



Safety Data Sheet according to (EC) No 1907/2006 as amended

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TEROSON PU 8519 P

SDS No. : 284600
V020.1

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

1.1. Product identifier

TEROSON PU 8519 P

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

Intended use:

Direct Glazing Adhesive

1.3. Details of the supplier of the safety data sheet

Henkel AG & Co. KGaA

Henkelstr. 67

40589 Düsseldorf

Germany

Phone: +49 211 797 0

SDSinfo.Adhesive@henkel.com

For Safety Data Sheet updates please visit our website <https://mysds.henkel.com/index.html#/appSelection> or www.henkel-adhesives.com.

1.4. Emergency telephone number

The Henkel information service also provides an around-the-clock telephone service on phone no.+49-(0)211-797-3350 for exceptional cases.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (CLP):

Flammable liquids

Category 2

H225 Highly flammable liquid and vapour.

Serious eye irritation

Category 2

H319 Causes serious eye irritation.

Specific target organ toxicity - single exposure

Category 3

H336 May cause drowsiness or dizziness.

Target organ: Central nervous system

2.2. Label elements

Label elements (CLP):

Hazard pictogram:



Contains

Butanone

Ethyl acetate

Signal word: Danger

Hazard statement: H225 Highly flammable liquid and vapour.
H319 Causes serious eye irritation.
H336 May cause drowsiness or dizziness.

Supplemental information EUH066 Repeated exposure may cause skin dryness or cracking.
Contains isocyanates. May produce an allergic reaction.

Precautionary statement: P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.
Prevention No smoking.
P261 Avoid breathing vapors.
P280 Wear protective gloves/eye protection.

Precautionary statement: P370+P378 In case of fire: Use CO₂, dry chemical, or foam for extinction.
Response

2.3. Other hazards

Solvents contained in the product evaporate during processing and their vapors can form explosive/highly inflammable air/vapor mixtures.

The solvent vapors are heavier than air and may collect in high concentrations at floor level.

Following substances are present in a concentration \geq the concentration limit for depiction in Section 3 and fulfill the criteria for PBT/vPvB, or were identified as endocrine disruptor (ED):

This mixture does not contain any substances in a concentration \geq the concentration limit for depiction in Section 3 that are assessed to be a PBT, vPvB or ED.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Declaration of the ingredients according to CLP (EC) No 1272/2008:

Hazardous components CAS-No. EC Number REACH-Reg No.	Concentration	Classification	Specific Conc. Limits, M- factors and ATEs	Add. Information
Butanone 78-93-3 201-159-0 01-2119457290-43	20- 40 %	STOT SE 3, H336 Eye Irrit. 2, H319 Flam. Liq. 2, H225		EU OEL
Ethyl acetate 141-78-6 205-500-4 01-2119475103-46	20- 40 %	Flam. Liq. 2, H225 STOT SE 3, H336 Eye Irrit. 2, H319		EU OEL
n-butyl acetate 123-86-4 204-658-1 01-2119485493-29	5- < 10 %	Flam. Liq. 3, H226 STOT SE 3, H336		EU OEL
Phenol, 4-isocyanato-, phosphorothioat 4151-51-3 223-981-9 01-2119948848-16	1- < 5 %	Acute Tox. 4, Oral, H302	oral:ATE = 676 mg/kg inhalation:ATE = 5,7211 mg/l;	
1,3-Diisocyanatomethylbenzene homopolymer 9017-01-0 01-2119950331-47	0,1- < 1 %	Skin Sens. 1, H317		
2,4-Toluene diisocyanate, homopolymer 26006-20-2	0,1- < 1 %	Skin Sens. 1, H317 Acute Tox. 4, Inhalation, H332 Eye Irrit. 2, H319	dermal:ATE = > 5.000 mg/kg	
Acrylic acid 79-10-7 201-177-9 01-2119452449-31	0,1- < 1 %	Acute Tox. 4, Dermal, H312 Skin Corr. 1A, H314 Flam. Liq. 3, H226 Acute Tox. 4, Oral, H302 Acute Tox. 4, Inhalation, H332 Aquatic Acute 1, H400 Aquatic Chronic 2, H411 STOT SE 3, H335 Eye Dam. 1, H318	STOT SE 3; H335; C >= 1 % ===== M acute = 1 ===== dermal:ATE = 1.100 mg/kg inhalation:ATE = 11 mg/l; vapour	EU OEL
4-isocyanatosulphonyltoluene 4083-64-1 223-810-8 01-2119980050-47	0,1- < 1 %	Eye Irrit. 2, H319 STOT SE 3, H335 Skin Irrit. 2, H315 Resp. Sens. 1, H334	Eye Irrit. 2; H319; C >= 5 % STOT SE 3; H335; C >= 5 % Skin Irrit. 2; H315; C >= 5 %	

If no ATE values are displayed, please refer to LD/LC50 values in Section 11.

