

#### **HEALTH AND SAFETY DATA SHEET**

This SDS is an English translation of COMMISSION REGULATION (EU) 2020/878, without any country-specific legislation.

Date of compilation: 07/06/2017 Revised Date: 27/09/2023 Version: 6

#### 1. PRODUCT AND COMPANY IDENTIFICATION

	Product Code	Aquimax Hardener AQM190203		
1.1	Other means of identification	Non-applicable		
1.2	Relevant identified uses of the substance or mixture and uses advised against	Relevant uses: Coatings for Wood. For industrial use only Uses advised against: All uses not specified in this section or in section 7.3		
1.3	Name, Address, Telephone Number of the chemical manufacturer	Ultrimax Coatings Ltd Shaw Lane Industrial Estate, Ogden Road, Doncaster, DN2 4SE 01302 856666		
1.4	Emergency phone number	01302 856666		

#### 2. HAZARD(S) IDENTIFICATION

	Classification of the substance or mixture	Classification of this product has been carried out in accordance			
2.1	CLP Regulation (EC) No 1272/2008	with CLP Regulation(EC) No 1272/2008.  Acute Tox. 4: Acute inhalation toxicity, Category4, H332  Aquatic Chronic 3: Hazardous to the aquatic environment, longterm hazard, Category 3, H412  Eye Dam. 1: Serious eye damage, Category 1, H318  Skin Irrit. 2: Skin irritation, Category 2, H315  Skin Sens. 1: Sensitisation, skin, Category 1, H317  STOT SE 3: Respiratory tract toxicity, single exposure, Category 3, H335			
	Label elements	A A			
	CLP Regulation (EC) No 1272/2008				
	Hazard Statements	Harmful if inhaled. Harmful to aquatic life with long lasting effects. Causes serious eye damage. Causes skin irritation. May cause an allergic skin reaction. May cause respiratory irritation.			
2.2	Precautionary statements	Wear protective gloves/protective clothing/respiratory protection/eye protection/protective footwear. IF ON SKIN: Wash with plenty of water.  IF INHALED: Remove person to fresh air and keep comfortable for breathing.  IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Store in a well-ventilated place. Keep container tightly closed.  Dispose of contents/container in accordance with regulations on hazardous waste or packaging and packaging waste respectively.			

(1) Substance with a Union workplace exposure limit (2) Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2020/878





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	Supplementary information	Contains isocyanates. May produce an allergic reaction.	
		Hexamethylene diisocyanate, oligomers (<0.1 % O=C=N-R-	
	Substances that contribute to the classification	N=C=O); 3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl	
2.2		isocyanate, oligomers; Tridecyl alcohol, ethoxylated,	
		phosphated (6 mol EO); Cyclohexyldimethylamine	
	Additional Labelling	As from 24 August 2023 adequate training is required before	
	Additional Labelling	industrial or professional use.	
		Product does not meet PBT/vPvB criteria	
2.3	Other Hazards	Endocrine-disrupting properties: The product does not meet	
		the criteria.	

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1	Substances	Not applicable (N/A)						
	Mixtures	Polyicocyanata						
	Chemical description	Polyisocyanate						
i		In accordance with Annex II of Regulation (EC) No 1907/2006 (point 3), the product contains:						
		Identification	Chemical name/Classification		Concentration			
		CAS: 28182-81-2	Hexamethylen (<0.1 % O=C=N	e diisocyanate, oligomers N-R-N=C=O) <sup>(1)</sup>				
		EC: 931-274-8Index: Non-	Seif-classified	l =	25 - <50 %			
	Components	applicable REACH: 01-2119485796-17- XXXX	Regulation 1272/2008	Acute Tox. 4: H332; Skin Sens. 1: H317; STOT SE 3: H335 - Warning				
		CAS: 53880-05-0 EC: 500-125-5 Index: Non-applicable REACH: Non-applicable	3-Isocyanatomethyl-3,5,5- trimethylcyclohexyl isocyanate,oligomers <sup>(1)</sup> Self-classified		10 - <25 %			
3.2			Regulation 1272/2008	Skin Sens. 1: H317 - Warning				
		CAS: 9046-01-9 EC: Non-applicable Index: Non- applicable REACH: Non-applicable	Tridecyl alcohol, ethoxylated, phosphated (6 mol EO) <sup>(1)</sup> Self-classified		5 - <10 %			
			Regulation 1272/2008 Aquatic Chronic 2: H411; Eye Dam. 1: H318; Skin Irrit. 2: H315 - Danger					
		CAS: 98-94-2	Cyclohexyldimethylamine <sup>(1)</sup> Self- classified					
		EC: 98-94-2 EC: 202-715-5 Index: Non-applicable REACH: 01-2119533030-60- XXXX	Regulation 1272/2008	Acute Tox. 3: H301+H311+H331; Aquatic Chronic 3: H412; Flam. Liq. 3: H226; Skin Corr. 1B: H314 - Danger	1 - <2,5 %			

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(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.

