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

1.1. Product identifier

Mixture identification:

Trade name: MAPEPROOF 1K TURBO

Trade code: 9028218

UFI: UYP4-C0WD-C002-6ENW

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

Recommended use: Polyurethane primer

Uses advised against: Data not available

1.3. Details of the supplier of the safety data sheet

Company: MAPEI U.K. Ltd - Mapei House Steel Park Road
Halesowen - West Midlands B62 8HD

phone: +44(0)121 508 6970 - fax: +44(0)121 5086 960 - www.mapei.co.uk (office hour 8:30-17:30)

Responsible: sicurezza@mapei.it

1.4. Emergency telephone number

call NHS 111 or a doctor/OHES Environmental Ltd +44(0)333 333 9962

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) n. 1272/2008 (CLP)

Skin Irrit. 2	Causes skin irritation.
Eye Irrit. 2	Causes serious eye irritation.
Resp. Sens. 1	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin Sens. 1	May cause an allergic skin reaction.
Carc. 2	Suspected of causing cancer if inhaled, in contact with skin and if swallowed.
STOT SE 3	May cause respiratory irritation.
STOT RE 2	May cause damage to organs through prolonged or repeated exposure if inhaled, in contact with skin and if swallowed.

2 The concentration of isocyanate stated is the percentage by weight of the free monomer calculated with reference to the total weight of the mixture.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

Regulation (EC) n. 1272/2008 (CLP)

Pictograms and Signal Words

Danger

Hazard statements:

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer if inhaled, in contact with skin and if swallowed.
H373	May cause damage to organs through prolonged or repeated exposure if inhaled, in contact with skin and if swallowed.

Precautionary statements:

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P261	Avoid breathing mist/vapours/spray.
P280	Wear protective gloves/clothing and eye/face protection.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P342+P311	If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

Special Provisions:

EUH208	Contains prepolymer based on aromatic polyisocyanate. May produce an allergic reaction.
EUH204	Contains isocyanates. May produce an allergic reaction.

Contains:

diphenylmethane-4,4'-diisocyanate

o-(p-isocyanatobenzyl)phenyl isocyanate;
diphenylmethane-2,4'-diisocyanate

diphenylmethanediisocyanate isomers and homologues

2,2'-methylenediphenyl diisocyanate;
diphenylmethane-2,2'-diisocyanate

Special provisions according to Annex XVII of REACH and subsequent amendments:

Restricted to professional users.; As from 24 August 2023 adequate training is required before industrial or professional use.

2.3. Other hazards

No PBT, vPvB or endocrine disruptor substances present in concentration >= 0.1%.

Other Hazards: No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

Not Relevant

3.2. Mixtures

Mixture identification: MAPEPROOF 1K TURBO

Hazardous components within the meaning of the CLP regulation and related classification:

Concentration (% w/w)	Name	Ident. Numb.	Classification	Registration Number
≥25 - <50 %	prepolymer based on aromatic polyisocyanate	CAS:67815-87-6 EC:642-899-8	Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319; Resp. Sens. 1, H334; Skin Sens. 1, H317; STOT SE 3, H335; STOT RE 2, H373	
≥25 - <50 %	diphenylmethane-4,4'-diisocyanate	CAS:101-68-8 EC:202-966-0 Index:615-005-00-9	Acute Tox. 4, H332 Eye Irrit. 2, H319 STOT SE 3, H335 Skin Irrit. 2, H315 Resp. Sens. 1, H334 Skin Sens. 1, H317 STOT RE 2, H373 Carc. 2, H351 Specific Concentration Limits: 0,1% ≤ C < 100%: Resp. Sens. 1 H334 5% ≤ C < 100%: Skin Irrit. 2 H315 5% ≤ C < 100%: Eye Irrit. 2 H319 5% ≤ C < 100%: STOT SE 3 H335	01-2119457014-47-XXXX
≥20 - <25 %	o-(p-isocyanatobenzyl)phenyl isocyanate; diphenylmethane-2,4'-diisocyanate	CAS:5873-54-1 EC:227-534-9 Index:615-005-00-9	Carc. 2, H351 STOT RE 2, H373 Eye Irrit. 2, H319 STOT SE 3, H335 Skin Irrit. 2, H315 Resp. Sens. 1, H334 Skin Sens. 1, H317 Acute Tox. 4, H332 Specific Concentration Limits: 0,1% ≤ C < 100%: Resp. Sens. 1 H334	01-2119480143-45-0000

