professional users/industrials, we recommend using CE III gloves in line with standards EN 420:2004+A1:2010 and EN ISO 374-1:2016+ A1:2018

As the product is a mixture of several substances, the resistance of the glove material can not be calculated in advance with total reliability and has therefore to be checked prior to the application.

D.- Eye and face protection

Pictogram	PPE	Remarks
 Mandatory face protection	Panoramic glasses against splash/projections.	Clean daily and disinfect periodically according to the manufacturer´s instructions. Use if there is a risk of splashing.

E.- Body protection

Pictogram	PPE	Remarks
	Work clothing	Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 6529:2013, EN ISO 6530:2005, EN ISO 13688:2013, EN 464:1994.
	Anti-slip work shoes	Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 20345:2012 y EN 13832-1:2007

F.- Additional emergency measures

Emergency measure	Standards	Emergency measure	Standards
 Emergency shower	ANSI Z358-1 ISO 3864-1:2011, ISO 3864-4:2011	 Eyewash stations	DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011

Environmental exposure controls:

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

The Volatile Organic Compounds in Paints, Varnishes and Vehicle Refinishing Products Regulations 2012:

V.O.C. (Supply):	0.11 % weight
V.O.C. density at 20 ºC:	1.12 kg/m³ (1.12 g/L)

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

Appearance:

Physical state at 20 ºC:	Liquid
Appearance:	Paste
Colour:	White
Odour:	Not available
Odour threshold:	Non-applicable *

Volatility:

Boiling point at atmospheric pressure:	190 ºC
Vapour pressure at 20 ºC:	55 Pa
Vapour pressure at 50 ºC:	246.34 Pa (0.25 kPa)
Evaporation rate at 20 ºC:	Non-applicable *

Product description:

Density at 20 ºC:	1000 kg/m³
Relative density at 20 ºC:	1.185
Dynamic viscosity at 20 ºC:	Non-applicable *
Kinematic viscosity at 20 ºC:	Non-applicable *
Kinematic viscosity at 40 ºC:	>20.5 mm²/s
Concentration:	Non-applicable *
pH:	Non-applicable *
Vapour density at 20 ºC:	Non-applicable *
Partition coefficient n-octanol/water 20 ºC:	Non-applicable *
Solubility in water at 20 ºC:	Non-applicable *
Solubility properties:	Non-applicable *
Decomposition temperature:	Non-applicable *
Melting point/freezing point:	Non-applicable *

Flammability:

Flash Point:	Non Flammable (>60 ºC)
Flammability (solid, gas):	Non-applicable *
Autoignition temperature:	235 ºC
Lower flammability limit:	Non-applicable *
Upper flammability limit:	Non-applicable *

Particle characteristics:

Median equivalent diameter:	Non-applicable

9.2 Other information:

Information with regard to physical hazard classes:

Explosive properties:	Non-applicable *
Oxidising properties:	Non-applicable *
Corrosive to metals:	Non-applicable *

*Not relevant due to the nature of the product, not providing information property of its hazards.

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)

Heat of combustion:	Non-applicable *
Aerosols-total percentage (by mass) of flammable components:	Non-applicable *
Other safety characteristics:	
Surface tension at 20 ºC:	Non-applicable *
Refraction index:	Non-applicable *

*Not relevant due to the nature of the product, not providing information property of its hazards.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7.

10.2 Chemical stability:

Chemically stable under the indicated conditions of storage, handling and use.

10.3 Possibility of hazardous reactions:

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

10.4 Conditions to avoid:

Applicable for handling and storage at room temperature:

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

10.5 Incompatible materials:

Acids	Water	Oxidising materials	Combustible materials	Others
Avoid strong acids	Not applicable	Avoid direct impact	Not applicable	Avoid alkalis or strong bases

10.6 Hazardous decomposition products:

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO), carbon monoxide and other organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

The experimental information related to the toxicological properties of the product itself is not available

Dangerous health implications:

In case of exposure that is repetitive, prolonged or at concentrations higher than the recommended occupational exposure limits, adverse effects on health may result, depending on the means of exposure:

A- Ingestion (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for consumption. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met. However, it does contain substances classified as hazardous for this effect. For more information see section 3.

B- Inhalation (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met. However, it contains substances classified as hazardous for inhalation. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met. However, it does contain substances classified as hazardous for this effect. For more information see section 3.