For full text of the H - statements and other abbreviations see section 16 "Other information".

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:

Move to fresh air, consult doctor if complaint persists.

Skin contact:

Rinse with running water and soap. Apply replenishing cream. Change all contaminated clothing. If necessary, see a dermatologist.

Eye contact:

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Ingestion:

Rinse mouth, drink 1-2 glasses of water, do not induce vomiting, consult a doctor.

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

EYE: Irritation, conjunctivitis.

An allergic reaction cannot be excluded after repeated skin contact.

Repeated exposure may cause skin dryness or cracking.

Vapors may cause drowsiness and dizziness.

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

See section: Description of first aid measures

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Carbon dioxide, foam, powder

Extinguishing media which must not be used for safety reasons:

Water jet (solvent-containing product).

5.2. Special hazards arising from the substance or mixture

In case of fire toxic gases can be released.

5.3. Advice for firefighters

Wear self-contained breathing apparatus.

Wear protective equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective equipment.

Avoid contact with skin and eyes.

Keep unprotected persons away.

Danger of slipping on spilled product.

6.2. Environmental precautions

Do not empty into drains / surface water / ground water.

6.3. Methods and material for containment and cleaning up

Remove with liquid-absorbing material (sand, peat, sawdust).

Dispose of contaminated material as waste according to Section 13.

6.4. Reference to other sections

See advice in section 8

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Avoid open flames and sources of ignition.
- Use explosion proof electric equipment.
- Use only non-sparking tools.
- Ground/bond container and receiving equipment.
- Take precautionary measures against static discharge.

Hygiene measures:

- Wash hands before work breaks and after finishing work.
- Do not eat, drink or smoke while working.

7.2. Conditions for safe storage, including any incompatibilities

- Ensure good ventilation/extraction.
- Storage at 5 to 25°C is recommended.
- Keep container in a well ventilated place.

7.3. Specific end use(s)

Direct Glazing Adhesive

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure Limits

Valid for
Germany

Ingredient [Regulated substance]	ppm	mg/m ³	Value type	Short term exposure limit category / Remarks	Regulatory list
Butanone 78-93-3 [BUTANONE]	200	600	Time Weighted Average (TWA):	Indicative	ECLTV
Butanone 78-93-3 [BUTANONE]	300	900	Short Term Exposure Limit (STEL):	Indicative	ECLTV
Butanone 78-93-3			Skin designation:	Can be absorbed through the skin.	TRGS 900
Butanone 78-93-3	200	600	Exposure limit(s):	1 If the AGW and BGW values are complied with, there should be no risk of reproductive damage (see Number 2.7).	TRGS 900
Butanone 78-93-3			Short Term Exposure Classification:	Category I: substances for which the localized effect has an assigned OEL or for substances with a sensitizing effect in respiratory passages.	TRGS 900
Ethyl acetate 141-78-6 [ETHYL ACETATE]	200	734	Time Weighted Average (TWA):	Indicative	ECLTV
Ethyl acetate 141-78-6 [ETHYL ACETATE]	400	1.468	Short Term Exposure Limit (STEL):	Indicative	ECLTV
Ethyl acetate 141-78-6			Short Term Exposure Classification:	Category I: substances for which the localized effect has an assigned OEL or for substances with a sensitizing effect in respiratory passages.	TRGS 900
Ethyl acetate 141-78-6	200	730	Exposure limit(s):	2 If the AGW and BGW values are complied with, there should be no risk of reproductive damage (see Number 2.7).	TRGS 900
Carbon black 1333-86-4		1,25	Exposure limit(s):	If the AGW and BGW values are complied with, there should be no risk of reproductive damage (see Number 2.7).	TRGS 900
Carbon black 1333-86-4		10	Exposure limit(s):	2 If the AGW and BGW values are complied with, there should be no risk of reproductive damage (see Number 2.7).	TRGS 900
Carbon black 1333-86-4			Short Term Exposure Classification:	Category II: substances with a resorptive effect.	TRGS 900
n-Butyl acetate 123-86-4	62	300	Exposure limit(s):	2 If the AGW and BGW values are complied with, there should be no risk of reproductive damage (see Number 2.7).	TRGS 900
n-Butyl acetate 123-86-4			Short Term Exposure Classification:	Category II: substances with a resorptive effect.	TRGS 900
n-Butyl acetate 123-86-4 [N-BUTYL ACETATE]	150	723	Short Term Exposure Limit (STEL):	Indicative	ECLTV