			5% ≤ C < 100%: Skin Irrit. 2 H315 5% ≤ C < 100%: Eye Irrit. 2 H319 5% ≤ C < 100%: STOT SE 3 H335	
≥10 - <20 %	diphenylmethanediisocyanate isomers and homologues	CAS:9016-87-9 EC:618-498-9 Index:615-005-00-9	Acute Tox. 4, H332 Eye Irrit. 2, H319 STOT SE 3, H335 Skin Irrit. 2, H315 Resp. Sens. 1, H334 Skin Sens. 1, H317 STOT RE 2, H373 Carc. 2, H351 Specific Concentration Limits: 5% ≤ C < 100%: Skin Irrit. 2 H315 5% ≤ C < 100%: Eye Irrit. 2 H319 C ≥ 0,1%: Resp. Sens. 1,1A,1B H334 C ≥ 5%: STOT SE 3 H335	
≥1 - <2.5 %	2,2'-methylenediphenyl diisocyanate; diphenylmethane-2,2'-diisocyanate	CAS:2536-05-2 EC:219-799-4 Index:615-005-00-9	Carc. 2, H351 STOT RE 2, H373 Eye Irrit. 2, H319 STOT SE 3, H335 Skin Irrit. 2, H315 Resp. Sens. 1, H334 Skin Sens. 1, H317 Acute Tox. 4, H332 Specific Concentration Limits: 0,1% ≤ C < 100%: Resp. Sens. 1 H334 5% ≤ C < 100%: Skin Irrit. 2 H315 5% ≤ C < 100%: Eye Irrit. 2 H319 5% ≤ C < 100%: STOT SE 3 H335	01-2119927323-43-XXXX
≥0.25 - <0.49 %	2-methoxy-1-methylethyl acetate	CAS:108-65-6 EC:203-603-9 Index:607-195-00-7	Flam. Liq. 3, H226; STOT SE 3, H336	01-2119475791-29-XXXX

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose of safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an opthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Do not induce vomiting, get medical attention showing the SDS and the hazard label.

In case of Inhalation:

If breathing is irregular or stopped, administer artificial respiration.

In case of inhalation, consult a doctor immediately and show him packing or label.

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

Eye irritation

Eye damages

Skin Irritation

Erythema

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

(see paragraph 4.1)

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Water.

Carbon dioxide (CO_2).

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

5.3. Advice for firefighters

Use suitable breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Provide adequate ventilation.

Use appropriate respiratory protection.

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Limit leakages with earth or sand.

6.3. Methods and material for containment and cleaning up

Suitable material for taking up: absorbing material, organic, sand

Retain contaminated washing water and dispose it.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Exercise the greatest care when handling or opening the container.

Use localized ventilation system.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Adequately ventilated premises.

7.3. Specific end use(s)

Recommendation(s)

None in particular

Industrial sector specific solutions:

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

List of components with OEL value

	OEL Type	Country	Ceiling	Long Term mg/m3	Long Term ppm	Short Term mg/m3	Short Term ppm	Behaviour	Note
diphenylmethane-4,4'-diisocyanate CAS: 101-68-8	National	NORWAY		0,050	0,005		0,010		A 4
	SUVA			0,020		0,020			
	National	SWEDEN	C	0,030	0,002	0,050	0,005		SWEDEN, Ceiling limit value
	NDS			0,030					