C- Contact with the skin and the eyes (acute effect):

- Contact with the skin: Based on available data, the classification criteria are not met. However, it contains substances classified as hazardous for skin contact. For more information see section 3.
- Contact with the eyes: Based on available data, the classification criteria are not met. However, it does contain substances classified as hazardous for this effect. For more information see section 3.

D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):

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SECTION 11: TOXICOLOGICAL INFORMATION (continued)

- Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for the effects mentioned. For more information see section 3.
  IARC: Toluene (3)
- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.
- Reproductive toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

E- Sensitizing effects:

- Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous with sensitising effects. For more information see section 3.
- Skin: Prolonged contact with the skin can result in episodes of allergic contact dermatitis.

F- Specific target organ toxicity (STOT) - single exposure:

Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

G- Specific target organ toxicity (STOT)-repeated exposure:

- Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met. However, it does contain substances classified as hazardous for this effect. For more information see section 3.
- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

H- Aspiration hazard:

Based on available data, the classification criteria are not met, as it does not contain substances classified as hazardous for this effect. For more information see section 3.

Other information:

Non-applicable

Specific toxicology information on the substances:

Identification	Acute toxicity		Genus
Butan-2-one O,O´,O´´-(methylsilylidyne)trioxime	LD50 oral	2247 mg/kg	Rat
CAS: 22984-54-9	LD50 dermal	>5000 mg/kg	
	LC50 inhalation	>20 mg/L	
O,O´,O´´-(methylsilylidyne)trioxime 2-pentanone	LD50 oral	1234 mg/kg	Rat
CAS: Non-applicable	LD50 dermal	>5000 mg/kg	
	LC50 inhalation	>20 mg/L	
N-(3-(trimethoxysilyl)propyl)ethylenediamine	LD50 oral	>5000 mg/kg	Rat
CAS: 1760-24-3	LD50 dermal	>5000 mg/kg	
	LC50 inhalation	>20 mg/L	
Butan-2-one O,O´,O´´-(vinylsilylidyne)trioxime	LD50 oral	3519 mg/kg	Rat
CAS: 2224-33-1	LD50 dermal	>5000 mg/kg	
	LC50 inhalation	>20 mg/L	
octhilinone (ISO)	LD50 oral	125 mg/kg	
CAS: 26530-20-1	LD50 dermal	311 mg/kg	
	LC50 inhalation	>20 mg/L	

Acute Toxicity Estimate (ATE mix):

ATE mix		Ingredient(s) of unknown toxicity
Oral	66818.28 mg/kg (Calculation method)	0 %
Dermal	>5000 mg/kg (Calculation method)	Non-applicable
Inhalation	>20 mg/L (4 h) (Calculation method)	Non-applicable

SECTION 12: ECOLOGICAL INFORMATION

The experimental information related to the eco-toxicological properties of the product itself is not available

12.1 Toxicity:

Acute toxicity:

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SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification	Concentration		Species	Genus
N-(3-(trimethoxysilyl)propyl)ethylenediamine	LC50	597 mg/L (96 h)	Brachydanio rerio	Fish
CAS: 1760-24-3	EC50	81 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	8.8 mg/L (72 h)	Selenastrum capricornutum	Algae
Butan-2-one O,O´,O´´-(vinylsilylidyne)trioxime	LC50	55000 mg/L (96 h)	QSAR	Fish
CAS: 2224-33-1	EC50	17168 mg/L (48 h)	QSAR	Fish
	EC50	1429 mg/L (96 h)	QSAR	Fish
octhilinone (ISO)	LC50	>0.1 - 1 mg/L (96 h)		Fish
CAS: 26530-20-1	EC50	>0.1 - 1 mg/L (48 h)		Crustacean
	EC50	>0.1 - 1 mg/L (72 h)		Algae

Chronic toxicity:

Identification	Concentration		Species	Genus
Butan-2-one O,O´,O´´-(vinylsilylidyne)trioxime	NOEC	50 mg/L	Oryzias latipes	Fish
CAS: 2224-33-1	NOEC	100 mg/L	Daphnia magna	Crustacean

12.2 Persistence and degradability:

Substance-specific information:

Identification	Degradability		Biodegradability	
N-(3-(trimethoxysilyl)propyl)ethylenediamine	BOD5	Non-applicable	Concentration	Non-applicable
CAS: 1760-24-3	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	39 %
Butan-2-one O,O´,O´´-(vinylsilylidyne)trioxime	BOD5	Non-applicable	Concentration	20 mg/L
CAS: 2224-33-1	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	0 %