3.2		Identification	Specific concentration limit
	Other information	3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate CAS: 4098-71-9 EC: 223-861-6	% (w/w) >=0,5: Resp. Sens. 1 - H334 % (w/w) >=0,5: Skin Sens. 1 - H317
		Hexamethylene-di-isocyanate CAS: 822-06-0 EC: 212-485-8	% (w/w) >=0,5: Resp. Sens. 1 - H334 % (w/w) >=0,5: Skin Sens. 1 - H317

Acute toxicity estimate for the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or as determined in accordance with Annex I to that Regulation:

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#### 3. COMPOSITION/INFORMATION ON INGREDIENTS CONTINUED

Identification		Acute Toxicity	Genus
	LD50 oral	Non-applicable	
Cyclohexyldimethylamine CAS: 98-94-2 EC: 202-715-5	LD50 dermal	Non-applicable	
	LC50 inhalation	3 mg/L (ATEi)	
	LD50 oral	Non-applicable	
Hexamethylenediisocyanate, oligomers (<0.1% O=C=N-R-N=C=O) CAS: 28182-81-2 EC: 931-274-8	LD50 dermal	Non-applicable	
	LC50 inhalation	11 mg/L (ATEi)	
	LD50 oral	Non-applicable	
3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate CAS: 4098-71-9	LD50 dermal	Non-applicable	
EC: 223-861-6	LC50 inhalation	3 mg/L (ATEi)	

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#### 4. FIRST-AID MEASURES

	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.  Remove the person affected from the area of exposure,
	By inhalation	provide with fresh air and keep at rest. In serious cases such as cardiorespiratory failure, artificial resuscitation techniques will be necessary(mouth to mouth resuscitation, cardiac massage, oxygen supply, etc.) requiring immediate medical assistance.
4.1	By skin contact	Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.
	By eye contact	Rinse eyes thoroughly with lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of 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 / effects, acute and delayed	Acute and delayed effects are indicated in sections 2 and 11
4.3	Indication of immediate medical attention and special treatment needed, if necessary	Not applicable (N/A)

#### 5. FIRE-FIGHTING MEASURES

	Extinguishing media	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	
	Suitable extinguishing media	of improper manipulation, storage or use preferably use	
5.1		polyvalent powder extinguishers (ABC powder),in	
		accordance with the Regulation on fire protection systems.	
	Uncuitable outinguishing media	IT IS RECOMMENDED NOT to use full jet water as an	
	Unsuitable extinguishing media	extinguishing agent.	
		As a result of combustion or thermal decomposition reactive	
5.2	Specific hazards arising from the chemical	sub-products are created that can become highly toxic and,	
		consequently, can present a serious health risk.	





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	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.
5.3	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.

#### 6. ACCIDENTAL RELEASE MEASURES

	Personal precautions, protective equipment and emergency	Isolate leaks provided that there is no additional risk for the		
	procedures:	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		
6.1	For non-emergency personnel	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		
	To emergency responders	away. See section 8.		
	Environmental precautions	Avoid at all cost any type of spillage into an aqueous		
6.2		medium. Contain the product absorbed appropriately in		
0.2		hermetically sealed containers. Notify the relevant authorit		
		in case of exposure to the general public or the environment.		
		It is recommended:		
		Absorb the spillage using sand or inert absorbent and move		
6.3	Methods and materials for containment and cleaning up	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.		



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#### 7. HANDLING AND STORAGE

			General Precautions for safe use
			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.
			Technical recommendations for the prevention of fires and
			explosions
			Avoid the evaporation of the product as it contains flammable
		В	substances, which could form flammable vapour/air mixtures in
7.1	Precautions for safe handing	٦	the presence of sources of ignition. Control sources of ignition
7.1	recountries for safe flatiging		(mobile phones, sparks,) and transfer at slow speeds to avoid
			the creation of electrostaticcharges. Consult section 10 for
			conditions and materials that should be avoided.
			Technical recommendations on general occupational hygiene
		C	Do not eat or drink during the process, washing hands
			afterwards with suitable cleaning products.
			Technical recommendations to prevent environmental risks
			Due to the danger of this product for the environment it is
		D	recommended to use it within an area containing
			contamination control barriers in case of spillage, as well as
			having absorbent material in close proximity.
			Technical measures for storage
	Conditions for safe storage, including any incompatibilities		Minimum Temp: 5°C
7.2			·
		_	General conditions for storage
		В	Avoid sources of heat, radiation, static electricity and contact
		<u> </u>	with food. For additional information see subsection 10.5
	6 (6 1 ()		except for the instructions already specified it is not necessary to
7.3	Specific end use(s)		provide any special recommendation regarding the uses of this
			product.