	NDSP			0,090				
	ACGIH				0,005			Resp sens
	National	POLAND		0,030		0,090		
	National	AUSTRIA		0,050	0,005	0,100	0,010	
	DFG	GERMANY	C			0,050		
	ACGIH				0,005			respiratory sensitization (listed under Methylene bisphenyl isocyanate (MDI))
	National	SWEDEN		0,030	0,002			
	National	FRANCE		0,100	0,010	0,200	0,020	
	National	SPAIN		0,052	0,005			
	National	DENMARK		0,050	0,005			
	National	GERMANY		0,050				
	National	PORTUGAL			0,005			
	National	BELGIUM		0,052	0,005			
	NDS	POLAND		0,030				
	NDSCh	POLAND				0,090		
	National	CZECH REPUBLIC		0,050				
	National	HUNGARY		0,05		0,050		
	Malaysia OEL	MALAYSIA		0,051	0,005			
	National	ESTONIA		0,050	0,005	0,100	0,010	
	National	CZECH REPUBLIC	C			0,100		
	National	SLOVAKIA		0,002				
	National	SLOVENIA		0,050		0,050		
	National	ROMANIA				0,150		
	National	LITHUANIA		0,050	0,005			
	National	LITHUANIA	C			0,100	0,010	
	National	NORWAY		0,05	0,005		0,01	
o-(p-isocyanatobenzyl)phenyl isocyanate; diphenylmethane-2,4'-diisocyanate CAS: 5873-54-1	NDS			0,03				
	NDSCh			0,09				
	National	GERMANY		0,05				
	NDS	POLAND		0,03				
	NDSCh	POLAND				0,09		
	National	SLOVENIA		0,05		0,05		
diphenylmethanediisocyanate isomers and homologues CAS: 9016-87-9	ACGIH				0,05			
	SUVA			0,02		0,02		
	DFG	GERMANY	C			0,05		
	National	GERMANY		0,05				
	National	SLOVENIA		0,05		0,05		
2,2'-methylenediphenyl diisocyanate; diphenylmethane-2,2'-diisocyanate CAS: 2536-05-2	ACGIH			0,051				
	National	GERMANY		0,05				

	NDS	POLAND		0,03					
	NDSCh	POLAND				0,09			
	National	SLOVENIA		0,05		0,05			
2-methoxy-1-methylethyl acetate CAS: 108-65-6	ACGIH			275,000	50,000	550,000	100,000		Skin
	SUVA			275,000	50				
	National	SWEDEN		250,000	50	400,000	75,000		SWEDEN, Short-term value, 15 minutes average value
	National	NORWAY		270,000	50				H E
	National	FINLAND		270,000	50,000	550,000	100,000		FINLAND, hud
	NDS			260,000					
	NDSCh			520,000					
	EU			275,000	50,000	550,000	100,000		Skin
	National	GREECE		275	50	550	100		
	National	DENMARK		275	50				
	National	BELGIUM		275	50	550	100		
	National	CZECH REPUBLIC	C			550			
	National	SLOVAKIA	C			550			
	EU			275,000	50	550,000	100,000	Indicative	Possibility of significant uptake through the skin
	DFG	GERMANY	C			270	50		
	National	SWEDEN		275	50				
	National	FRANCE		275	50	550	100		
	National	SPAIN		275	50	550	100		
	National	FINLAND		270	50	550	100		
	National	GERMANY		270	50				
	National	PORTUGAL		275	50	550	100		
	National	NORWAY		270	50	337,5	75		
	NDS	POLAND		260					
	NDSCh	POLAND				520			
	CHE	SWITZERLAND				275	50		
	NDS	NETHERLANDS		550					
	National	CZECH REPUBLIC		270					
	National	HUNGARY		275		550			
	National	ESTONIA		275	50	550	100		
	National	LATVIA		275	50	550	100		
	National	SLOVAKIA		275	50				
	National	SLOVENIA		275	50	550	100		
	National	UNITED KINGDOM		274	50	548	100		
	National	BULGARIA		275,0	50	550,0	100		
	National	ROMANIA		275	50	550	100		
	TUR	TURKEY		275	50	550	100		
	National	LITHUANIA		250	50	400	75		
	National	CROATIA		275	50	550	100		

Predicted No Effect Concentration (PNEC) values

	PNEC Limit	Exposure Route	Exposure Frequency	Remark
diphenylmethane-4,4'-diisocyanate CAS: 101-68-8	1 mg/l	Fresh Water		
	0,1 mg/l	Marine water		

	1 mg/kg	Soil
	1 mg/l	Microorganisms in sewage treatments
	10 mg/l	Intermittent release
o-(p-isocyanatobenzyl)phenyl isocyanate; diphenylmethane-2,4'-diisocyanate CAS: 5873-54-1	1 mg/l	Fresh Water
	0,1 mg/l	Marine water
	1 mg/kg	Soil
	1 mg/l	Microorganisms in sewage treatments
2,2'-methylenediphenyl diisocyanate; diphenylmethane-2,2'-diisocyanate CAS: 2536-05-2	1 mg/l	Fresh Water
	0,1 mg/kg	Marine water
	1 mg/l	Soil
	1 mg/l	Microorganisms in sewage treatments
2-methoxy-1-methylethyl acetate CAS: 108-65-6	0,635 mg/l	Fresh Water
	0,0635 mg/l	Marine water
	3,29 mg/kg	Freshwater sediments
	0,329 mg/kg	Marine water sediments
	6,35 mg/l	Intermittent release
	100 mg/l	Microorganisms in sewage treatments
	0,29 mg/kg	Soil