n-Butyl acetate 123-86-4 [N-BUTYL ACETATE]	50	241	Time Weighted Average (TWA):	Indicative	ECLTV
Acrylic acid 79-10-7 [ACRYLIC ACID (PROP-2-ENOIC ACID)]	10	29	Time Weighted Average (TWA):	Indicative	ECLTV
Acrylic acid 79-10-7 [ACRYLIC ACID (PROP-2-ENOIC ACID)]	20	59	Short Term Exposure Limit (STEL):	Indicative	ECLTV
Acrylic acid 79-10-7	10	30	Exposure limit(s):	1 If the AGW and BGW values are complied with, there should be no risk of reproductive damage (see Number 2.7).	TRGS 900
Acrylic acid 79-10-7			Short Term Exposure Classification:	Category I: substances for which the localized effect has an assigned OEL or for substances with a sensitizing effect in respiratory passages.	TRGS 900

Predicted No-Effect Concentration (PNEC):

Name on list	Environmental Compartment	Exposure period	Value				Remarks
			mg/l	ppm	mg/kg	others	
Butanone 78-93-3	aqua (freshwater)		55,8 mg/l				
Butanone 78-93-3	aqua (marine water)		55,8 mg/l				
Butanone 78-93-3	aqua (intermittent releases)		55,8 mg/l				
Butanone 78-93-3	sewage treatment plant (STP)		709 mg/l				
Butanone 78-93-3	sediment (freshwater)				284,74 mg/kg		
Butanone 78-93-3	sediment (marine water)				284,7 mg/kg		
Butanone 78-93-3	Soil				22,5 mg/kg		
Butanone 78-93-3	oral				1000 mg/kg		
Ethyl acetate 141-78-6	aqua (freshwater)		0,24 mg/l				
Ethyl acetate 141-78-6	aqua (marine water)		0,024 mg/l				
Ethyl acetate 141-78-6	aqua (intermittent releases)		1,65 mg/l				
Ethyl acetate 141-78-6	sewage treatment plant (STP)		650 mg/l				
Ethyl acetate 141-78-6	sediment (freshwater)				1,15 mg/kg		
Ethyl acetate 141-78-6	sediment (marine water)				0,115 mg/kg		
Ethyl acetate 141-78-6	Air						no hazard identified
Ethyl acetate 141-78-6	Soil				0,148 mg/kg		
Ethyl acetate 141-78-6	oral				200 mg/kg		
n-Butyl acetate 123-86-4	aqua (freshwater)		0,18 mg/l				
n-Butyl acetate 123-86-4	aqua (marine water)		0,018 mg/l				
n-Butyl acetate 123-86-4	aqua (intermittent releases)		0,36 mg/l				
n-Butyl acetate 123-86-4	sewage treatment plant (STP)		35,6 mg/l				
n-Butyl acetate 123-86-4	sediment (freshwater)				0,981 mg/kg		
n-Butyl acetate 123-86-4	sediment (marine water)				0,0981 mg/kg		
n-Butyl acetate 123-86-4	Soil				0,0903 mg/kg		
n-Butyl acetate 123-86-4	Air						no hazard identified
n-Butyl acetate 123-86-4	Predator						no potential for bioaccumulation
Tris(p-isocyanatophenyl) thiophosphate 4151-51-3	aqua (freshwater)		0,1 mg/l				
Tris(p-isocyanatophenyl) thiophosphate 4151-51-3	aqua (marine water)		0,01 mg/l				
Tris(p-isocyanatophenyl) thiophosphate 4151-51-3	aqua (intermittent releases)		1 mg/l				
Tris(p-isocyanatophenyl) thiophosphate	sewage		100 mg/l				