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	Control Parameters	workplace(European OEL, no	pecific legisla	e limits have to be monitored in the ecific legislation): osure limits for the substances contained in the			
		-			Short exposure		xposure
		Identification	Identification			Systemic	Local
		Hexamethylene	Oral	Non- applicable	Non- applicable	Non- applicable	Non- applicable
		diisocyanate, oligomers (<0.1 % O=C=N- R-N=C=O) CAS: 28182-81-2	Dermal	Non- applicable	Non- applicable	Non- applicable	Non- applicable
		EC: 931-274-8	Inhalation	Non- applicable	1mg/m³	Non- applicable	0,5mg/m³
	DNEL (Workers)	Cyclohexyldimethylamine CAS: 98-94-2 EC: 202-715-5	Oral	Non- applicable	Non- applicable	Non- applicable	Non- applicable
8.1			Dermal	Non- applicable	Non- applicable	0,6vmg/kg	Non- applicable
		20.202 /10 3	Inhalation	Non- applicable	8,3 mg/m³	0,53mg/m³	8,3 mg/m³
		3-isocyanatomethyl-3,5,5- trimethylcyclohexyl isocyanate CAS: 4098-71-9 EC: 223-861-6	Oral	Non- applicable	Non- applicable	Non- applicable	Non- applicable
			Dermal	Non- applicable	Non- applicable	Non- applicable	Non- applicable
			Inhalation	Non- applicable	0,045 mg/m³	Non- applicable	0,045 mg/m³
		Hexamethylene-di-	Oral	Non- applicable	Non- applicable	Non- applicable	Non- applicable
		isocyanate CAS: 822-06-0	Dermal	Non- applicable	Non- applicable	Non- applicable	Non- applicable
		EC: 212-485-8	Inhalation	Non- applicable	0,07 mg/m <sup>3</sup>	Non- applicable	0,035 mg/m <sup>3</sup>
	DNEL (General population):	Non-applicable					



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		Identification				
			STP	88 MG/L	Fresh Water	0,127 mg/L
		Hexamethylene diisocyanate, oligomers (<0.1 % O=C=N- R-N=C=0)	Soil	53183 mg/kg	Marine water	0,013 mg/L
		CAS: 28182-81-2 EC: 931-274-8	Intermittent	1,27 mg/kg	Sediment (Fresh water)	266701 mg/kg
			Oral	Non-applicable	Sediment (Marine water)	26670 mg/kg
			STP	20,6 mg/L	Fresh water	0,002 mg/L
		Soil	0,003 mg/kg	Marine water	0 mg/L	
			Intermittent	0,02 mg/L	Sediment (Fresh water)	0,021 mg/L
8.1			Oral	Non-applicable	Sediment (Marine water)	0,002 mg/kg
			STP	10,6 mg/L	Fresh Water	0,027 mg/L
		3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	Soil	19,8 mg/kg	Marine water	0,013 mg/L 266701 mg/kg 26670 mg/kg 0,002 mg/L 0 mg/L 0,021 mg/L 0,002 mg/kg
		CAS: 4098-71-9 EC: 223-861-6	Intermittent	0,27 mg/L	Sediment (Fresh water)	
			Oral	No-applicable	Sediment (Marine water)	1,46 mg/kg
			STP	8,42 mg/L	Fresh water	Non-applicable
		Hexamethylene-di-isocyanate CAS: 822-06-0 EC: 212-485-8	Soil	Non-applicable	Marine water	Non-applicable
			Intermittent	Non-applicable	Sediment (Fresh water)	Non-applicable
			Oral	Non-applicable	Sediment (Marine water)	Non-applicable