Derived No Effect Level. (DNEL)

	Worker Industry	Worker Professional	Consumer	Exposure Route	Exposure Frequency	Remark
diphenylmethane-4,4'-diisocyanate CAS: 101-68-8	50 mg/kg			Human Dermal	Short Term, systemic effects	
	0,1 mg/m3			Human Inhalation	Short Term, systemic effects	
	0,1 mg/m3			Human Inhalation	Short Term, local effects	
	0,05 mg/m3			Human Inhalation	Long Term, systemic effects	
	0,05 mg/m3			Human Inhalation	Long Term, local effects	
			25 mg/kg	Human Dermal	Short Term, systemic effects	
			0,05 mg/m3	Human Inhalation	Short Term, systemic effects	
			20 mg/kg	Human Oral	Short Term, systemic effects	

		0,05 mg/m3	Human Inhalation	Short Term, local effects
		0,025 mg/m3	Human Inhalation	Long Term, systemic effects
		0,025 mg/m3	Human Inhalation	Long Term, local effects
	28,7 mg/cm2	17,2 mg/cm2	Human Dermal	Short Term, local effects
o-(p-isocyanatobenzyl)phenyl isocyanate; diphenylmethane-2,4'-diisocyanate CAS: 5873-54-1	50 mg/kg	25 mg/kg	Human Dermal	Short Term, systemic effects
	0,1 mg/m3	0,05 mg/m3	Human Inhalation	Short Term, systemic effects
	28,7 mg/cm2	17,2 mg/cm2	Human Dermal	Short Term, local effects
	0,1 mg/m3	0,05 mg/m3	Human Inhalation	Short Term, local effects
	0,05 mg/m3	0,025 mg/m3	Human Inhalation	Long Term, systemic effects
	0,05 mg/m3	0,025 mg/m3	Human Inhalation	Long Term, local effects
		20 mg/kg	Human Oral	Short Term, systemic effects
2,2'-methylenediphenyl diisocyanate; diphenylmethane-2,2'-diisocyanate CAS: 2536-05-2	50 mg/kg	25 mg/kg	Human Dermal	Short Term, systemic effects
	0,1 mg/m3	0,05 mg/m3	Human Inhalation	Short Term, systemic effects
	28,7 mg/cm2	17,2 mg/cm2	Human Dermal	Short Term, local effects
	0,1 mg/m3	0,05 mg/m3	Human Inhalation	Short Term, local effects
	0,05 mg/m3	0,025 mg/m3	Human Inhalation	Long Term, systemic effects
	0,05 mg/m3	0,025 mg/m3	Human Inhalation	Long Term, local effects
		20 mg/kg	Human Oral	Long Term, systemic effects
2-methoxy-1-methylethyl acetate CAS: 108-65-6	796 mg/kg	320 mg/kg	Human Dermal	Long Term, systemic effects
	275 mg/m3	33 mg/m3	Human Inhalation	Long Term, systemic effects
		36 mg/kg	Human Oral	Long Term, systemic effects
	550 mg/m3		Human Inhalation	Short Term, local effects

8.2. Exposure controls

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Suitable materials for safety gloves; EN ISO 374:

Polychloroprene - CR: thickness >=0,5mm; breakthrough time >=480min.

Nitrile rubber - NBR: thickness >=0,35mm; breakthrough time >=480min.

Butyl rubber - IIR: thickness >=0,5mm; breakthrough time >=480min.

Fluorinated rubber - FKM: thickness >=0,4mm; breakthrough time >=480min.

Neoprene gloves are suggested (0,5 mm) not recommended gloves: not waterproof gloves

Respiratory protection:

Personal Protective Equipment should comply with relevant CE standards (as EN ISO 374 for gloves and EN ISO 166 for goggles), correctly maintained and stored. Consult the supplier to check the suitability of equipment against specific chemicals and for user information.

Respiratory protection must be used where exposure levels exceed workplace exposure limits. Refer to appropriate EN standards, like EN 136, 140, 143, 149, 14387 for information on selection and use of appropriate respiratory protection equipment.

In case of insufficient ventilation use mask with ABEKP filters (EN 14387).

Use adequate protective respiratory equipment.

