

CRYSTAL CAST 3000A





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Compilation date: 27/10/2017

Revision date: 08/12/2017

Revision No: 2

Section 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier Product name: CRYSTAL CAST 3000A Product code: CC3000A 1.2. Relevant identified uses of the substance or mixture and uses advised against Use of substance / mixture: PC1: Adhesives, sealants. PC9a: Coatings and paints, thinners, paint removers. PC9b: Fillers, putties, plasters, modelling clay. PC32: Polymer preparations and compounds. PROC1: Use in closed process, no likelihood of exposure PROC2: Use in closed, continuous process with occasional controlled exposure PROC3: Use in closed batch process (synthesis or formulation) PROC4: Use in batch and other process (synthesis) where opportunity for exposure arises PROC5: Mixing or blending in batch processes for formulation of preparations* and articles (multistage and/or significant contact) PROC8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities PROC8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities PROC9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing) PROC10: Roller application or brushing PROC13: Treatment of articles by dipping and pouring PROC19: Hand-mixing with intimate contact and only PPE available ERC2: Formulation of preparations* ERC3: Formulation in materials ERC5: Industrial use resulting in inclusion into or onto a matrix ERC6d: Industrial use of process regulators for polymerisation processes in production of resins, rubbers, polymers 1.3. Details of the supplier of the safety data sheet

Company name:	Alchemie Ltd
	Warwick Road
	Kineton
	Warwick
	CV35 0HU
	United Kingdom
Tel:	+44 (0) 1926 641600
Fax:	+44 (0) 1926 641698
Email:	sds@alchemie.com



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1.4. Emergency telephone num	ıber		
Emergency tel:	+44 (0) 1926 641 600		
	(office hours only)		
Section 2: Hazards identificati	on		
2.1. Classification of the subst	ance or mixture		
Classification under CLP:	Acute Tox. 4: H302; Aquatic Acute 1: H400; Aquatic Chronic 1: H410; Skin Sens. 1A: H317		
Most important adverse effects:	Harmful if swallowed. May cause an allergic skin reaction. Very toxic to aquatic life. Very		
	toxic to aquatic life with long lasting effects.		
2.2. Label elements			
Label elements:			
Hazard statements:	H302: Harmful if swallowed.		
	H317: May cause an allergic skin reaction.		
	H400: Very toxic to aquatic life.		
	H410: Very toxic to aquatic life with long lasting effects.		
Hazard pictograms:	GHS07: Exclamation mark		
	GHS09: Environmental		
Signal words:	Warning		
Precautionary statements:	P261: Avoid breathing dust/fumes/gas/mist/vapours/spray.		
	P280: Wear protective gloves/protective clothing/eye protection/face protection.		
	P301+312: IF SWALLOWED: Call a doctor if you feel unwell.		
	P302+352: IF ON SKIN: Wash with plenty of water/.		
	P321: Specific treatment (see instructions on this label).		
	P330: Rinse mouth.		
2.3. Other hazards			
PBT:	This product is not identified as a PBT/vPvB substance.		

Section 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients:

PENTAERYTHRITOL TETRAKIS(3-MERCAPTOPROPIONATE) - REACH registered number(s): 01-211948698123

EINECS CAS PBT / WEL CLP Classific	tion Percent
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231-472-8	7575-23-7	-	Acute Tox. 4: H302; Skin Sens. 1A:	>50%
			H317; Aquatic Acute 1: H400; Aquatic	
			Chronic 1: H410	

3-MERCAPTOPROPIONIC ACID - REACH registered number(s): 01-211948944330

230-537-0	107-96-0	-	Met. Corr. 1: H290; Acute Tox. 3: H301;	0.05-1%
			Acute Tox. 4: H332; Skin Corr. 1B:	
			H314; Eye Dam. 1: H318	

Section 4: First aid measures

4.1. Description of first aid mea	asures
Skin contact:	Wash immediately with plenty of soap and water.
Eye contact:	Bathe the eye with running water for 15 minutes.
Ingestion:	Wash out mouth with water. Do not induce vomiting. If conscious, give half a litre of water
	to drink immediately. Transfer to hospital as soon as possible.
Inhalation:	Remove casualty from exposure ensuring one's own safety whilst doing so. Consult a
	doctor.
4.2. Most important symptoms	and effects, both acute and delayed
Skin contact:	There may be mild irritation at the site of contact.
	There may be irritation and redness.
-	There may be irritation of the throat.
-	No symptoms.
Delayed / immediate effects:	
-	e medical attention and special treatment needed
4.5. mulcation of any inmediat	
Immediate / special treatment:	Not applicable.
Section 5: Fire-fighting measu	res
5.1. Extinguishing media	
	Quitable entire media for the current disc fire should be used. Use water every
Extinguishing media:	Suitable extinguishing media for the surrounding fire should be used. Use water spray
	to cool containers.
5.2. Special hazards arising fro	om the substance or mixture

Exposure hazards: In combustion emits toxic fumes.