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0. L	AI OJUNE COIVII	NOL3 / PENSONAL PRO	OTECTION				Version: 6
		A Individual protection measures, such as personal protective equipment	As a preventative measure it is recommended to use basic Personal Prote Equipment, with the corresponding < <ce marking="">&gt; in accordance w 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 mo information see subsection 7.1. All information contained here in is a recommendation which needs some specification from the labour risprevention services as it is not known whether the company has addition measures at its disposal.</ce>				
					T		
		B Respiratory protection	Pictogram  Mandatory respiratory tract protection	Filter mask fo vapours and p	r gases,	EN 405:2002+A1: 2010	rking>> in accordance with tion on Personal Protective ance, class of protection,) the manufacturer. For more tion contained here in is a cation from the labour risk the company has additional isal.  Remarks  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  Remarks  EN ISO 21420:2020.
			Pictogram	PPE	E Lab	elling CEN Standard	Remarks
8.2	C Specific protection for the						
			Pictogram	PPE	Labelling	CEN Standard	Remarks
8.2 Exposure controls  hands  Mandatory hand pro  Pictogram  D  Eye and face protection	Mandatory face protection	Panoramic glasses against splash/proj ections	CATII	EN 149:2001+A1:2009 EN 405:2022+A1:2010 EN ISO 136:1998	breathing is observed and/or a smell or taste of the		
			Pictogram	PPE	Labelling	CEN Standard	Remarks
		E Rody protection	Mandatory complete bod protection	Work	CATI		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
		Body protection	Mandatory foot protection	n	CATII	EN ISO 20347:2012	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 20345:2012y EN



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		Emergency measure	Standards	Emergency measure	Standards
	Additional emergency measures	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
8.2	Environmental Exposure Controls  In accordance with the community legislation for the protection of the environmental spillage of both the product and its can additional information see subsection 7.1.D				
	Volatile Organic Compounds	With regard to Dir V.O.C. (Supply): 1 % wei V.O.C. density at 25 °C: 1 Average carbon numbe Average molecular weig	11,08 kg/m³ (11,08g/L) r: 8	product has the followir	g characteristics:



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#### 9. PHYSICAL AND CHEMICAL PROPERTIES

	Information on basic physical and chemical properties	For complete information s	see the product datasheet	
		Physical state at 20°C	Liquid	
		Physical state at 20°C Appearance Colour Odour Threshold Boiling point at atmospheric pressure Vapour pressure at 25°C Vapour pressure at 50°C Evaporation rate at 25°C Relative density at 25°C Relative density at 25°C Kinematic viscosity at 25°C Solubility in water at 25°C Solubility in water at 25°C Solubility in water at 25°C Solubility properties Decomposition temperature Melting point/freezing point Flash point Flammability (solid, gas) Autoignition temperature Lower flammability limit Upper flammability limit Upper flammability limit Upper flammability limit Upper flammability limit Heat of combustion Aerosols-total percentage (by mass) of flammable components Surface tension at 25°C Surface tension at 25°C	N/A	
	Appearance		N/A	
			N/A	
		Odour Threshold	N/A*	
	Appearance  Appearance  Colour Odour Threst Boiling point at atr pressure Evaporation rate Density at 2 Relative density Dynamic viscosit Kinematic viscosit Kinematic viscosit Kinematic viscosit Kinematic viscosit Kinematic viscosit Vapour density a Partition coeffic octanol/water Solubility prop Decomposition ter Melting point/free: Flammability  Particle characteristics  Autoignition tem Lower flammabil Upper flammabil Upper flammabil Upper flammabil Corrosive to m Heat of combu Aerosols-total percomass) of flammacomponen Corponent  Other safety characteristics  Surface tension	I I	195°C	
	Volatility	Appearance Appearance Appearance Appearance Appearance Appearance Colour Odour Threshold Boiling point at atmospheric pressure at 25°C Vapour pressure at 25°C Vapour pressure at 50°C Evaporation rate at 25°C Dynamic viscosity at 25°C Relative density at 25°C Dynamic viscosity at 25°C Kinematic viscosity at 25°C Kinematic viscosity at 40°C Concentration PH Vapour density at 25 °C Partition coefficient n-octanol/water 25 °C Solubility in water at 25 °C Solubility properties Decomposition temperature Melting point/freezing point Flammability Flammability Autoignition temperature Lower flammability limit Upper flammability limit Heat of combustion Aerosols-total percentage (by mass) of flammable components Other safety characteristics Other safety characteristics Surface tension at 25°C	165 Pa	
	·	Vapour pressure at 50°C	822,58 Pa (0.82 kPa)	
		Evaporation rate at 25°C	N/A*	
		Density at 25°C	1108,1 kg/m³	
		Relative density at 25°C	1,108	
		Dynamic viscosity at 25°C	200 cP	
		Kinematic viscosity at 25°C	N/A*	
9.1		Kinematic viscosity at 40°C	N/A*	
		Concentration	N/A*	
	Product description	рН	N/A*	
	Floduct description	Vapour density at 25 ℃	N/A*	
			N/A*	
-		<del>                                     </del>	Non flammable (>60°C)	
			N/A*	
	Flammability		430°C	
			N/A*	
			N/A*	
<b> </b>	Particle characteristics	1 1	N/A	
$\vdash$		· · · · · · · · · · · · · · · · · · ·	N/A*	
		· · · · ·	N/A*	
	OH 16 H		N/A*	
			N/A*	
9.2	illioitilation with regard to physical nazard classes			
			N/A	
		components		
[	Other safety characteristics	Surface tension at 25°C	N/A*	
	Other surety characteristics	Refraction index	N/A*	

