SILIKON WYSOKOTEMPERATUROWY BOLL - HIGH-TEMPERATURE SILICON

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

1.1 Product identifier: SILIKON WYSOKOTEMPERATUROWY BOLL - HIGH-TEMPERATURE SILICON

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

Relevant uses: A product for sealing engine parts, machines, devices exposed to high temperatures up to 350°C and contact with machine oils and greases, e.g. assembly of gearboxes, engines, drive axles, etc.

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:

Agencja Handlowa "BOLL" Wojciech Dalewski Spółka Jawna
ul. Chemiczna 3
65-713 Zielona Góra - Polska
Phone.: 68 451 99 99 - Fax: 68 451 99 00
technolog@boll.pl

1.4 Emergency telephone number:

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture:

CLP Regulation (EC) No 1272/2008:

The product is not classified as hazardous according to CLP Regulation (EC) No 1272/2008.

2.2 Label elements:

CLP Regulation (EC) No 1272/2008:

Hazard statements:

Non-applicable

Precautionary statements:

P102: Keep out of reach of children
P280: Wear protective gloves/protective clothing

Supplementary information:

EUH208: Contains Butan-2-one O,O´,O´´-(methylsilylidyne)trioxime, Butan-2-one O,O´,O´´-(vinylsilylidyne)trioxime, N-(3-(trimethoxysilyl)propyl)ethylenediamine. May produce an allergic reaction
EUH210: Safety data sheet available on request

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:

Chemical description: Polydimethylsiloxane + filler + auxiliaries + crosslinker

Components:

In accordance with Annex II of Regulation (EC) No 1907/2006 (point 3), the product contains:

Identification	Chemical name/Classification		Concentration
CAS: 7631-86-9 EC: 231-545-4 Index: Non-applicable REACH: 01-2119379499-16-XXXX	**Silicon dioxide (RCS < 1%)[1]**	Not classified	**<10 %**
	Regulation 1272/2008		
CAS: 22984-54-9 EC: 245-366-4 Index: Non-applicable REACH: 01-2119970560-38-XXXX	**Butan-2-one O,O´,O´´-(methylsilylidyne)trioxime[1]**	Self-classified	**<5 %**
	Regulation 1272/2008	Eye Irrit. 2: H319; Skin Sens. 1B: H317; STOT RE 2: H373 - Warning	

[1] Voluntarily-listed substance failing to meet any of the criteria set out in Regulation (EU) No. 2015/830

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS (continued)

Identification	Chemical name/Classification		Concentration
CAS: 2224-33-1 EC: 218-747-8 Index: Non-applicable REACH: 01-2119970537-27-XXXX	**Butan-2-one O,O´,O´´-(vinylsilylidyne)trioxime[1]** Self-classified		**<1,5 %**
	Regulation 1272/2008	Eye Dam. 1: H318; Skin Sens. 1B: H317; STOT RE 2: H373 - Danger	
CAS: 1760-24-3 EC: 217-164-6 Index: Non-applicable REACH: 01-2119970215-39-XXXX	**N-(3-(trimethoxysilyl)propyl)ethylenediamine[1]** Self-classified		**<0,5 %**
	Regulation 1272/2008	Eye Dam. 1: H318; Skin Sens. 1: H317 - Danger	
CAS: 919-30-2 EC: 213-048-4 Index: 612-108-00-0 REACH: 01-2119480479-24-XXXX	**3-aminopropyltriethoxysilane[1]** Self-classified		**<0,1 %**
	Regulation 1272/2008	Acute Tox. 4: H302; Skin Corr. 1B: H314; Skin Sens. 1: H317 - Danger	

[1] Voluntarily-listed substance failing to meet any of the criteria set out in Regulation (EU) No. 2015/830

To obtain more information on the hazards of the substances consult sections 8, 11, 12, 15 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 does not contain substances classified as hazardous for inhalation, however, in case of symptoms of intoxication remove the person affected from the exposure area and provide with fresh air. Seek medical attention if the symptoms get worse or persist.