Hygienic and Technical measures

Not available

Appropriate engineering controls:

Not available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid

Appearance: liquid

Color: light brown

Odour: Characteristic

Odour threshold: Not available

Melting point / freezing point: Not available

Initial boiling point and boiling range: 350 °C (662 °F)

Flammability: N.A.

Upper/lower flammability or explosive limits: Not available

Flash point: Not available

Auto-ignition temperature: Not available

Decomposition temperature: Not available

pH: Not available

Viscosity: 300.00 cPs

Kinematic viscosity: Not available

Solubility in water: insoluble, reacts

Solubility in oil: Not available

Partition coefficient (n-octanol/water): Not available

Vapour pressure: Not available

Relative density: Not available

Vapour density: Not available

Particle characteristics:

Particle size: Not available

9.2. Other information

Miscibility: Not available

Conductivity: Not available

No other relevant information

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

None.

10.4. Conditions to avoid

Stable under normal conditions.

10.5. Incompatible materials

None in particular.

10.6. Hazardous decomposition products

None.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Toxicological information of the mixture:

a) acute toxicity	Not classified
	Based on available data, the classification criteria are not met
b) skin corrosion/irritation	The product is classified: Skin Irrit. 2(H315)
c) serious eye damage/irritation	The product is classified: Eye Irrit. 2(H319)
d) respiratory or skin sensitisation	The product is classified: Resp. Sens. 1(H334), Skin Sens. 1(H317)
e) germ cell mutagenicity	Not classified
	Based on available data, the classification criteria are not met
f) carcinogenicity	The product is classified: Carc. 2(H351)
g) reproductive toxicity	Not classified
	Based on available data, the classification criteria are not met
h) STOT-single exposure	The product is classified: STOT SE 3(H335)
i) STOT-repeated exposure	The product is classified: STOT RE 2(H373)
j) aspiration hazard	Not classified
	Based on available data, the classification criteria are not met

Toxicological information on main components of the mixture:

prepolymer based on aromatic polyisocyanate	a) acute toxicity	LD50 Skin Rat > 9400 mg/kg	
		LC50 Inhalation Rat 310 mg/m3 4h	
		LD50 Oral Rat > 2000 mg/kg	
	b) skin corrosion/irritation	Skin Irritant Positive	
	d) respiratory or skin sensitisation	Skin Sensitization Mouse Positive	
	e) germ cell mutagenicity	NOAEL Inhalation Rat = 12 mg/m3	
diphenylmethane-4,4'-diisocyanate	a) acute toxicity	LD50 Oral Rat > 2000 mg/kg	
		LD50 Skin Rabbit > 9400 mg/kg	
	b) skin corrosion/irritation	Skin Irritant Skin Rabbit Positive	
	d) respiratory or skin sensitisation	Skin Sensitization Skin Mouse Positive	
		Respiratory Sensitization Inhalation Positive	
	f) carcinogenicity	Carcinogenicity Inhalation Rat = 6, mg/m3	2 y
	g) reproductive toxicity	NOAEL Inhalation Rat = 12, mg/m3	20 d
o-(p-isocyanatobenzyl)phenyl isocyanate; diphenylmethane-2,4'-diisocyanate	a) acute toxicity	LD50 Skin Rabbit > 9400 mg/kg	
		LD50 Oral Rat > 2000 mg/kg	
	e) germ cell mutagenicity	NOAEL Inhalation Rat = 12 mg/m3	
diphenylmethanediisocyanate isomers and homologues	a) acute toxicity	LD50 Oral Rat > 10000 mg/kg	
		LD50 Skin Rabbit > 9400 mg/kg	
		LC50 Inhalation Dust Rat = 0,31 mg/l 4h	
		LD50 Skin Rabbit > 9,4 g/kg	
		LC50 Inhalation Rat = 490 mg/m3 4h	
		LD50 Oral Rat = 49 g/kg	

	g) reproductive toxicity	NOAEL Inhalation Rat = 12 mg/m3
2,2'-methylenediphenyl diisocyanate; diphenylmethane-2,2'-diisocyanate	a) acute toxicity	LD50 Oral Rat > 2000 mg/kg
		LC50 Inhalation Dust Rat = 0,527 mg/l 4h
		LD50 Skin Rabbit > 9400 mg/kg
	e) germ cell mutagenicity	NOAEL Inhalation Rat = 12 mg/m3
2-methoxy-1-methylethyl acetate	a) acute toxicity	LD50 Oral Rat > 5000 mg/kg
		LD50 Skin Rabbit > 5000 mg/kg
		LD50 Skin Rabbit > 5, g/kg
	e) germ cell mutagenicity	NOAEL Inhalation Rat = 1000, ppm
	g) reproductive toxicity	NOAEL Inhalation Rat = 500, ppm