\*Not relevant due to the nature of the product, not providing information of it's hazards





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#### 10. STABILITY AND REACTIVITY

Information on basic physical and chemical properties:

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

10.1	Reactivity	No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7 from Safety Data Sheet.				
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				
		Applicable for handling an storage at room temperature:				
		Shock and friction N/A				
		Contact with air N/A				
10.4	Conditions to avoid	Increase in temperature Precaution				
		Sunlight Precaution				
		Humidity N/A				
		Acids Avoid strong acids				
		Water N/A				
10.5	Incompatible materials	Oxidising materials				
10.5	Incompatible materials	Combustible materials N/A				
		Others Avoid alkalis or strong bases				
		See subsection 10.3, 10.4 and 10.5 to find out the specific				
		decomposition products. Depending on the decomposition				
10.6	Hazardous decomposition products	conditions, complex mixtures of chemical substances can be				
		released: carbon dioxide (CO <sub>2</sub> ), carbon monoxide and other				
		organic compounds.				

#### 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:		





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#### 11. TOXICOLOGICAL INFORMATION

11.1	Dangerous health implications	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: The consumption of a considerable dose can cause irritation in the throat, abdominal pain, nausea and vomiting.  Inhalation (acute effect):  Acute toxicity: Exposure in high concentration can interfere with the central nervous system causing headache, dizziness, vertigo, nausea, vomiting, confusion, and in serious cases, loss of consciousness.  Corrosivity/Irritability: Causes irritation in respiratory passages, which is normally reversible and limited to the upper respiratory passages.  Contact with the skin and the eyes (acute effect):  Contact with the skin: Produces skin inflammation.  Contact with the eyes: Produces serious eye damage after contact.  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 hazardous for the effects mentioned. For more information see section 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.  Respiratory: 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.  Skin: Prolonged contact with the skin can result in episodes of allergic contact dermatitis.  Specific target organ toxicity (STOT) - single exposure  For Causes irritation in respiratory passages, which is normally reversible and limited to the upper respiratory p



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#### 11. TOXICOLOGICAL INFORMATION

	Dangerous health implications	Specific exposure: E criteria are r classified  Skin: Based of are not met, as hazardou  Based on avenue has not met, as in not met.	STOT) - repeated xicity (STOT) - repole data, the classes not contain suffer this effect. For ee section 3. ta, the classification tain substance. For more informon 3. Hazard le classification cain substances classification cain cain cain cain cain	oeated sification ubstances r more on criteria es classified nation see	
	Other information		N/A		
		Identification		Toxicity	Genus
		3-Isocyanatomethyl-	LD50 Oral	>2000 mg/kg	
		3,5,5-trimethylcyclohexyl isocyanate, oligomers	LD50 Dermal	>2000 mg/kg	
		CAS: 53880-05-0 EC: 500-125-5	LC50 Inhalation	Non-applicable	
11.1			LD50 Oral	289 mg/kg	Rat
''''		Cyclohexyldimethylamine CAS: 98-94-2	LD50 Dermal	380 mg/kg	Rat
		EC: 202-715-5	LC50 Inhalation	Non-applicable	
		Tridecyl alcohol, ethoxylated, phosphated (6 mol EO) CAS: 9046-01- 9 EC: Non-applicable	LD50 Oral	>2000 mg/kg	
			LD50 Dermal	>2000 mg/kg	
	Specific toxicology information on the substances		LC50 Inhalation	Non-applicable	
		Hexamethylenediisocyanat	LD50 Oral	2660 mg/kg	Rat
		e, oligomers (<0.1%	LD50 Dermal	>2000 mg/kg	
		O=C=N-R-N=C=O) CAS: 28182-81-2 EC: 931-274-8	LC50 Inhalation	11 mg/L (ATEi)	
		3-isocyanatomethyl-3,5,5-	LD50 Oral	>2000 mg/kg	
		trimethylcyclohexyl	LD50 Dermal	>2000 mg/kg	
		isocyanate CAS: 4098-71-9 EC: 223-861-6	LC60 Inhalation	3 mg/L (ATEi)	
			LD50 Oral	959 mg/kg	Rat
		Hexamethylene-di-isocyanate CAS: 822-06-0	LD50 Dermal	7000 mg/kg	Rat
		EC: 212-485-8	LC50 Inhalation	0,12 mg/L (4h)	Rat



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#### 11. TOXICOLOGICAL INFORMATION

		Endocrine disrupting properties	The product does not meet the criteria
11.2	Information on other hazards	Other Information	Non-applicable

#### 12. ECOLOGICAL INFORMATION

The experimental information related to the eco-toxicological properties of the product itself is not available Harmful to aquatic life with long lasting effects.