5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus. Wear protective clothing to prevent contact

with skin and eyes.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Refer to section 8 of SDS for personal protection details. Turn leaking containers leak-



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side up to prevent the escape of liquid. Mark out the contaminated area with signs and

prevent access to unauthorised personnel.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers. Contain the spillage using bunding.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Absorb into dry earth or sand. Transfer to a closable, labelled salvage container for

disposal by an appropriate method.

6.4. Reference to other sections

Reference to other sections: Refer to section 8 of SDS.

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: Avoid the formation or spread of mists in the air. Avoid direct contact with the substance.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a cool, well ventilated area. Keep container tightly closed. The floor of the

storage room must be impermeable to prevent the escape of liquids.

Suitable packaging: Must only be kept in original packaging.

7.3. Specific end use(s)

Specific end use(s): No data available.

Section 8: Exposure controls/personal protection

8.1. Control parameters

Workplace exposure limits: No data available.

DNEL/PNEC Values

DNEL / PNEC No data available.

8.2. Exposure controls

Engineering measures:The floor of the storage room must be impermeable to prevent the escape of liquids.Respiratory protection:Respiratory protection not required.Hand protection:Protective gloves.Eye protection:Safety glasses. Ensure eye bath is to hand.Skin protection:Protective clothing.Environmental:The floor of the storage room must be impermeable to prevent the escape of liquids.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State: Liquid

Colour: Colourless



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Odour:	Characteristic odour		
Evaporation rate:	No data available.		
Oxidising:	No data available.		
Solubility in water:	Slightly soluble		
Viscosity:	350 mPa.s (25°C)		
Boiling point/range°C:	No data available.	Melting point/range°C:	-40.1
Flammability limits %: lower:	No data available.	upper:	No data available.
Flash point°C:	214	Part.coeff. n-octanol/water:	log Pow: 3.03
Autoflammability°C:	No data available.	Vapour pressure:	0.0000042hPa at 25C
Relative density:	1.25 - 1.28	pH:	No data available.
VOC g/l:	No data available.		

9.2. Other information

Other information: No data available.

Section 10: Stability and reactivity

10.1. Reactivity

Reactivity: Stable under recommended transport or storage conditions.

10.2. Chemical stability

Chemical stability: Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions.

Decomposition may occur on exposure to conditions or materials listed below.

10.4. Conditions to avoid

Conditions to avoid: Heat.

10.5. Incompatible materials

Materials to avoid: Strong oxidising agents. Strong acids.

10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes.

Section 11: Toxicological information

11.1. Information on toxicological effects

Relevant hazards for product:

Hazard	Route	Basis
Acute toxicity (ac. tox. 4)	ING	Hazardous: calculated



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			. 0
Respiratory/skin sensitisation	-	Hazardous: calculated	

Symptoms / routes of exposure

Skin contact: There may be mild irritation at the site of contact.

Eye contact: There may be irritation and redness.

Ingestion: There may be irritation of the throat.

Inhalation: No symptoms.

Delayed / immediate effects: No symptoms.

Section 12: Ecological information

12.1. Toxicity

Hazardous ingredients:

PENTAERYTHRITOL TETRAKIS(3-MERCAPTOPROPIONATE)

Daphnia magna	48H EC50	0.71	mg/l
RAINBOW TROUT (Oncorhynchus mykiss)	96H LC50	0.42	mg/l

12.2. Persistence and degradability

Persistence and degradability: Not biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential: Bioaccumulation potential.

12.4. Mobility in soil

Mobility: Readily absorbed into soil.

12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

Other adverse effects: Toxic to aquatic organisms. Toxic to soil organisms.

Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations:	Transfer to a suitable container and arrange for collection by specialised disposal
	company.
Waste code number:	16 05 08
Disposal of packaging:	Arrange for collection by specialised disposal company.
NB:	The user's attention is drawn to the possible existence of regional or national
	regulations regarding disposal.

Section 14: Transport information



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	Pa	ge: 7
14.1. UN number		
UN number:	UN3082	
14.2. UN proper shipping name		
Shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	
	(Pentaerythritol tetra(3-mercaptopropionate))	
14.3. Transport hazard class(e		
Transport class:	9	
14.4. Packing group	•	
Packing group:		
14.5. Environmental hazards		
Environmentally hazardous:	Yes Marine pollutant: Yes	
14.6. Special precautions for u	ser	
Special precautions:	No special precautions.	
Tunnel code:	-	
Transport category:	3	
Section 15: Regulatory inform	ation	
	ation nmental regulations/legislation specific for the substance or mixture	
	nmental regulations/legislation specific for the substance or mixture	
15.1. Safety, health and enviro	nmental regulations/legislation specific for the substance or mixture Not applicable.	
15.1. Safety, health and enviro Specific regulations: 15.2. Chemical Safety Assessm	nmental regulations/legislation specific for the substance or mixture Not applicable.	
15.1. Safety, health and enviro Specific regulations: 15.2. Chemical Safety Assessm	nmental regulations/legislation specific for the substance or mixture Not applicable. nent	
15.1. Safety, health and enviro Specific regulations: 15.2. Chemical Safety Assessm	nmental regulations/legislation specific for the substance or mixture Not applicable. nent A chemical safety assessment has not been carried out for the substance or the mixture	
15.1. Safety, health and enviro Specific regulations: 15.2. Chemical Safety Assessm Chemical safety assessment: Section 16: Other information	nmental regulations/legislation specific for the substance or mixture Not applicable. nent A chemical safety assessment has not been carried out for the substance or the mixture	
15.1. Safety, health and enviro Specific regulations: 15.2. Chemical Safety Assessm Chemical safety assessment: Section 16: Other information Other information	Inmental regulations/legislation specific for the substance or mixture Not applicable. Inent A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.	
15.1. Safety, health and enviro Specific regulations: 15.2. Chemical Safety Assessm Chemical safety assessment: Section 16: Other information Other information	Inmental regulations/legislation specific for the substance or mixture Not applicable. Inent A chemical safety assessment has not been carried out for the substance or the mixture by the supplier. This safety data sheet is prepared in accordance with Commission Regulation (EU) No	
15.1. Safety, health and enviro Specific regulations: 15.2. Chemical Safety Assessm Chemical safety assessment: Section 16: Other information Other information	Inmental regulations/legislation specific for the substance or mixture Not applicable. Inent A chemical safety assessment has not been carried out for the substance or the mixture by the supplier. This safety data sheet is prepared in accordance with Commission Regulation (EU) No 2015/830.	
15.1. Safety, health and enviro Specific regulations: 15.2. Chemical Safety Assessm Chemical safety assessment: Section 16: Other information Other information Other information:	Inmental regulations/legislation specific for the substance or mixture Not applicable. A chemical safety assessment has not been carried out for the substance or the mixture by the supplier. This safety data sheet is prepared in accordance with Commission Regulation (EU) No 2015/830. * indicates text in the SDS which has changed since the last revision.	
15.1. Safety, health and enviro Specific regulations: 15.2. Chemical Safety Assessm Chemical safety assessment: Section 16: Other information Other information Other information:	Inmental regulations/legislation specific for the substance or mixture Not applicable. Inent A chemical safety assessment has not been carried out for the substance or the mixture by the supplier. This safety data sheet is prepared in accordance with Commission Regulation (EU) No 2015/830. * indicates text in the SDS which has changed since the last revision. H290: May be corrosive to metals.	
15.1. Safety, health and enviro Specific regulations: 15.2. Chemical Safety Assessm Chemical safety assessment: Section 16: Other information Other information Other information:	International regulations/legislation specific for the substance or mixture Not applicable. International A chemical safety assessment has not been carried out for the substance or the mixture by the supplier. This safety data sheet is prepared in accordance with Commission Regulation (EU) No 2015/830. * indicates text in the SDS which has changed since the last revision. H290: May be corrosive to metals. H301: Toxic if swallowed.	
15.1. Safety, health and enviro Specific regulations: 15.2. Chemical Safety Assessm Chemical safety assessment: Section 16: Other information Other information Other information:	International regulations/legislation specific for the substance or mixture Not applicable. Inent A chemical safety assessment has not been carried out for the substance or the mixture by the supplier. This safety data sheet is prepared in accordance with Commission Regulation (EU) No 2015/830. * indicates text in the SDS which has changed since the last revision. H290: May be corrosive to metals. H301: Toxic if swallowed. H302: Harmful if swallowed.	
15.1. Safety, health and enviro Specific regulations: 15.2. Chemical Safety Assessm Chemical safety assessment: Section 16: Other information Other information Other information:	International regulations/legislation specific for the substance or mixture Not applicable. International A chemical safety assessment has not been carried out for the substance or the mixture by the supplier. This safety data sheet is prepared in accordance with Commission Regulation (EU) No 2015/830. * indicates text in the SDS which has changed since the last revision. H290: May be corrosive to metals. H301: Toxic if swallowed.	

