

Safety Data Sheet
ULTRABOND P 990 1K

Safety Data Sheet dated: 14/06/2022 - version 3



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

1.1. Product identifier

Mixture identification:

Trade name: ULTRABOND P 990 1K

Trade code: 902444

UFI: HSC1-0087-6007-337C

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

Recommended use: Polyurethane-based adhesive

Uses advised against: Not available

1.3. Details of the supplier of the safety data sheet

Company: MAPEI S.p.A. - Via Cafiero, 22 - 20158 Milano

Tel. +(39)02376731 (office hours) - Fax: +39-02-37673.214 - www.mapei.it

Responsible: sicurezza@mapei.it

1.4. Emergency telephone number

Centro antiveleni, Azienda ospedaliera "Antonio Cardarelli", III Servizio di anestesia e rianimazione, via Antonio Cardarelli 9, Napoli - Tel. 081 5453333

Centro antiveleni, Azienda ospedaliera universitaria Careggi, U.O. Tossicologia medica, via Largo Brambilla 3, Firenze - Tel. 055 7947819

Centro antiveleni, Centro nazionale d'informazione tossicologica, IRCCS Fondazione Salvatore Maugeri Clinica del lavoro e della riabilitazione, via Salvatore Maugeri 10, Pavia - Tel. 0382 24444

Centro antiveleni, Azienda ospedaliera Niguarda Ca' Granda, piazza Ospedale Maggiore 3, Milano - Tel. 02 66101029

Centro antiveleni, Azienda ospedaliera "Papa Giovanni XXIII", Tossicologia clinica, Dipartimento di farmacia clinica e farmacologia, piazza OMS 1, Bergamo - Tel. 800 883300

Centro antiveleni Policlinico "Umberto I", PRGM tossicologia d'urgenza, viale del Policlinico 155, Roma - Tel. 06 49978000

Centro antiveleni del Policlinico "Agostino Gemelli", Servizio di tossicologia clinica, largo Agostino Gemelli 8, Roma - Tel. 06 3054343

Centro antiveleni, Azienda ospedaliera universitaria Riuniti, viale Luigi Pinto 1, Foggia - Tel. 800 183459

Centro antiveleni, Ospedale pediatrico Bambino Gesù, Dipartimento emergenza e accettazione DEA, piazza Sant'Onofrio 4, Roma - Tel. 06 68593726

Centro antiveleni dell'Azienda ospedaliera universitaria integrata (AOUI) di Verona sede di Borgo Trento, piazzale Aristide Stefani, 1 - 37126 Verona - Tel. 800 011858

SECTION 2: Hazards identification



2.1. Classification of the substance or mixture

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

Eye Dam. 1 Causes serious eye damage.

Resp. Sens. 1 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

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:

H318 Causes serious eye damage.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Precautionary statements:

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.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER.
P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
P501 Dispose of contents/container in accordance with applicable regulations.

Special Provisions:

EUH204 Contains isocyanates. May produce an allergic reaction.

Contains:

calcium oxide
diphenylmethane-4,4'-diisocyanate

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

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: ULTRABOND P 990 1K

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

Concentration (%) w/w)	Name	Ident. Numb.	Classification	Registration Number
≥5 - <10 %	calcium oxide	CAS:1305-78-8 EC:215-138-9	STOT SE 3, H335; Skin Irrit. 2, H315; Eye Dam. 1, H318	01-2119475325-36-XXXX
≥2.5 - <5 %	Benzene, mono-C10-13-alkyl derivs., distn. residues	CAS:84961-70-6 EC:284-660-7	Asp. Tox. 1, H304	01-2119485843-26-XXXX
≥0.49 - <1 %	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	01-2119457014-47-XXXX
			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	
≥0.016 - <0.025 %	phosphoric acid ... %	CAS:7664-38-2 EC:231-633-2 Index:015-011-00-6	Met. Corr. 1, H290 Eye Dam. 1, H318 Acute Tox. 4, H302 Skin Corr. 1B, H314	01-2119485924-24-XXXX
			Specific Concentration Limits: C ≥ 25%: Skin Corr. 1B H314 10% ≤ C < 25%: Skin Irrit. 2 H315 10% ≤ C < 25%: Eye Irrit. 2 H319	

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.