	Toxicity	Identification		Concentration	Species	Genus
		Hexamethylene diisocyanate, oligomers (<0.1 %	LC50	Non-applicable		
		-	EC50	Non-applicable		
		56 021 274 0	EC50	1000 mg/L (72 h)	Scenedesmus subspicatus	Algae
		Tridecyl alcohol, ethoxylated,	LC50	>1 - 10 mg/L (96 h)		Fish
12.1	Acute toxicity	phosphated (6 mol EO) CAS: 9046-01-9	EC50	>1 - 10 mg/L (48 h)		Crustacean
12			EC50	>1 - 10 mg/L (72 h)		Algae
		re CAS: 98-94-2 EC: 202-715-5	LC50	28 mg/L (96 h)	Leuciscus idus	Fish
			EC50	75 mg/L (48 h)	Daphnia magna	Crustacean
			EC50	2 mg/L (72 h)	Desmodesmus subspicatus	Algae
		3,5,5-	LC50	>1 - 10 mg/L (96 h)		Fish
		trimethylcyclohexyl isocyanate	EC50	>1 - 10 mg/L (48 h)		Crustacean
		CAS: 4098-71-9 EC: 223-861-6	EC50	>1 - 10 mg/L (72 h)		Algae



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#### 12. ECOLOGICAL INFORMATION

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

	Toxicity	Identification	Degra	adability	Biodeg	adability		
			BOD5	Non-applicable	Concentration	20 mg/L		
12.2	Persistence and degradability - Substance specific information	Cyclohexyldimethylamin- e CAS: 98-94-2 EC: 202-715-5	COD	Non-applicable	Period	28 Days		
			BOD5/COD	Non-applicable	% Biodegradability	95%		
			Bioaccumulation Potential					
			BFC	FC				
12.3	Bioaccumulative potential:	Cyclohexyldimethylamin -e CAS: 98-94-2 EC: 202-715-5	Pow Log	2.31				
			Potential					
		Coolah amilah di li	Absorption	/desorption	Vola	-		
		Cyclohexyldimethylamin e	Koc	69.49	Henry	6,73 Pa*m³		
12.4	Mobility in soil	CAS: 98-94-2	Conclusion	High	Dry soil	Non-applicable		
		EC: 202-715-5	Surface tension	Non- applicable	Moist soil	Non-applicable		
12.5	Results of PBT & vPvB assessment	Product does not meet PBT/vPvB criteria						
12.6	Endocrine disrupting properties	The product does not meet the criteria						
12.7	Other adverse effects	Not described						





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### 13. DISPOSAL CONSIDERATIONS

Wasta treatment methods	Code Description (R  waste paint and varnish				
waste treatment metrious	waste paint and containing organic other hazardous since the paint and containing organic	waste paint and varnish containing organic solvents or other hazardous substances	Dangerous		
Type of waste (Regulation (EU) No 1357/2014)	Toxicity(STOT		Toxicity,HP13		
	3				
	Consult the authorized waste service manageron the assessment				
Waste management (disposal and evaluation)	code and in case the container has been in direct contact with				
-	the product, it will be processed the same way as the actual				
	·				
	· ·				
	In accord		o (EC) No		
		<del>-</del>			
Populations related to waste management	1907/2000(REAL	•	isions related to		
negulations related to waste management	Community	=	2014/955/FII		
	· ·				
	Waste treatment methods  Type of waste (Regulation (EU) No 1357/2014)  Waste management (disposal and evaluation)  Regulations related to waste management	Waste treatment methods    08 01 11*	Waste treatment methods  08 01 11*  Waste paint and varnish containing organic solvents or other hazardous substances  HP14 Ecotoxic,HP5 Specific Target O Toxicity(STOT)/Aspiration Toxicity, HP6 Acute Sensitising  Consult the authorized waste service manageror and disposal operations in accordance with Anna 2 (Directive 2008/98/EC). As under 15 01 (2014, code and in case the container has been in direct the product, it will be processed the same was product. Otherwise, it will be processed as not residue. Waste should not be disposed of to paragraph 6.2.  In accordance with Annax II of Regulation 1907/2006(REACH) the community or state province.		

