CH0231* - CHEMISIL SILICONE NEUTRAL ULTIMATE AY

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

1.1 Product identifier: CH0231* - CHEMISIL SILICONE NEUTRAL ULTIMATE AY

Other means of identification:

UFI: JR10-F0KP-Q00W-29HH

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:

Lusavouga
Avenida Europa, 375
3800-533 Aveiro - Cacia - Portugal
Phone: +351 234 915 010 - Fax: +351 234 915 015
lusavouga@lusavouga.pt
www.chemitool.com

1.4 Emergency telephone number: CIAV 800 250 250

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:

Non-applicable

Supplementary information:

EUH208: Contains 3-aminopropyltriethoxysilane, N-(2-aminoethyl)-N´-[3-(trimethoxysilyl)propyl]ethylenediamine, N-(3-(trimethoxysilyl)propyl)ethylenediamine, Trimethoxyvinylsilane. May produce an allergic reaction.
EUH210: Safety data sheet available on request.
EUH211: Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

UFI: JR10-F0KP-Q00W-29HH

2.3 Other hazards:

Product fails to meet PBT/vPvB criteria
Endocrine-disrupting properties: The product fails to meet the criteria.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance:

Non-applicable

3.2 Mixture:

Chemical description: Mixture of substances

Components:

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

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS (continued)

Identification	Chemical name/Classification		Concentration
CAS: 13463-67-7 EC: 236-675-5 Index: 022-006-00-2 REACH: 01-2119489379-17-XXXX	**Titanium dioxide (aerodynamic diameter ≤ 10 µm)** [1]	ATP ATP14	**<2,5 %**
	Regulation 1272/2008	Carc. 2: H351 - Warning 	
CAS: 2768-02-7 EC: 220-449-8 Index: 014-049-00-0 REACH: 01-2119513215-52-XXXX	**Trimethoxyvinylsilane** [1]	ATP ATP15	**0,5 - <1 %**
	Regulation 1272/2008	Flam. Liq. 3: H226; Skin Sens. 1B: H317 - Warning 	
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 - <1 %**
	Regulation 1272/2008	Eye Dam. 1: H318; Skin Sens. 1: H317 - Danger 	
CAS: 35141-30-1 EC: 252-390-9 Index: Non-applicable REACH: 01-2120770264-55-XXXX	**N-(2-aminoethyl)-N´-[3-(trimethoxysilyl)propyl]ethylenediamine** [1]	Self-classified	**0,5 - <1 %**
	Regulation 1272/2008	Aquatic Chronic 2: H411; 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 - <0,5 %**
	Regulation 1272/2008	Acute Tox. 4: H302; Skin Corr. 1B: H314; Skin Sens. 1: H317 - Danger 	

[1] Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2020/878

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 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:

Suitable extinguishing media:

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SECTION 5: FIREFIGHTING MEASURES (continued)

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

Unsuitable extinguishing media:

IT IS RECOMMENDED NOT 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:

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. Evacuate the area and keep out those without protection. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Above all prevent the formation of any vapour-air flammable mixtures, through either ventilation or the use of an inert medium. Remove any source of ignition. Eliminate electrostatic charges by interconnecting all the conductive surfaces on which static electricity could form, and also ensuring that all surfaces are connected to the ground.

For emergency responders:

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

6.2 Environmental precautions:

Avoid spillage into the aquatic environment as it contains substances potentially dangerous for this. Contain the product absorbed in hermetically sealed containers. In the case of serious spillage into the aquatic environment notify the relevant authority.

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

Avoid the evaporation of the product as it contains flammable substances, which could form flammable vapour/air mixtures in the presence of sources of ignition. Control sources of ignition (mobile phones, sparks,...) and transfer at slow speeds to avoid the creation of electrostatic charges. Consult section 10 for 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.

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SECTION 7: HANDLING AND STORAGE (continued)

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.: 30 ºC

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 (European OEL, not country-specific legislation):
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
Trimethoxyvinylsilane	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 2768-02-7	Dermal	Non-applicable	Non-applicable	3,9 mg/kg	Non-applicable
EC: 220-449-8	Inhalation	Non-applicable	Non-applicable	27,6 mg/m³	Non-applicable
N-(2-aminoethyl)-N´-[3-(trimethoxysilyl)propyl] ethylenediamine	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 35141-30-1	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
EC: 252-390-9	Inhalation	Non-applicable	Non-applicable	16,45 mg/m³	Non-applicable
3-aminopropyltriethoxysilane	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
CAS: 919-30-2	Dermal	Non-applicable	Non-applicable	2 mg/kg	Non-applicable
EC: 213-048-4	Inhalation	Non-applicable	Non-applicable	14 mg/m³	Non-applicable

DNEL (General population):