4151-51-3	treatment plant (STP)						
Tris(p-isocyanatophenyl) thiophosphate 4151-51-3	sediment (freshwater)				2557 mg/kg		
Tris(p-isocyanatophenyl) thiophosphate 4151-51-3	sediment (marine water)				155 mg/kg		
Tris(p-isocyanatophenyl) thiophosphate 4151-51-3	Soil				510 mg/kg		
1,3-Diisocyanatomethylbenzene homopolymer 9017-01-0	aqua (freshwater)		0,1 mg/l				
1,3-Diisocyanatomethylbenzene homopolymer 9017-01-0	aqua (marine water)		0,01 mg/l				
1,3-Diisocyanatomethylbenzene homopolymer 9017-01-0	aqua (intermittent releases)		0,1 mg/l				
1,3-Diisocyanatomethylbenzene homopolymer 9017-01-0	sewage treatment plant (STP)		0,1 mg/l				
1,3-Diisocyanatomethylbenzene homopolymer 9017-01-0	sediment (freshwater)				3302 mg/kg		
1,3-Diisocyanatomethylbenzene homopolymer 9017-01-0	sediment (marine water)				330 mg/kg		
1,3-Diisocyanatomethylbenzene homopolymer 9017-01-0	Soil				658 mg/kg		
Acrylic acid 79-10-7	aqua (freshwater)		0,003 mg/l				
Acrylic acid 79-10-7	aqua (marine water)		0,0003 mg/l				
Acrylic acid 79-10-7	sewage treatment plant (STP)		0,9 mg/l				
Acrylic acid 79-10-7	sediment (freshwater)				0,0236 mg/kg		
Acrylic acid 79-10-7	sediment (marine water)				0,00236 mg/kg		
Acrylic acid 79-10-7	Soil				1 mg/kg		
Acrylic acid 79-10-7	oral				0,03 g/kg		
Acrylic acid 79-10-7	Air						no hazard identified
p-Toluenesulphonyl isocyanate 4083-64-1	aqua (freshwater)		0,03 mg/l				
p-Toluenesulphonyl isocyanate 4083-64-1	aqua (marine water)		0,003 mg/l				
p-Toluenesulphonyl isocyanate 4083-64-1	sewage treatment plant (STP)		0,4 mg/l				
p-Toluenesulphonyl isocyanate 4083-64-1	sediment (freshwater)				0,172 mg/kg		
p-Toluenesulphonyl isocyanate 4083-64-1	sediment (marine water)				0,017 mg/kg		
p-Toluenesulphonyl isocyanate 4083-64-1	Soil				0,017 mg/kg		

Derived No-Effect Level (DNEL):