#### 14. TRANSPORT INFORMATION

This product is not regulated for transport (ADR/RID,IMDG,IATA)
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#### 15. REGULATORY INFORMATION

15.2		The supplier has not carried out evaluation of chemical safety
	Specific provisions in terms of protecting people or the environment  Other legislation	It is recommended to use the informationincluded 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 disposalof this product.  The product could be affected by sectorial legislation
15.1		<ul> <li>Shall not be used in:</li> <li>ornamental articles intendedto produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,</li> <li>tricks and jokes,</li> <li>games for one or more participants, or any article intended to be used as such, even with ornamental aspects. Contains more than 0.1 % of 3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate, Hexamethylene-di-isocyanate,3- Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate, oligomers by weight. 1. Shall not be used as substances on their own, as a constituent in other substances or in mixtures for industrial and professional use(s)after 24 August 2023,unless:</li> <li>(a) the concentration of diisocyanates individually and in combination is less than 0,1 % by weight, or (b) the employer or self- employed ensures that industrial or professional user(s)have successfully completed training on the safe use of diisocyanates prior to the use of the substance(s) or mixture(s).</li> </ul>
	Safety, health and environmental regulations/legislation specific for the substance or mixture  Seveso III	initial properties of the treated article. Contains 1,2- benzisothiazol-3(2H)-one, Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-oneand 2-methyl-2H-isothiazol-3-one(3:1), bronopol (INN),2-methyl-2H-isothiazol-3-one.  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: Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-oneand 2-methyl-2H-isothiazol-3-one (3:1) (Product-type 2, 4, 6, 11, 12, 13)  REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable
		[





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2. Shall not be placed on the market as substances on their own, as a constituent in other substances or in mixtures for industrial and professional use(s)after 24 February 2022, unless:

(a) the concentration of diisocyanates individually and in combination is less than 0,1 % by weight, or (b) the supplier ensures that the recipient of the substance(s) or mixture(s) is provided with information on the requirements referred to in point (b) of paragraph 1 and the following statement is placed on the packaging, in a manner that is visibly distinct from the rest of the label information: "As from 24 August 2023 adequate training is required before industrial or professional use".

3. For the purpose of this entry "industrial and professional user(s)"means any worker or self-employed worker handling diisocyanates on their own, as a constituent in other substances or in mixtures for industrial and professional use(s)or supervising these tasks.

4. The training referred to in point (b) of paragraph 1 shall include the instructions for the control of dermal and inhalation exposure to diisocyanates at the workplace without prejudice to any national occupational exposure limit value or other appropriate risk management measures at national level. Such training shall be conducted by an expert on occupational safety and health with competence acquired by relevant vocational training. That training shall cover as a minimum: (a) the training elementsin point (a) of paragraph 5 for all industrial and professional use(s). (b) the training elements in points (a) and (b) of paragraph 5 for the following uses:

- handling open mixtures at ambient temperature (including foam tunnels)
- spraying in a ventilated booth
- · application by roller
- 15.1 application by brush
  - · application by dipping and pouring
  - · mechanical post treatment(e.g. cutting) of not fully cured articles which are not warm anymore

  - any other uses with similar exposure through the dermal and/or inhalation route

(c) the training elements in points (a), (b) and (c) of paragraph 5 for the following uses:

- handling in completely cured articles (e.g. freshly cured, still warm)
- foundry applications
- maintenance and repair that needs access to equipment
- open handling of warm or hot formulations (> 45 °C)
- spraying in open air, with limited or only natural ventilation (includes large industry working halls) and spraying with high energy (e.g. foams, elastomers)
- and any other uses with similar exposure through the dermal and/or inhalation route.
- 5. Training elements:

(a) general training, including on-line training, on:

- chemistry of diisocyanates
- toxicity hazards (including acute toxicity)
- exposure to diisocyanates
- occupational exposure limit values





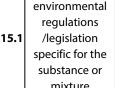
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#### 15. REGULATORY INFORMATION