OBTAIN IMMEDIATE MEDICAL ATTENTION.

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose of safely.

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 ophthalmologist 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:

Remove casualty to fresh air and keep warm and at rest.

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

Eye irritation

Eye damages

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 (CO₂).

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.

Remove persons to safety.

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.

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
calcium oxide CAS: 1305-78-8	NDS			2					
	NDSch			6					
	ACGIH			2					URT irr
	National	SWEDEN		1		2,5			SWEDEN, Short-term value, 15 minutes average value
	National	FINLAND		2					
	National	NORWAY		2					NORWAY, T
	National	NORWAY		2		4			
	DFG	GERMANY	C			2			
	ACGIH			2					upper respiratory tract irritation
	National	SWEDEN		1					
	National	FRANCE		2					
	National	SPAIN		1		4			
	National	GREECE		1		4			
	National	DENMARK		1					
	National	GERMANY		1					
	National	PORTUGAL		2					
	National	BELGIUM		2					
	NDS	POLAND		2					
	NDSch	POLAND					6		
	CHE	SWITZERLAND					2		
	NDS	NETHERLANDS		1		4			
	National	CZECH REPUBLIC		1					
	National	HUNGARY		1		4			
	Malaysi a OEL	MALAYSIA		2					
	National	ESTONIA		1		4			
	National	LATVIA		1		4			
	National	CZECH REPUBLIC	C			4			
	National	SLOVAKIA		5					
	National	SLOVENIA		5		5			
	National	UNITED KINGDOM		1		4			
National	BULGARIA		1		4				
National	ROMANIA		1		4				
National	LITHUANIA		1		4				
National	CROATIA		1		4				
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		
	Malaysi a OEL		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	
phosphoric acid ... % CAS: 7664-38-2	DFG GERMANY	C			4		
	ACGIH		1		3		eye, skin and upper respiratory tract irritation
	National SWEDEN		1				
	National FRANCE		1	0,2	2	0,5	
	National SPAIN		1		2		
	National GREECE		1		3		
	National DENMARK		1				
	National FINLAND		1		2		
	National GERMANY		2				
	National PORTUGAL		1		3		
	National NORWAY		1		2		
	National BELGIUM		1		2		
	NDS POLAND		1				
	NDSch POLAND				2		
	CHE SWITZERLAND				2		
	NDS NETHERLANDS		1		2		
	National CZECH REPUBLIC		1				

National HUNGARY	1	2	
Malaysi a OEL	1		
National ESTONIA	1	2	
National LATVIA	1	2	
National CZECH REPUBLIC	C	2	
National SLOVAKIA	C	2	
National SLOVAKIA	1		
National SLOVENIA	1	2	
National UNITED KINGDOM	1	2	
National BULGARIA	1,0	2,0	
National ROMANIA	1	2	
TUR TURKEY	1	2	
National LITHUANIA	1	2	
National CROATIA	1	2	
EU	1	2	Indicative

Predicted No Effect Concentration (PNEC) values

	PNEC Limit	Exposure Route	Exposure Frequency	Remark
calcium oxide CAS: 1305-78-8	0,49 mg/l	Fresh Water		
	0,32 mg/l	Marine water		
	3 mg/l	Microorganisms in sewage treatments		
	1080 mg/kg	Soil		
Benzene, mono-C10-13- alkyl derivs., distn. residues CAS: 84961-70-6	816 mg/l	Soil		
	0,000075 mg/l	Fresh Water		
	7,5 mg/l	Marine water		
	0,001 mg/l	Intermittent release		
	1761 mg/kg	Freshwater sediments		
	1761 mg/l	Marine water sediments		
	2 mg/l	Microorganisms in sewage treatments		
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		