- H318: Causes serious eye damage.
- H332: Harmful if inhaled.

- H400: Very toxic to aquatic life.
- H410: Very toxic to aquatic life with long lasting effects.

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Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.



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Page: 1

Compilation date: 27/10/2017

Revision date: 08/12/2017

Revision No: 2

Section 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name: CRYSTAL CAST 3000B Product code: CC3000B

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

Use of substance / mixture: PC1: Adhesives, sealants. PC9b: Fillers, putties, plasters, modelling clay. PC9a: Coatings and paints, thinners, paint removers. PC32: Polymer preparations and compounds. PROC1: Use in closed process, no likelihood of exposure PROC2: Use in closed, continuous process with occasional controlled exposure PROC3: Use in closed batch process (synthesis or formulation) PROC4: Use in batch and other process (synthesis) where opportunity for exposure arises PROC5: Mixing or blending in batch processes for formulation of preparations* and articles (multistage and/or significant contact) PROC8a: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at non-dedicated facilities PROC8b: Transfer of substance or preparation (charging/discharging) from/to vessels/large containers at dedicated facilities PROC9: Transfer of substance or preparation into small containers (dedicated filling line, including weighing) PROC10: Roller application or brushing PROC13: Treatment of articles by dipping and pouring PROC19: Hand-mixing with intimate contact and only PPE available ERC2: Formulation of preparations* ERC3: Formulation in materials ERC5: Industrial use resulting in inclusion into or onto a matrix ERC6d: Industrial use of process regulators for polymerisation processes in production of resins, rubbers, polymers

1.3. Details of the supplier of the safety data sheet

Company name:	Alchemie Ltd
	Warwick Road
	Kineton
	Warwick
	CV35 0HU
	United Kingdom
Tel:	+44 (0) 1926 641600
Fax:	+44 (0) 1926 641698
Email:	sds@alchemie.com



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1.4. Emergency telephone num	her
Emergency tel:	+44 (0) 1926 641 600
	(office hours only)
Section 2: Hazards identification	on
2.1. Classification of the subst	ance or mixture
Classification under CLP:	Acute Tox. 3: H331; Eye Irrit. 2: H319; Resp. Sens. 1: H334; Skin Irrit. 2: H315; Skin Sens.
	1: H317; STOT SE 3: H335; -: EUH208
Most important adverse effects:	Contains hexamethylene-di-isocyanate. May produce an allergic reaction. Causes skin
	irritation. May cause an allergic skin reaction. Causes serious eye irritation. Toxic if
	inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May
	cause respiratory irritation.
2.2. Label elements	
Label elements:	
Hazard statements:	EUH208: Contains hexamethylene-di-isocyanate. May produce an allergic reaction.
	H315: Causes skin irritation.
	H317: May cause an allergic skin reaction.
	H319: Causes serious eye irritation.
	H331: Toxic if inhaled.
	H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
	H335: May cause respiratory irritation.
Hazard pictograms:	GHS06: Skull and crossbones
	GHS08: Health hazard
Signal words:	Danger
Precautionary statements:	P260: Do not breathe dust/fumes/gas/mist/vapours/spray.
	P280: Wear protective gloves/protective clothing/eye protection/face protection.
	P302+352: IF ON SKIN: Wash with plenty of water/.
	P304+340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.
	P304+341: IF INHALED: If breathing is difficult, remove victim to fresh air and keep at
	rest in a position comfortable for breathing.
	P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove
	contact lenses, if present and easy to do. Continue rinsing.
2.3. Other hazards	

PBT: This product is not identified as a PBT/vPvB substance.