By skin contact:

This product is not classified as hazardous when in contact with the skin. However, in case of skin contact it is recommended to remove contaminated clothes and shoes, rinse the skin or if necessary shower the affected person thoroughly with cold water and neutral soap. In case of serious reaction consult a doctor.

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:

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. IT IS NOT RECOMMENDED to use full jet water as an extinguishing agent.

5.2 Special hazards arising from the substance or mixture:

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,...) in accordance with Directive 89/654/EC.

Additional provisions:

- CONTINUED ON NEXT PAGE -

SECTION 5: FIREFIGHTING MEASURES (continued)

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:

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.

6.2 Environmental precautions:

This product is not classified as hazardous to the environment. Keep product away from drains, surface and ground water.

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.- Precautions for safe manipulation

Comply with the current legislation concerning the prevention of industrial risks. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

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 to prevent ergonomic and toxicological risks

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

D.- Technical recommendations to prevent environmental risks

It is recommended to have absorbent material available at close proximity to the product (See subsection 6.3)

7.2 Conditions for safe storage, including any incompatibilities:

A.- Technical measures for storage

Minimum Temp.:	5 ºC
Maximum Temp.:	20 ºC
Maximum time:	24 Months

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):

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

- CONTINUED ON NEXT PAGE -

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

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

DNEL (Workers):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Silicon dioxide (RCS < 1%)	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 7631-86-9	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
EC: 231-545-4	Inhalation	Non-applicable	Non-applicable	4 mg/m³	Non-applicable
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	Non-applicable	Non-applicable
EC: 245-366-4	Inhalation	Non-applicable	Non-applicable	0,988 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	Non-applicable	Non-applicable
EC: 218-747-8	Inhalation	Non-applicable	Non-applicable	1,03 mg/m³	Non-applicable
N-(3-(trimethoxysilyl)propyl)ethylenediamine	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 1760-24-3	Dermal	5 mg/kg	Non-applicable	5 mg/kg	Non-applicable
EC: 217-164-6	Inhalation	Non-applicable	Non-applicable	35,3 mg/m³	Non-applicable
3-aminopropyltriethoxysilane	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 919-30-2	Dermal	8,3 mg/kg	Non-applicable	8,3 mg/kg	Non-applicable
EC: 213-048-4	Inhalation	59 mg/m³	Non-applicable	59 mg/m³	Non-applicable

DNEL (General population):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
N-(3-(trimethoxysilyl)propyl)ethylenediamine	Oral	Non-applicable	Non-applicable	2,5 mg/kg	Non-applicable
CAS: 1760-24-3	Dermal	17 mg/kg	Non-applicable	2,5 mg/kg	Non-applicable
EC: 217-164-6	Inhalation	Non-applicable	Non-applicable	8,7 mg/m³	Non-applicable
3-aminopropyltriethoxysilane	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 919-30-2	Dermal	5 mg/kg	Non-applicable	5 mg/kg	Non-applicable
EC: 213-048-4	Inhalation	17,4 mg/m³	Non-applicable	17,4 mg/m³	Non-applicable

PNEC:

Identification				
Butan-2-one O,O´,O´´-(methylsilylidyne)trioxime	STP	10 mg/L	Fresh water	0,26 mg/L
CAS: 22984-54-9	Soil	0,05 mg/kg	Marine water	0,026 mg/L
EC: 245-366-4	Intermittent	0,12 mg/L	Sediment (Fresh water)	1,02 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,102 mg/kg
Butan-2-one O,O´,O´´-(vinylsilylidyne)trioxime	STP	10 mg/L	Fresh water	0,26 mg/L
CAS: 2224-33-1	Soil	0,05 mg/kg	Marine water	0,026 mg/L
EC: 218-747-8	Intermittent	0,12 mg/L	Sediment (Fresh water)	1,02 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,102 mg/kg
N-(3-(trimethoxysilyl)propyl)ethylenediamine	STP	25 mg/L	Fresh water	0,062 mg/L
CAS: 1760-24-3	Soil	0,0085 mg/kg	Marine water	0,0062 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
3-aminopropyltriethoxysilane	STP	13 mg/L	Fresh water	0,33 mg/L
CAS: 919-30-2	Soil	0,05 mg/kg	Marine water	0,033 mg/L
EC: 213-048-4	Intermittent	3,3 mg/L	Sediment (Fresh water)	1,2 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,12 mg/kg

8.2 Exposure controls:

A.- General security and hygiene measures in the work place

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

As a preventative measure it is recommended to use basic Personal Protective Equipment, with the corresponding <<CE marking>> in accordance with Directive 89/686/EC. 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

The use of protection equipment will be necessary if a mist forms or if the occupational exposure limits are exceeded.