12.3 Bioaccumulative potential:

Substance-specific information:

Identification	Bioaccumulation potential	
Butan-2-one O,O´,O´´-(vinylsilylidyne)trioxime	BCF	1
CAS: 2224-33-1	Pow Log	0.6
	Potential	Low

12.4 Mobility in soil:

Not available

12.5 Results of PBT and vPvB assessment:

Product fails to meet PBT/vPvB criteria

12.6 Other adverse effects:

Not described

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

Code	Description	Waste class
08 04 09*	waste adhesives and sealants containing organic solvents or other hazardous substances	Dangerous

Type of waste:

HP14 Ecotoxic

Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations in accordance The Waste Regulations 2011, 2011 No. 988. As under 15 01 of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. Waste should not be disposed of to drains. See paragraph 6.2.

Regulations related to waste management:

In accordance with Annex II of UK REACH the provisions related to waste management are stated:

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SECTION 13: DISPOSAL CONSIDERATIONS (continued)

UK legislation: The Waste Regulations 2011.

SECTION 14: TRANSPORT INFORMATION

This product is not regulated for transport (ADR/RID,IMDG,IATA)

SECTION 15: REGULATORY INFORMATION

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

- Substances listed in UK candidate list of substances of very high concern (SVHCs): Non-applicable
- Substances listed in UK REACH Authorisation List (Annex 14): Non-applicable

The Control of Major Accident Hazards Regulations 2015:

Non-applicable

Restrictions to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII UK REACH, etc ….):

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 ashtrays,
—tricks and jokes,
—games for one or more participants, or any article intended to be used as such, even with ornamental aspects.

Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

Other legislation:

The REACH etc. (Amendment etc.) (EU Exit) Regulations 2020.
The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2020.
Control of Substances Hazardous to Health Regulations 2002 (as amended)
EH40/2005 Workplace exposure limits.

SECTION 16: OTHER INFORMATION

Legislation related to safety data sheets:

This safety data sheet has been designed in accordance with ANNEX II-The REACH etc. (Amendment etc.) (EU Exit) Regulations 2020.

Texts of the legislative phrases mentioned in section 2:

H317: May cause an allergic skin reaction.
H412: Harmful to aquatic life with long lasting effects.

Texts of the legislative phrases mentioned in section 3:

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

GB CLP Regulation:

Acute Tox. 2: H330 - Fatal if inhaled.
Acute Tox. 3: H301+H311 - Toxic if swallowed or in contact with skin.
Acute Tox. 4: H302 - Harmful if swallowed.
Aquatic Acute 1: H400 - Very toxic to aquatic life.
Aquatic Chronic 1: H410 - Very toxic to aquatic life with long lasting effects.
Eye Dam. 1: H318 - Causes serious eye damage.
Eye Irrit. 2: H319 - Causes serious eye irritation.
Skin Corr. 1: H314 - Causes severe skin burns and eye damage.
Skin Sens. 1: H317 - May cause an allergic skin reaction.
Skin Sens. 1A: H317 - May cause an allergic skin reaction.
Skin Sens. 1B: H317 - May cause an allergic skin reaction.
STOT RE 2: H373 - May cause damage to organs through prolonged or repeated exposure (Oral).

Classification procedure:

Skin Sens. 1A: Calculation method
Aquatic Chronic 3: Calculation method

- CONTINUED ON NEXT PAGE -

SECTION 16: OTHER INFORMATION (continued)

Advice related to training:

Training is recommended in order to prevent industrial risks for staff using this product and to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

Principal bibliographical sources:

http://echa.europa.eu
http://eur-lex.europa.eu

Abbreviations and acronyms:

ADR: European agreement concerning the international carriage of dangerous goods by road
IMDG: International maritime dangerous goods code
IATA: International Air Transport Association
ICAO: International Civil Aviation Organisation
COD: Chemical Oxygen Demand
BOD5: 5day biochemical oxygen demand
BCF: Bioconcentration factor
LD50: Lethal Dose 50
LC50: Lethal Concentration 50
EC50: Effective concentration 50
LogPOW: Octanolwater partition coefficient
Koc: Partition coefficient of organic carbon
UFI: unique formula identifier
IARC: International Agency for Research on Cancer

- END OF SAFETY DATA SHEET -