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Trimethoxyvinylsilane	Oral	Non-applicable	Non-applicable	0,3 mg/kg	Non-applicable
CAS: 2768-02-7	Dermal	Non-applicable	Non-applicable	7,8 mg/kg	Non-applicable
EC: 220-449-8	Inhalation	Non-applicable	Non-applicable	18,9 mg/m³	Non-applicable
N-(2-aminoethyl)-N´-[3-(trimethoxysilyl)propyl] ethylenediamine	Oral	Non-applicable	Non-applicable	0,83 mg/kg	Non-applicable
CAS: 35141-30-1	Dermal	Non-applicable	Non-applicable	Non-applicable	Non-applicable
EC: 252-390-9	Inhalation	Non-applicable	Non-applicable	2,9 mg/m³	Non-applicable
3-aminopropyltriethoxysilane	Oral	Non-applicable	Non-applicable	1 mg/kg	Non-applicable
CAS: 919-30-2	Dermal	Non-applicable	Non-applicable	1 mg/kg	Non-applicable
EC: 213-048-4	Inhalation	Non-applicable	Non-applicable	3,5 mg/m³	Non-applicable

PNEC:

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

Identification				
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
N-(2-aminoethyl)-N´-[3-(trimethoxysilyl)propyl] ethylenediamine	STP	2,5 mg/L	Fresh water	0,0088 mg/L
CAS: 35141-30-1	Soil	0,00149 mg/kg	Marine water	0,00088 mg/L
EC: 252-390-9	Intermittent	0,088 mg/L	Sediment (Fresh water)	0,0333 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,00333 mg/kg
3-aminopropyltriethoxysilane	STP	1,3 mg/L	Fresh water	Non-applicable
CAS: 919-30-2	Soil	Non-applicable	Marine water	Non-applicable
EC: 213-048-4	Intermittent	Non-applicable	Sediment (Fresh water)	Non-applicable
	Oral	Non-applicable	Sediment (Marine water)	Non-applicable

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 <<CE marking>> in accordance with Regulation (EU) 2016/425. 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 420:2004+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	Labelling	CEN Standard	Remarks
 Mandatory face protection	Panoramic glasses against splash/projections.	CE CAT II	EN 166:2002 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 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	CE CAT II	EN ISO 20347:2012	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

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SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)

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

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:	Paste
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:	Non-applicable *
Vapour pressure at 50 ºC:	Non-applicable *
Evaporation rate at 20 ºC:	Non-applicable *

Product description:

Density at 20 ºC:	~1,2 kg/m³
Relative density at 20 ºC:	1,2
Dynamic viscosity at 20 ºC:	10000 cP
Kinematic viscosity at 20 ºC:	8333,33 mm²/s
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:	Insoluble in water
Decomposition temperature:	Non-applicable *
Melting point/freezing point:	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)

Flammability:

Flash Point:	>100 ºC (Does not maintain combustion)
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 *
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	Precaution	Precaution	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 hazard classes as defined in Regulation (EC) No 1272/2008:

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

Dangerous health implications:

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SECTION 11: TOXICOLOGICAL INFORMATION (continued)

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, as it does not contain 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):

- Carcinogenicity: Based on available data, the classification criteria are not met. However, it contains substances classified as dangerous with carcinogenic effects. For more information see section 3.
  IARC: Titanium dioxide (aerodynamic diameter ≤ 10 µm) (2B)
- 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: 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 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, as it does not 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:

CAS 13463-67-7 Titanium dioxide (aerodynamic diameter ≤ 10 µm): The classification as a carcinogen by inhalation applies only to mixtures in powder form containing 1 % or more of titanium dioxide which is in the form of or incorporated in particles with aerodynamic diameter ≤ 10 µm

Specific toxicology information on the substances:

Identification	Acute toxicity		Genus
Titanium dioxide (aerodynamic diameter ≤ 10 µm)	LD50 oral	10000 mg/kg	Rat
CAS: 13463-67-7	LD50 dermal	10000 mg/kg	Rabbit
EC: 236-675-5	LC50 inhalation	>5 mg/L	
Trimethoxyvinylsilane	LD50 oral	7236 mg/kg	Rat
CAS: 2768-02-7	LD50 dermal	3880 mg/kg	Rabbit
EC: 220-449-8	LC50 inhalation	>20 mg/L	

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SECTION 11: TOXICOLOGICAL INFORMATION (continued)

Identification	Acute toxicity		Genus
N-(3-(trimethoxysilyl)propyl)ethylenediamine	LD50 oral	>5000 mg/kg	Rat
CAS: 1760-24-3	LD50 dermal	>2000 mg/kg	
EC: 217-164-6	LC50 inhalation	>20 mg/L	
N-(2-aminoethyl)-N´-[3-(trimethoxysilyl)propyl]ethylenediamine	LD50 oral	7758 mg/kg	Rat
CAS: 35141-30-1	LD50 dermal	16640 mg/kg	Rat
EC: 252-390-9	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	

Acute Toxicity Estimate (ATE mix):

	ATE mix	Ingredient(s) of unknown toxicity
Oral	>2000 mg/kg (Calculation method)	Non-applicable
Dermal	>2000 mg/kg (Calculation method)	Non-applicable
Inhalation	>20 mg/L (4 h) (Calculation method)	Non-applicable

11.2 Information on other hazards:

Endocrine disrupting properties

Endocrine-disrupting properties: The product fails to meet the criteria.