C.- Specific protection for the hands

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory hand protection	Protective gloves against minor risks	CE CAT I		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 and EN 374.

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

D.- Ocular and facial protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory face protection	Panoramic glasses against splash/projections.	CE CAT II	EN 166:2001 EN ISO 4007:2018	Clean daily and disinfect periodically according to the manufacturer´s instructions. Use if there is a risk of splashing.

E.- Body protection

Pictogram	PPE	Labelling	CEN Standard	Remarks
	Work clothing	CE CAT I		Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professionalindustrial 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	CE CAT II	EN ISO 20347:2012	Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professionalindustrial 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

Volatile organic compounds:

With regard to Directive 2010/75/EU, this product has the following characteristics:

V.O.C. (Supply):	0 % weight
V.O.C. density at 20 ºC:	0 kg/m³ (0 g/L)
Average carbon number:	Non-applicable
Average molecular weight:	Non-applicable

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

For complete information see the product datasheet.

Appearance:

Physical state at 20 ºC:	Liquid
Appearance:	Fluid
Colour:	According to the markings on the package
Odour:	Characteristic
Odour threshold:	Non-applicable *

Volatility:

Boiling point at atmospheric pressure:	Non-applicable *
Vapour pressure at 20 ºC:	7,241E-1 Pa
Vapour pressure at 50 ºC:	7,27 Pa (0,01 kPa)
Evaporation rate at 20 ºC:	Non-applicable *

Product description:

Density at 20 ºC:	1120 kg/m³
Relative density at 20 ºC:	1,12
Dynamic viscosity at 20 ºC:	Non-applicable *
Kinematic viscosity at 20 ºC:	Non-applicable *
Kinematic viscosity at 40 ºC:	Non-applicable *
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:	Insoluble in water
Decomposition temperature:	Non-applicable *
Melting point/freezing point:	Non-applicable *
Explosive properties:	Non-applicable *
Oxidising properties:	Non-applicable *

Flammability:

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

Explosive:

Lower explosive limit:	Non-applicable *
Upper explosive limit:	Non-applicable *

9.2 Other information:

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

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SECTION 10: STABILITY AND REACTIVITY (continued)

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 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	Precaution	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 (CO2), 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 dangerous 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, as it does not contain substances classified as dangerous 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 dangerous 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 dangerous 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 dangerous for this effect. For more information see section 3.

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

- Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for the effects mentioned. For more information see section 3.
  IARC: Silicon dioxide (RCS < 1%) (3)
- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous 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 dangerous for this effect. For more information see section 3.

E- Sensitizing effects:

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SECTION 11: TOXICOLOGICAL INFORMATION (continued)

- Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous with sensitising effects. For more information see section 3.
- Cutaneous: Based on available data, the classification criteria are not met. However, it contains substances classified as dangerous with sensitising effects. For more information see section 3.

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 dangerous 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 dangerous 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 dangerous 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 dangerous 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	>2000 mg/kg	
EC: 245-366-4	LC50 inhalation	>20 mg/L (4 h)	
Butan-2-one O,O´,O´´-(vinylsilylidyne)trioxime	LD50 oral	3519 mg/kg	Rat
CAS: 2224-33-1	LD50 dermal	>2000 mg/kg	
EC: 218-747-8	LC50 inhalation	>20 mg/L (4 h)	
Silicon dioxide (RCS < 1%)	LD50 oral	>2000 mg/kg	
CAS: 7631-86-9	LD50 dermal	>2000 mg/kg	
EC: 231-545-4	LC50 inhalation	>5 mg/L (4 h)	
N-(3-(trimethoxysilyl)propyl)ethylenediamine	LD50 oral	2413 mg/kg	Rat
CAS: 1760-24-3	LD50 dermal	>2000 mg/kg	
EC: 217-164-6	LC50 inhalation	>20 mg/L	
3-aminopropyltriethoxysilane	LD50 oral	1491 mg/kg	Rat
CAS: 919-30-2	LD50 dermal	4000 mg/kg	Rabbit
EC: 213-048-4	LC50 inhalation	>20 mg/L	