Derived No Effect Level. (DNEL)

	Worker Industr y	Worker Profess ional	Consu mer	Exposure Route	Exposure Frequency	Remark
calcium oxide CAS: 1305-78-8	4 mg/m3	4 mg/m3		Human Inhalation	Short Term, local effects	

	1 mg/m ³	1 mg/m ³	Human Inhalation	Long Term, local effects
Benzene, mono-C10-13-alkyl derivs., distn. residues CAS: 84961-70-6	96 mg/kg		Human Dermal	Long Term, systemic effects
diphenylmethane-4,4'-diisocyanate CAS: 101-68-8	50 mg/kg		Human Dermal	Short Term, systemic effects
	0,1 mg/m ³		Human Inhalation	Short Term, systemic effects
	0,1 mg/m ³		Human Inhalation	Short Term, local effects
	0,05 mg/m ³		Human Inhalation	Long Term, systemic effects
	0,05 mg/m ³		Human Inhalation	Long Term, local effects
		25 mg/kg	Human Dermal	Short Term, systemic effects
		0,05 mg/m ³	Human Inhalation	Short Term, systemic effects
		20 mg/kg	Human Oral	Short Term, systemic effects
		0,05 mg/m ³	Human Inhalation	Short Term, local effects
		0,025 mg/m ³	Human Inhalation	Long Term, systemic effects
		0,025 mg/m ³	Human Inhalation	Long Term, local effects
	28,7 mg/cm ²	17,2 mg/cm ²	Human Dermal	Short Term, local effects
phosphoric acid ... % CAS: 7664-38-2	2 mg/m ³		Human Inhalation	Short Term, local effects
	1 mg/m ³	0,36 mg/m ³	Human Inhalation	Long Term, local effects
	10,7 mg/m ³	4,57 mg/m ³	Human Inhalation	Long Term, systemic effects
		0,1 mg/kg	Human Dermal	Long Term, systemic 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 $\geq 0,5\text{mm}$; breakthrough time $\geq 480\text{min}$.

Nitrile rubber - NBR: thickness $\geq 0,35\text{mm}$; breakthrough time $\geq 480\text{min}$.

Butyl rubber - IIR: thickness $\geq 0,5\text{mm}$; breakthrough time $\geq 480\text{min}$.

Fluorinated rubber - FKM: thickness $\geq 0,4\text{mm}$; breakthrough time $\geq 480\text{min}$.

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 respiratory protection where ventilation is insufficient or exposure is prolonged.

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: paste

Color: beige or brown

Odour: Characteristic

Odour threshold: Not available

Melting point / freezing point: Not available

Initial boiling point and boiling range: Not available

Flammability: N.A.

Upper/lower flammability or explosive limits: Not available

Flash point: 100 °C (212 °F)

Auto-ignition temperature: Not available

Decomposition temperature: Not available

pH: Not available

Viscosity: 32,000.00 cPs

Kinematic viscosity: Not available

Solubility in water: Insoluble

Solubility in oil: partly soluble

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

Vapour pressure: Not available

Relative density: 1.50 g/cm³

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 | Not classified |
| | Based on available data, the classification criteria are not met |
| c) serious eye damage/irritation | The product is classified: Eye Dam. 1(H318) |
| d) respiratory or skin sensitisation | The product is classified: Resp. Sens. 1(H334) |
| e) germ cell mutagenicity | Not classified |

		Based on available data, the classification criteria are not met
f) carcinogenicity		Not classified
		Based on available data, the classification criteria are not met
g) reproductive toxicity		Not classified
		Based on available data, the classification criteria are not met
h) STOT-single exposure		Not classified
		Based on available data, the classification criteria are not met
i) STOT-repeated exposure		Not classified
		Based on available data, the classification criteria are not met
j) aspiration hazard		Not classified
		Based on available data, the classification criteria are not met