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Section 3: Composition/information on ingredients

3.2. Mixtures

Hazardous ingredients:

4,4'-METHYLENEDI(CYCLOHEXYL ISOCYANATE) - REACH registered number(s): 01-2119457437-31

EINECS	CAS	PBT / WEL	CLP Classification	Percent
225-863-2	5124-30-1	-	Acute Tox. 3: H331; Eye Irrit. 2: H319; STOT SE 3: H335; Skin Irrit. 2: H315; Resp. Sens. 1: H334; Skin Sens. 1: H317	25-50%

HEXAMETHYLENE-1,6-DIISOCYANATE HOMOPOLYMER - REACH registered number(s): 01-2119485796-17

500-060-2	28182-81-2	-	STOT SE 3: H335; Acute Tox. 4: H332;	25-50%	
			Skin Sens. 1: H317		

HEXAMETHYLENE-DI-ISOCYANATE

212-485-8	822-06-0	-	Acute Tox. 3: H331; Eye Irrit. 2: H319;	0.05-1%
			STOT SE 3: H335; Skin Irrit. 2: H315;	
			Resp. Sens. 1: H334; Skin Sens. 1:	
			H317	

Section 4: First aid measures

4.1. Description of first aid measures

Skin contact:Remove all contaminated clothes and footwear immediately unless stuck to skin.Drench the affected skin with running water for 10 minutes or longer if substance is still
on skin. Consult a doctor.Eye contact:Bathe the eye with running water for 15 minutes. Consult a doctor.Ingestion:Do not induce vomiting. Consult a doctor.Inhalation:Remove casualty from exposure ensuring one's own safety whilst doing so. If
unconscious, check for breathing and apply artificial respiration if necessary. Consult a
doctor.4.2. Most important symptoms:There may be irritation and redness at the site of contact.Eye contact:There may be irritation and redness.Ingestion:Nausea and stomach pain may occur.Inhalation:There may be a feeling of tightness in the chest with shortness of breath. Exposure may
cause coughing or wheezing.

Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

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

Immediate / special treatment: Show this safety data sheet to the doctor in attendance.



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		Page:
ection 5: Fire-fighting measu	res	
5.1. Extinguishing media		
Extinguishing media:	Carbon dioxide. Alcohol or polymer foam. Dry chemical powder. Water spray. Use water	
	spray to cool containers.	
5.2. Special hazards arising fro	m the substance or mixture	
Exposure hazards:	In combustion emits toxic fumes of carbon dioxide / carbon monoxide. In combustion	
	emits toxic fumes of nitrogen oxides. In combustion emits toxic fumes of hydrogen	
	cyanide.	
5.3. Advice for fire-fighters		
Advice for fire-fighters:	Wear protective clothing to prevent contact with skin and eyes. Wear self-contained	
	breathing apparatus.	
ection 6: Accidental release n	•	
6.1. Personal precautions, prot	ective equipment and emergency procedures	
Personal precautions:	Refer to section 8 of SDS for personal protection details. Mark out the contaminated area	
	with signs and prevent access to unauthorised personnel. Turn leaking containers	
	leak-side up to prevent the escape of liquid.	
6.2. Environmental precautions		
Environmental precautions:	Do not discharge into drains or rivers. Contain the spillage using bunding.	
6.3. Methods and material for c	ontainment and cleaning up	
Clean-up procedures:	Mix with sand or vermiculite. Clean-up should be dealt with only by qualified personnel	
	familiar with the specific substance. Transfer to a closable, labelled salvage container	
	for disposal by an appropriate method.	
6.4. Reference to other sections	6	
Reference to other sections:	Refer to section 8 of SDS. Refer to section 13 of SDS.	
ection 7: Handling and storag	e	
7.1. Precautions for safe handli	ng	
Handling requirements:	Avoid direct contact with the substance. Ensure there is sufficient ventilation of the area.	
	Do not handle in a confined space. Avoid the formation or spread of mists in the air.	
7.2. Conditions for safe storage	e, including any incompatibilities	
	Keep container tightly closed. Avoid contact with water or humidity. >20°C	
Storage conditions		
	Must only be kept in original packaging.	

Specific end use(s): No data available.