SECTION 12: ECOLOGICAL INFORMATION

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

12.1 Toxicity:

Identification	Acute toxicity		Species	Genus
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
EC: 218-747-8	EC50	1429 mg/L (96 h)	QSAR	Fish
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
EC: 217-164-6	EC50	8.8 mg/L (72 h)	Selenastrum capricornutum	Algae
3-aminopropyltriethoxysilane	LC50	934 mg/L (96 h)	Danio rerio	Fish
CAS: 919-30-2	EC50	331 mg/L (48 h)	N/A	Crustacean
EC: 213-048-4	EC50	603 mg/L (72 h)	Desmodesmus subspicatus	Algae

12.2 Persistence and degradability:

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SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification	Degradability		Biodegradability	
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
EC: 218-747-8	BOD5/COD	Non-applicable	% Biodegradable	0 %
N-(3-(trimethoxysilyl)propyl)ethylenediamine	BOD5	Non-applicable	Concentration	Non-applicable
CAS: 1760-24-3	COD	Non-applicable	Period	28 days
EC: 217-164-6	BOD5/COD	Non-applicable	% Biodegradable	39 %
3-aminopropyltriethoxysilane	BOD5	Non-applicable	Concentration	Non-applicable
CAS: 919-30-2	COD	Non-applicable	Period	28 days
EC: 213-048-4	BOD5/COD	Non-applicable	% Biodegradable	67 %

12.3 Bioaccumulative potential:

Identification	Bioaccumulation potential	
Butan-2-one O,O´,O´´-(vinylsilylidyne)trioxime	BCF	1
CAS: 2224-33-1	Pow Log	0.6
EC: 218-747-8	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 (Regulation (EU) No 1357/2014)
07 02 17	waste containing silicones other than those mentioned in 07 02 16	Non dangerous

Type of waste (Regulation (EU) No 1357/2014):

Non-applicable

Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2014/955/EC) 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. We do not recommended disposal down the drain. See paragraph 6.2.

Regulations related to waste management:

In accordance with Annex II of Regulation (EC) No 1907/2006 (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

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:

Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH): Non-applicable

Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Non-applicable

- CONTINUED ON NEXT PAGE -

SECTION 15: REGULATORY INFORMATION (continued)

Regulation (EC) No 1005/2009, about substances that deplete the ozone layer: Non-applicable

Article 95, REGULATION (EU) No 528/2012: Non-applicable

REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable

Seveso III:

Non-applicable

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

Non-applicable

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 product could be affected by sectorial legislation

15.2 Chemical safety assessment:

The supplier has not carried out evaluation of chemical safety.

SECTION 16: OTHER INFORMATION

Legislation related to safety data sheets:

This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) No 1907/2006 (Regulation (EC) No 2015/830)

Modifications related to the previous Safety Data Sheet which concerns the ways of managing risks.:

Non-applicable

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

CLP Regulation (EC) No 1272/2008:

Acute Tox. 4: H302 - Harmful if swallowed
Eye Dam. 1: H318 - Causes serious eye damage
Eye Irrit. 2: H319 - Causes serious eye irritation
Skin Corr. 1B: H314 - Causes severe skin burns and eye damage
Skin Sens. 1: 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:

Non-applicable

Advice related to training:

Minimal 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:

- CONTINUED ON NEXT PAGE -

SECTION 16: OTHER INFORMATION (continued)

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: 5-day biochemical oxygen demand
BCF: Bioconcentration factor
LD50: Lethal Dose 50
LC50: Lethal Concentration 50
EC50: Effective concentration 50
Log-POW: Octanol-water partition coefficient
Koc: Partition coefficient of organic carbon

- END OF SAFETY DATA SHEET -