Toxicological information on main components of the mixture:

calcium oxide	a) acute toxicity	LD50 Oral Rat > 2000 mg/kg LD50 Skin Rat > 2500 mg/kg	
Benzene, mono-C10-13-alkyl derivs., distn. residues	a) acute toxicity	LD50 Oral Rat > 2000 mg/kg LD50 Skin Rat > 2000 mg/kg	
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/m ³	2 y
	g) reproductive toxicity	NOAEL Inhalation Rat = 12, mg/m ³	20 d
phosphoric acid ... %	a) acute toxicity	LD50 Skin Rabbit > 2000, mg/kg LC50 Inhalation Rat > 3800, mg/m ³ 1h LD50 Oral Rat = 2600, mg/kg	

11.2 Information on other hazards

Endocrine disrupting properties:

No endocrine disruptor substances present in concentration $\geq 0.1\%$

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
calcium oxide	CAS: 1305-78-8 - EINECS: 215-138-9	a) Aquatic acute toxicity : LC50 Fish = 457 mg/L 96 a) Aquatic acute toxicity : EC50 Daphnia = 49,1 mg/L 48 b) Aquatic chronic toxicity : NOEC Daphnia = 32 mg/L - 14 d a) Aquatic acute toxicity : LC50 Fish = 50,6 mg/L 96 a) Aquatic acute toxicity : LC50 Daphnia = 158 mg/L 96 a) Aquatic acute toxicity : EC50 Algae = 184,57 mg/L 72

		b) Aquatic chronic toxicity : NOEC Algae = 48 mg/L 72
		a) Aquatic acute toxicity : LC50 Fish Cyprinus carpio = 1070 mg/L 96h IUCLID
Benzene, mono-C10-13-alkyl derivs., distn. residues	CAS: 84961-70-6 - EINECS: 284-660-7	a) Aquatic acute toxicity : EC50 Algae > 10 mg/L 72h
		a) Aquatic acute toxicity : LC50 Fish > 10000 mg/L 96h
		a) Aquatic acute toxicity : EC50 Daphnia > 1,4 mg/L 48h
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
phosphoric acid ... %	CAS: 7664-38-2 - EINECS: 231-633-2 - INDEX: 015-011-00-6	a) Aquatic acute toxicity : EC50 Daphnia > 100 mg/L 48h

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 $\geq 0.1\%$.

12.6 Endocrine disrupting properties

No endocrine disruptor substances present in concentration $\geq 0.1\%$

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) :

ADR-Hazard identification number: NA

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: 56, 74, 75

SVHC Substances:

SVHC substances not present in a concentration $\geq 0.1\%$ (w/w)

National regulations

Produktregisteret Norge: 110189

Produktregistret Sverige: 658598-8

Produktregister Danmark: 2422734

German Water Hazard Class (WGK)

Class 1: slightly 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
H290	May be corrosive to metals.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
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.
H351	Suspected of causing cancer.
H373	May cause damage to organs through prolonged or repeated exposure if inhaled.

Code	Hazard class and hazard category	Description
2.16/1	Met. Corr. 1	Substance or mixture corrosive to metals, Category 1
3.1/4/Inhal	Acute Tox. 4	Acute toxicity (inhalation), Category 4
3.1/4/Oral	Acute Tox. 4	Acute toxicity (oral), Category 4
3.10/1	Asp. Tox. 1	Aspiration hazard, Category 1
3.2/1B	Skin Corr. 1B	Skin corrosion, Category 1B
3.2/2	Skin Irrit. 2	Skin irritation, Category 2
3.3/1	Eye Dam. 1	Serious eye damage, Category 1
3.3/2	Eye Irrit. 2	Eye irritation, Category 2
3.4.1/1	Resp. Sens. 1	Respiratory Sensitisation, Category 1
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 according to Regulation (EC) Nr. 1272/2008	Classification procedure
3.3/1	Calculation method
3.4.1/1	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.**