- · how sensitisation can develop
- · odour as indication of hazard
- · importance of volatility for risk
- viscosity, temperature, and molecular weight of diisocyanates
- personalhygiene
- personal protective equipment needed, including practical instructions for its correct use and its limitations
- risk of dermal contact and inhalation exposure
- risk in relation to application process used
- skin and inhalationprotection scheme
- ventilation
- cleaning,leakages, maintenance
- discarding empty packaging
- protection of bystanders
- · identification of critical handlingstages
- specificnational code systems (if applicable)
- behaviour-based safety
- · certification or documented proof that training has been successfully completed
- (b) intermediate level training, including on-line training, on:
- · additional behaviour-basedaspects
- maintenance
- management of change
- evaluation of existing safety instructions
- · risk in relationto application process used
- certification or documented proof that training has been successfully completed
- (c) advanced training, including on-line training, on:
- any additional certification needed for the specificuses covered
- spraying outsidea spraying booth
- open handling of hot or warm formulations (> 45 °C)
- certification or documented proof that training has been successfully completed
- 6. The training shall comply with the provisions set by the Member State in which the industrial or professionaluser(s) operate. Member States may implementor continue to apply their own national requirements for the use of the substance(s) or mixture (s), as long as the minimum requirements set out in paragraphs 4 and 5 are met.
- 7. The supplierreferred to in point (b) of paragraph 2 shall ensure that the recipient is provided with training
  material and courses pursuant paragraphs 4 and 5 in the official language(s) of the Member State(s) where
  the substance(s) or mixture(s) are supplied. The training shall take into consideration the specificity of the
  products supplied, including composition, packaging, and design.
- 8. The employer or self-employed shall document the successful completion of the training referred to in paragraphs 4 and 5. The training shall be renewedat least every five years.
- 9. Member States shall include in their reportspursuant to Article 117(1) the followinginformation:
- (a) any established training requirements and other risk management measures related to the industrial and professional uses of diisocyanates foreseen in nationallaw
- (b) the number of cases of reported and recognised occupational asthma and occupational respiratoryand dermal diseasesin relation to diisocyanates
- (c) national exposure limits for diisocyanates, if there are any
- (d) information about enforcementactivities related to this restriction.
- 10. This restriction shall apply without prejudice to other Union legislation on the protection of safety and health of workers at the workplace



Safety, health and



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#### **16. OTHER INFORMATION**

Legislation related to safety data sheets	The SDS shall be suppliedin an official languageof the country where the product is placed on the market. This safety data sheet hasbeen 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:	COMPOSITION/INFORMATION ON INGREDIENTS (SECTION3, SECTION 11, SECTION 12):  · New declared substances  Hexamethylene diisocyanate, oligomers (<0.1 % O=C=N-R-N=C=O) (28182-81-2)  · Removed substances  Hexamethylenediisocyanate, oligomers (28182-81-2) Substances that contribute to the classification (SECTION 2):  · New declared substances  Hexamethylenediisocyanate, oligomers (<0.1 % O=C=N-R-N=C=O) (28182-81-2)  · Removed substances  Hexamethylenediisocyanate, oligomers (28182-81-2)
Texts of the legislative phrases mentioned in section 3	H317: May cause an allergic skin reaction. H335: May cause respiratory irritation. H315: Causes skin irritation.  H318: Causes serious eye damage.  H412: Harmful to aquatic life with long lasting effects. H332: Harmful if inhaled.
CLP Regulation (EC) No 1272/2008	Acute Tox. 1: H330 - Fatal if inhaled.  Acute Tox. 3: H301+H311+H331 - Toxic if swallowed, in contact with skin or if inhaled. Acute Tox. 3: H331 - Toxic if inhaled.  Acute Tox. 4: H302 - Harmful if swallowed. Acute Tox. 4: H332 - Harmful if inhaled.  Aquatic Chronic 2: H411 - Toxic to aquatic life with long lasting effects.  Aquatic Chronic 3: H412 - Harmful to aquatic life with long lasting effects. Eye Dam. 1: H318 - Causes serious eye damage.  Eye Irrit. 2: H319 - Causes serious eye irritation. Flam. Liq. 3: H226 - Flammable liquid and vapour.  Resp. Sens. 1: H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled. Skin Corr. 1B: H314 - Causes severe skin burns and eye damage.  Skin Irrit. 2: H315 - Causes skin irritation.  Skin Sens. 1: H317 - May cause an allergic skin reaction. STOT SE 3: H335 - May cause respiratory irritation.
Classification procedure	Skin Sens. 1: Calculation method STOT SE 3: Calculation method Skin Irrit. 2: Calculation method Eye Dam. 1: Calculation method Aquatic Chronic 3: Calculation method Acute Tox. 4: Calculation method



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#### 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 carriageof dangerous goods by road IMDG: International maritimedangerous goods code IATA: International Air Transport Association ICAO: International Civil Aviation Organisation COD: ChemicalOxygen Demand BODS: 5day biochemical oxygen demand BCF: Bioconcentration factor LD50: Lethal Dose 50 LC50: Lethal Concentration50 EC50: Effective concentration 50 LogPOW: Octanolwater partitioncoefficient Koc: Partition coefficient of organic carbon UFI:unique formula identifier IARC: International Agencyfor Research on Cancer

Product safety information sheet prepared in accordance with Article 32 of Regulation (EC) 1907/2006 (REACH)

this document does not constitute a Safety Data Sheet under Article 31 of Regulation (EC) No. 1907/2006, as a Safety Data Sheet is not mandatory for this product The information contained in thissafety data sheet is based on sources, technical knowledgeand current legislation at European and state level, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified. The information contained in this safety data sheet is based on sources, technical knowledge and current legislation at European and state level, without being able to guarantee its accuracy