11.2 Information on other hazards

Endocrine disrupting properties:

No endocrine disruptor substances present in concentration >= 0.1%

SECTION 12: Ecological information

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

Eco-Toxicological Information:

List of Eco-Toxicological properties of the product

Not classified for environmental hazards

Based on available data, the classification criteria are not met

List of components with eco-toxicological properties

Component	Ident. Numb.	Ecotox Infos
prepolymer based on aromatic polyisocyanate	CAS: 67815-87-6 - EINECS: 642-899-8	a) Aquatic acute toxicity : LC50 Fish > 1000 mg/L 96
		a) Aquatic acute toxicity : EC50 Daphnia > 1000 mg/L 24
		b) Aquatic chronic toxicity : NOEC Daphnia > 10 mg/L - 21 d
		a) Aquatic acute toxicity : EC50 Algae > 1640 mg/L 72
		c) Bacteria toxicity : EC50 > 100 mg/L 3
diphenylmethane-4,4'-diisocyanate	CAS: 101-68-8 - EINECS: 202-966-0 - INDEX: 615-005-00-9	a) Aquatic acute toxicity : LC50 Fish > 1000 mg/L 96
		a) Aquatic acute toxicity : EC50 Daphnia > 1000 mg/L 24
		b) Aquatic chronic toxicity : NOEC Daphnia > 10 mg/L - 21 d
		a) Aquatic acute toxicity : EC50 Algae > 1640 mg/L 72
		c) Bacteria toxicity : EC50 > 100 mg/L 3
		d) Terrestrial toxicity : NOEC > 1000 mg/kg - 14 d
		e) Plant toxicity : NOEC > 1000 mg/kg - 14 d
o-(p-isocyanatobenzyl)phenyl isocyanate; diphenylmethane-2,4'-diisocyanate	CAS: 5873-54-1 - EINECS: 227-534-9 - INDEX: 615-005-00-9	a) Aquatic acute toxicity : LC50 Fish > 1000 mg/L 96
		a) Aquatic acute toxicity : EC50 Daphnia > 1000 mg/L 24
		b) Aquatic chronic toxicity : NOEC Daphnia > 10 mg/L - 21 d
		a) Aquatic acute toxicity : EC50 Algae > 1640 mg/L 72
		c) Bacteria toxicity : EC50 > 100 mg/L 3
		d) Terrestrial toxicity : NOEC > 1000 mg/kg - 14 d

		e) Plant toxicity : NOEC > 1000 mg/kg - 14 d
diphenylmethanediisocyanate isomers and homologues	CAS: 9016-87-9 - EINECS: 618-498-9 - INDEX: 615-005-00-9	a) Aquatic acute toxicity : LC50 Fish > 1000 mg/L 96
		a) Aquatic acute toxicity : EC50 Daphnia > 1000 mg/L 24
		b) Aquatic chronic toxicity : NOEC Daphnia > 10 mg/L - 21 d
		a) Aquatic acute toxicity : EC50 Algae > 1640 mg/L 72
		c) Bacteria toxicity : EC50 > 100 mg/L 3
		d) Terrestrial toxicity : NOEC > 1000 mg/kg - 14 d
		e) Plant toxicity : NOEC > 1000 mg/kg - 14 d
2,2'-methylenediphenyl diisocyanate; diphenylmethane-2,2'-diisocyanate	CAS: 2536-05-2 - EINECS: 219-799-4 - INDEX: 615-005-00-9	a) Aquatic acute toxicity : LC50 Fish > 1000 mg/L 96
		a) Aquatic acute toxicity : EC50 Daphnia > 1000 mg/L 24
		b) Aquatic chronic toxicity : NOEC Daphnia > 10 mg/L - 21 d
		a) Aquatic acute toxicity : EC50 Algae > 1640 mg/L 72
		c) Bacteria toxicity : EC50 > 100 mg/L 3
		e) Plant toxicity : NOEC > 1000 mg/kg - 14 d
		d) Terrestrial toxicity : NOEC > 1000 mg/kg - 14 d
2-methoxy-1-methylethyl acetate	CAS: 108-65-6 - EINECS: 203-603-9 - INDEX: 607-195-00-7	a) Aquatic acute toxicity : LC50 Fish = 130 mg/L 96h
		a) Aquatic acute toxicity : EC50 Daphnia >= 100 mg/L 48h
		b) Aquatic chronic toxicity : NOEC Fish = 47,5 mg/L - 14 d
		b) Aquatic chronic toxicity : NOEC Daphnia >= 100 mg/L - 21 d
		b) Aquatic chronic toxicity : NOEC Algae >= 1000 mg/L

12.2. Persistence and degradability

N.A.