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Section 8: Exposure controls/personal protection

8.1. Control parameters

Hazardous ingredients:

4,4'-METHYLENEDI(CYCLOHEXYL ISOCYANATE)

Workplace exposure limits:

Workplace ex	cposure limits:		Respirable dust	
State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL
UK	0.02 mg/m3	0.07 mg/m3	-	-

HEXAMETHYLENE-1,6-DIISOCYANATE HOMOPOLYMER

UK	0.02 mg/m3 (as NCO)	0.07 mg/ms (as NCO)	-	-
HEXAMETHYLENE-DI-ISOCYANATE				
UK	0.02 mg/m3	0.07 mg/m3	-	-

DNEL/PNEC Values

Hazardous ingredients:

4,4'-METHYLENEDI(CYCLOHEXYL ISOCYANATE)

Effect	Population	Value	Exposure	Туре
Local	Workers	0.6 mg/m3	Dermal	DNEL
-	-	> 0.005 mg/l	Fresh water	PNEC
-	-	> 0.0005 mg/l	Marine water	PNEC
-	-	> 4.3 mg/kg	Soil (agricultural)	PNEC
Local	Workers	0.3 mg/m3	Inhalation	DNEL
-	-	1.91 mg/l	Microorganisms in sewage treatment	PNEC
-	-	> 21.75 mg/kg dry we	Fresh water sediments	PNEC
-	-	> 2.175 mg/kg dry we	Marine sediments	PNEC

HEXAMETHYLENE-1,6-DIISOCYANATE HOMOPOLYMER

Туре	Exposure	Value	Population	Effect
DNEL	Inhalation	0.5 mg/m3	Workers	Systemic
PNEC	Fresh water	0.127 mg/l	-	-
PNEC	Marine water	0.0127 mg/l	-	-
PNEC	Fresh water sediments	266700 mg/kg	-	-
PNEC	Marine sediments	26670 mg/kg	-	-
PNEC	Soil (agricultural)	53182 mg/kg	-	-



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PNEC	Microorganisms in sewage treatment	38.3 mg/l	-	-
DNEL	Inhalation	0.5 mg/m3	Workers	Local

8.2. Exposure controls

Engineering measures:	Ensure there is sufficient ventilation of the area.		
Respiratory protection:	Gas/vapour filter, type A: organic vapours (EN141). Self-contained breathing apparatus		
	must be available in case of emergency.		
Hand protection:	Impermeable gloves.		
Eye protection:	Safety glasses. Ensure eye bath is to hand.		
Skin protection:	Impermeable protective clothing.		
Environmental:	Ensure all engineering measures mentioned in section 7 of SDS are in place.		

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

State:	Liquid		
Colour:	Colourless		
Odour:	Barely perceptible odour		
Evaporation rate:	No data available.		
Oxidising:	No data available.		
Solubility in water:	Reacts with water.		
Viscosity:	130 mPas (25°C)		
Boiling point/range°C:	No data available.	Melting point/range°C:	No data available.
Flammability limits %: lower:	No data available.	upper:	No data available.
Flash point°C:	No data available.	Part.coeff. n-octanol/water:	No data available.
Autoflammability°C:	No data available.	Vapour pressure:	No data available.
Relative density:	1.08 - 1.13	pH:	No data available.
VOC g/l:	No data available.		

9.2. Other information

Other information: No data available.

Section 10: Stability and reactivity

10.1. Reactivity

Reactivity: Stable under recommended transport or storage conditions.

10.2. Chemical stability

Chemical stability: Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions: Hazardous reactions will not occur under normal transport or storage conditions.

Decomposition may occur on exposure to conditions or materials listed below.



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10.4. Conditions to avoid

Conditions to avoid: < 20°C. Heat. Moist air. Humidity.

10.5. Incompatible materials

Materials to avoid: Water. Acids. Alcohols. Amines.

10.6. Hazardous decomposition products

Haz. decomp. products: In combustion emits toxic fumes.