Other information

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:

Identification		Concentration	Species	Genus
Trimethoxyvinylsilane	LC50	191 mg/L (96 h)	Oncorhynchus mykiss	Fish
CAS: 2768-02-7	EC50	167 mg/L (48 h)	Daphnia magna	Crustacean
EC: 220-449-8	EC50	957 mg/L (72 h)	N/A	Algae
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
N-(2-aminoethyl)-N´-[3-(trimethoxysilyl)propyl]ethylenediamine	LC50	>1 - 10 mg/L (96 h)		Fish
CAS: 35141-30-1	EC50	>1 - 10 mg/L (48 h)		Crustacean
EC: 252-390-9	EC50	>1 - 10 mg/L (72 h)		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

Chronic toxicity:

Identification		Concentration	Species	Genus
Trimethoxyvinylsilane	NOEC	Non-applicable		
CAS: 2768-02-7 EC: 220-449-8	NOEC	28,1 mg/L	Daphnia magna	Crustacean

12.2 Persistence and degradability:

Substance-specific information:

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SECTION 12: ECOLOGICAL INFORMATION (continued)

Identification	Degradability		Biodegradability	
Trimethoxyvinylsilane	BOD5	Non-applicable	Concentration	104 mg/L
CAS: 2768-02-7	COD	Non-applicable	Period	28 days
EC: 220-449-8	BOD5/COD	Non-applicable	% Biodegradable	51 %
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:

Not available

12.4 Mobility in soil:

Not available

12.5 Results of PBT and vPvB assessment:

Product fails to meet PBT/vPvB criteria

12.6 Endocrine disrupting properties:

Endocrine-disrupting properties: The product fails to meet the criteria.

12.7 Other adverse effects:

Not described

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

Code	Description	Waste class (Regulation (EU) No 1357/2014)
08 04 10	waste adhesives and sealants other than those mentioned in 08 04 09	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. Waste should not be disposed of to drains. 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

Transport of dangerous goods by land:

With regard to ADR 2021 and RID 2021:

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SECTION 14: TRANSPORT INFORMATION (continued)

14.1	**UN number or ID number:**	Non-applicable
14.2	**UN proper shipping name:**	Non-applicable
14.3	**Transport hazard class(es):**	Non-applicable
	Labels:	Non-applicable
14.4	**Packing group:**	Non-applicable
14.5	**Environmental hazards:**	No
14.6	**Special precautions for user**	
	Special regulations:	Non-applicable
	Tunnel restriction code:	Non-applicable
	Physico-Chemical properties:	see section 9
	Limited quantities:	Non-applicable
14.7	**Maritime transport in bulk according to IMO instruments:**	Non-applicable

Transport of dangerous goods by sea:

With regard to IMDG 40-20:

14.1	**UN number or ID number:**	Non-applicable
14.2	**UN proper shipping name:**	Non-applicable
14.3	**Transport hazard class(es):**	Non-applicable
	Labels:	Non-applicable
14.4	**Packing group:**	Non-applicable
14.5	**Marine pollutant:**	No
14.6	**Special precautions for user**	
	Special regulations:	Non-applicable
	EmS Codes:	
	Physico-Chemical properties:	see section 9
	Limited quantities:	Non-applicable
	Segregation group:	Non-applicable
14.7	**Maritime transport in bulk according to IMO instruments:**	Non-applicable

Transport of dangerous goods by air:

With regard to IATA/ICAO 2023:

14.1	**UN number or ID number:**	Non-applicable
14.2	**UN proper shipping name:**	Non-applicable
14.3	**Transport hazard class(es):**	Non-applicable
	Labels:	Non-applicable
14.4	**Packing group:**	Non-applicable
14.5	**Environmental hazards:**	No
14.6	**Special precautions for user**	
	Physico-Chemical properties:	see section 9
14.7	**Maritime transport in bulk according to IMO instruments:**	Non-applicable

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

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

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SECTION 15: REGULATORY INFORMATION (continued)

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:
The SDS shall be supplied in an official language of the country where the product is placed on the market. 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 (COMMISSION REGULATION (EU) 2020/878).

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.
Aquatic Chronic 2: H411 - Toxic to aquatic life with long lasting effects.
Carc. 2: H351 - Suspected of causing cancer (Inhalation).
Eye Dam. 1: H318 - Causes serious eye damage.
Flam. Liq. 3: H226 - Flammable liquid and vapour.
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.

Classification procedure:
Non-applicable

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

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- END OF SAFETY DATA SHEET -