12.3. Bioaccumulative potential

N.A.

12.4. Mobility in soil

N.A.

12.5. Results of PBT and vPvB assessment

No PBT, vPvB or endocrine disruptor substances present in concentration >= 0.1%.

12.6 Endocrine disrupting properties

No endocrine disruptor substances present in concentration >= 0.1%

12.7 Other adverse effects

Not available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

The generation of waste should be avoided or minimized wherever possible. Recover if possible.

A waste code (EWC) according to European List of Waste (LoW) cannot be specified, due to dependence on the usage. Contact and send to an authorized waste disposal service.

Methods of disposal:

Disposal of this product, solutions, packaging and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Dispose of surplus and nonrecyclable products via a licensed waste disposal contractor.

Do not dispose of waste into sewers.

Hazardous waste: Yes

Disposal considerations:

Do not allow to enter drains or watercourses.

Dispose of product according to all federal, state and local applicable regulations.

If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned.

Dispose of containers contaminated by the product in accordance with local or national legal provisions. For further information, contact your local waste authority.

Special precautions:

This material and its container must be disposed of in a safe way. Care should be taken when handling untreated empty containers.

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Empty containers or liners may retain some product residues. Do not re-use empty containers.

SECTION 14: Transport information

Not classified as dangerous in the meaning of transport regulations.

14.1. UN number or ID number

Not Applicable

14.2. UN proper shipping name

Not Applicable

14.3. Transport hazard class(es)

Not Applicable

14.4. Packing group

Not Applicable

14.5. Environmental hazards

Not Applicable

14.6. Special precautions for user

Not Applicable

Road and Rail (ADR-RID) :

Not Applicable

Air (IATA) :

Not Applicable

Sea (IMDG) :

Not Applicable

14.7. Maritime transport in bulk according to IMO instruments

Not Applicable

SECTION 15: Regulatory information

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

VOC (2004/42/EC) : N.A. g/l

Dir. 98/24/EC (Risks related to chemical agents at work)

Dir. 2000/39/EC (Occupational exposure limit values)

Regulation (EC) n. 1907/2006 (REACH)

Regulation (EU) n. 2020/878

Regulation (EC) n. 1272/2008 (CLP)

Regulation (EC) n. 790/2009 (ATP 1 CLP) and (EU) n. 758/2013

Regulation (EU) n. 286/2011 (ATP 2 CLP)

Regulation (EU) n. 618/2012 (ATP 3 CLP)

Regulation (EU) n. 487/2013 (ATP 4 CLP)

Regulation (EU) n. 944/2013 (ATP 5 CLP)

Regulation (EU) n. 605/2014 (ATP 6 CLP)

Regulation (EU) n. 2015/1221 (ATP 7 CLP)

Regulation (EU) n. 2016/918 (ATP 8 CLP)

Regulation (EU) n. 2016/1179 (ATP 9 CLP)

Regulation (EU) n. 2017/776 (ATP 10 CLP)

Regulation (EU) n. 2018/669 (ATP 11 CLP)

Regulation (EU) n. 2019/521 (ATP 12 CLP)

Regulation (EU) n. 2018/1480 (ATP 13 CLP)

Regulation (EU) n. 2020/217 (ATP 14 CLP)

Regulation (EU) n. 2020/1182 (ATP 15 CLP)

Provisions related to directive EU 2012/18 (Seveso III):

None

Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:

Restrictions related to the product: 3

Restrictions related to the substances contained: 28, 29, 30, 40, 56, 74, 75

SVHC Substances:

SVHC substances not present in a concentration ≥ 0.1% (w/w)

German Water Hazard Class (WGK)

Class 2: hazardous for water.

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out for the mixture.