Section 11: Toxicological information

11.1. Information on toxicological effects

Hazardous ingredients:

4,4'-METHYLENEDI(CYCLOHEXYL ISOCYANATE)

DERMAL	RAT	LD50	> 7000	mg/kg
DUST/MIST	RAT	4H LC50	0.33	mg/l
ORL	RAT	LD50	18200	mg/kg

HEXAMETHYLENE-1,6-DIISOCYANATE HOMOPOLYMER

DERMAL	RAT	LD50	>2001	mg/kg
DERMAL	RBT	LD50	>2001	mg/kg
ORAL	RAT	LD50	>5000	mg/kg

HEXAMETHYLENE-DI-ISOCYANATE

IVN	MUS	LD50	5600	µg/kg
ORL	MUS	LD50	350	mg/kg
ORL	RAT	LD50	710	µl/kg

Relevant hazards for product:

Hazard	Route	Basis
Acute toxicity (ac. tox. 3)	INH	Hazardous: calculated
Skin corrosion/irritation	DRM	Hazardous: calculated
Serious eye damage/irritation	OPT	Hazardous: calculated
Respiratory/skin sensitisation	INH DRM	Hazardous: calculated
STOT-single exposure	INH	Hazardous: calculated

Symptoms / routes of exposure

Skin contact: There may be irritation and redness at the site of contact.

Eye contact: There may be irritation and redness.

Ingestion: Nausea and stomach pain may occur.

Inhalation: There may be a feeling of tightness in the chest with shortness of breath. Exposure may cause coughing or wheezing.



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Delayed / immediate effects: Immediate effects can be expected after short-term exposure.

Section 12: Ecological information

12.1. Toxicity

Hazardous ingredients:

4,4'-METHYLENEDI(CYCLOHEXYL ISOCYANATE)

Daphnia magna	EC0 (48h)	>= 8.3	mg/l
Scenedesmus Subspicatus	EC10 (72h)	1.2	mg/l
Scenedesmus Subspicatus	ErC50 (72h)	> 5	mg/l
ZEBRAFISH (Brachydanio rerio)	LC0 (96h)	>= 8.1	mg/l

HEXAMETHYLENE-1,6-DIISOCYANATE HOMOPOLYMER

Daphnia magna	48H EC50	>100	mg/l
Scenedesmus Subspicatus	72H ErC50	>1000	mg/l
ZEBRAFISH (Brachydanio rerio)	96H LC50	>100	mg/l

12.2. Persistence and degradability

Persistence and degradability: No data available.

12.3. Bioaccumulative potential

Bioaccumulative potential: No data available.

12.4. Mobility in soil

Mobility: No data available.

12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

Other adverse effects: No data available.

Section 13: Disposal considerations

13.1. Waste treatment methods	13.1. Waste treatment methods		
Disposal operations:	Transfer to a suitable container and arrange for collection by specialised disposal		
	company.		
Waste code number:	08 05 01		
Disposal of packaging:	Arrange for collection by specialised disposal company.		
NB:	The user's attention is drawn to the possible existence of regional or national		
	regulations regarding disposal.		

Section 14: Transport information



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		Page:
14.1. UN number		
UN number:	UN2206	
14.2. UN proper shipping name	3	
	ISOCYANATES, TOXIC, N.O.S.	
Յուհերութ, որութ, որո	(Aliphatic Isocyanates)	
14.3. Transport hazard class(e	\$)	
Transport class:	6.1	
14.4. Packing group		
Packing group:	III	
14.5. Environmental hazards		
Environmentally hazardous:	No Marine pollutant: No	
-		
14.6. Special precautions for u		
Tunnel code:		
Transport category:	2	
Section 15: Regulatory information	ation	
15.1. Safety, health and environ	nmental regulations/legislation specific for the substance or mixture	
Specific regulations:		
15.2. Chemical Safety Assessn		
Chemical safety assessment:	A chemical safety assessment has not been carried out for the substance or the mixture	
	by the supplier.	
Section 16: Other information		
Other information		
	This safety data sheet is prepared in accordance with Commission Regulation (EU) No	
Outer mormation.	2015/830.	
	* indicates text in the SDS which has changed since the last revision.	
Phrases used in s.2 and s.3:	EUH208: Contains <name of="" sensitising="" substance="">. May produce an allergic reaction.</name>	
	H315: Causes skin irritation.	
	H317: May cause an allergic skin reaction.	
	H319: Causes serious eye irritation.	
	H331: Toxic if inhaled.	
	H332: Harmful if inhaled.	
	H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.	
	H335: May cause respiratory irritation.	
Legal disclaimer:	The above information is believed to be correct but does not purport to be all inclusive	
-	and shall be used only as a guide. This company shall not be held liable for any	

damage resulting from handling or from contact with the above product.