SECTION 16: Other information

Code	Description
H226	Flammable liquid and vapour.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H351	Suspected of causing cancer.
H351	Suspected of causing cancer if inhaled, in contact with skin and if swallowed.
H373	May cause damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure if inhaled.
H373	May cause damage to organs through prolonged or repeated exposure if inhaled, in contact with skin and if swallowed.

Code	Hazard class and hazard category	Description
2.6/3	Flam. Liq. 3	Flammable liquid, Category 3
3.1/4/Inhal	Acute Tox. 4	Acute toxicity (inhalation), Category 4
3.2/2	Skin Irrit. 2	Skin irritation, Category 2
3.3/2	Eye Irrit. 2	Eye irritation, Category 2
3.4.1/1	Resp. Sens. 1	Respiratory Sensitisation, Category 1
3.4.1/1-1A-1B	Resp. Sens. 1,1A,1B	Respiratory Sensitisation, Category 1,1A,1B
3.4.2/1	Skin Sens. 1	Skin Sensitisation, Category 1
3.6/2	Carc. 2	Carcinogenicity, Category 2
3.8/3	STOT SE 3	Specific target organ toxicity — single exposure, Category 3
3.9/2	STOT RE 2	Specific target organ toxicity — repeated exposure, Category 2

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
3.2/2	Calculation method
3.3/2	Calculation method
3.4.1/1	Calculation method
3.4.2/1	Calculation method
3.6/2	Calculation method
3.8/3	Calculation method
3.9/2	Calculation method

If appropriate, specific provisions in relation to possible training for workers are mentioned in section 2. Any training related to safety in the workplace must in any case refer to a risk assessment that must be carried out by a company safety officer taking into account the specific operating and environmental conditions in which the products are used.

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.
This SDS cancels and replaces any preceding release.
Legend to abbreviations and acronyms used in the safety data sheet:

ACGIH: American Conference of Governmental Industrial Hygienists
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
AND: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ATE: Acute Toxicity Estimate
ATEmix: Acute toxicity Estimate (Mixtures)
BCF: Biological Concentration Factor
BEI: Biological Exposure Index
BOD: Biochemical Oxygen Demand
CAS: Chemical Abstracts Service (division of the American Chemical Society).
CAV: Poison Center
CE: European Community
CLP: Classification, Labeling, Packaging.
CMR: Carcinogenic, Mutagenic and Reprotoxic
COD: Chemical Oxygen Demand
COV: Volatile Organic Compound
CSA: Chemical Safety Assessment
CSR: Chemical Safety Report
DMEL: Derived Minimal Effect Level
DNEL: Derived No Effect Level.
DPD: Dangerous Preparations Directive
DSD: Dangerous Substances Directive
EC50: Half Maximal Effective Concentration
ECHA: European Chemicals Agency
EINECS: European Inventory of Existing Commercial Chemical Substances.
ES: Exposure Scenario
GefStoffVO: Ordinance on Hazardous Substances, Germany.
GHS: Globally Harmonized System of Classification and Labeling of Chemicals.
IARC: International Agency for Research on Cancer
IATA: International Air Transport Association.
IATA-DGR: Dangerous Goods Regulation by the "International Air Transport Association" (IATA).
IC50: half maximal inhibitory concentration
ICAO: International Civil Aviation Organization.
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO).
IMDG: International Maritime Code for Dangerous Goods.
INCI: International Nomenclature of Cosmetic Ingredients.
IRCCS: Scientific Institute for Research, Hospitalization and Health Care
KAFH: KAFH
KSt: Explosion coefficient.
LC50: Lethal concentration, for 50 percent of test population.
LD50: Lethal dose, for 50 percent of test population.
LDLo: Leathal Dose Low
N.A.: Not Applicable
N/A: Not Applicable
N/D: Not defined/ Not available
NA: Not available
NIOSH: National Institute for Occupational Safety and Health
NOAEL: No Observed Adverse Effect Level
OSHA: Occupational Safety and Health Administration.
PBT: Persistent, Bioaccumulative and Toxic
PGK: Packaging Instruction
PNEC: Predicted No Effect Concentration.
PSG: Passengers
RID: Regulation Concerning the International Transport of Dangerous Goods by Rail.
STEL: Short Term Exposure limit.
STOT: Specific Target Organ Toxicity.
TLV: Threshold Limiting Value.
TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).
vPvB: Very Persistent, Very Bioaccumulative.
WGK: German Water Hazard Class.

*** Sheet model entirely changed in compliance to regulatory update.**