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
Butanone 78-93-3	Workers	dermal	Long term exposure - systemic effects		1161 mg/kg	
Butanone 78-93-3	Workers	inhalation	Long term exposure - systemic effects		600 mg/m3	
Butanone 78-93-3	General population	dermal	Long term exposure - systemic effects		412 mg/kg	
Butanone 78-93-3	General population	inhalation	Long term exposure - systemic effects		106 mg/m3	
Butanone 78-93-3	General population	oral	Long term exposure - systemic effects		31 mg/kg	
Ethyl acetate 141-78-6	Workers	inhalation	Acute/short term exposure - systemic effects		1468 mg/m3	no hazard identified
Ethyl acetate 141-78-6	Workers	inhalation	Acute/short term exposure - local effects		1468 mg/m3	no hazard identified
Ethyl acetate 141-78-6	Workers	dermal	Long term exposure - systemic effects		63 mg/kg	no hazard identified
Ethyl acetate 141-78-6	Workers	inhalation	Long term exposure - systemic effects		734 mg/m3	no hazard identified
Ethyl acetate 141-78-6	Workers	inhalation	Long term exposure - local effects		734 mg/m3	no hazard identified
Ethyl acetate 141-78-6	General population	Inhalation	Acute/short term exposure - systemic effects		734 mg/m3	no hazard identified
Ethyl acetate 141-78-6	General population	inhalation	Acute/short term exposure - local effects		734 mg/m3	no hazard identified
Ethyl acetate 141-78-6	General population	dermal	Long term exposure - systemic effects		37 mg/kg	no hazard identified
Ethyl acetate 141-78-6	General population	inhalation	Long term exposure - systemic effects		367 mg/m3	no hazard identified
Ethyl acetate 141-78-6	General population	oral	Long term exposure - systemic effects		4,5 mg/kg	no hazard identified
Ethyl acetate 141-78-6	General population	inhalation	Long term exposure - local effects		367 mg/m3	no hazard identified
n-Butyl acetate 123-86-4	Workers	inhalation	Long term exposure - systemic effects		300 mg/m3	no hazard identified
n-Butyl acetate 123-86-4	Workers	inhalation	Acute/short term exposure - systemic effects		600 mg/m3	no hazard identified
n-Butyl acetate 123-86-4	Workers	inhalation	Long term exposure - local effects		300 mg/m3	no hazard identified
n-Butyl acetate 123-86-4	Workers	inhalation	Acute/short term exposure - local effects		600 mg/m3	no hazard identified
n-Butyl acetate 123-86-4	Workers	dermal	Long term exposure - systemic effects		11 mg/kg	no hazard identified
n-Butyl acetate 123-86-4	Workers	dermal	Acute/short term exposure - systemic effects		11 mg/kg	no hazard identified
n-Butyl acetate 123-86-4	General population	inhalation	Long term exposure -		35,7 mg/m3	no hazard identified

			systemic effects			
n-Butyl acetate 123-86-4	General population	inhalation	Acute/short term exposure - systemic effects		300 mg/m ³	no hazard identified
n-Butyl acetate 123-86-4	General population	inhalation	Acute/short term exposure - local effects		300 mg/m ³	no hazard identified
n-Butyl acetate 123-86-4	General population	dermal	Long term exposure - systemic effects		6 mg/kg	no hazard identified
n-Butyl acetate 123-86-4	General population	dermal	Acute/short term exposure - systemic effects		6 mg/kg	no hazard identified
n-Butyl acetate 123-86-4	General population	oral	Long term exposure - systemic effects		2 mg/kg	no hazard identified
n-Butyl acetate 123-86-4	General population	oral	Acute/short term exposure - systemic effects		2 mg/kg	no hazard identified
n-Butyl acetate 123-86-4	General population	inhalation	Long term exposure - local effects		35,7 mg/m ³	no hazard identified
Tris(p-isocyanatophenyl) thiophosphate 4151-51-3	Workers	inhalation	Long term exposure - local effects		0,047 mg/m ³	
1,3-Diisocyanatomethylbenzene homopolymer 9017-01-0	Workers	inhalation	Long term exposure - local effects		0,345 mg/m ³	
Acrylic acid 79-10-7	Workers	inhalation	Long term exposure - local effects		30 mg/m ³	no hazard identified
Acrylic acid 79-10-7	Workers	inhalation	Acute/short term exposure - local effects		30 mg/m ³	no hazard identified
Acrylic acid 79-10-7	Workers	dermal	Acute/short term exposure - local effects		1 mg/cm ²	no hazard identified
Acrylic acid 79-10-7	General population	dermal	Acute/short term exposure - local effects		1 mg/cm ²	no hazard identified
Acrylic acid 79-10-7	General population	inhalation	Acute/short term exposure - local effects		3,6 mg/m ³	no hazard identified
Acrylic acid 79-10-7	General population	inhalation	Long term exposure - local effects		3,6 mg/m ³	no hazard identified
p-Toluenesulphonyl isocyanate 4083-64-1	Workers	inhalation	Long term exposure - systemic effects		3,24 mg/m ³	
p-Toluenesulphonyl isocyanate 4083-64-1	Workers	dermal	Long term exposure - systemic effects		0,92 mg/kg	
p-Toluenesulphonyl isocyanate 4083-64-1	General population	inhalation	Long term exposure - systemic effects		0,8 mg/m ³	
p-Toluenesulphonyl isocyanate 4083-64-1	General population	dermal	Long term exposure - systemic effects		0,46 mg/kg	
p-Toluenesulphonyl isocyanate 4083-64-1	General population	oral	Long term exposure - systemic effects		0,46 mg/kg	

Biological Exposure Indices:

Ingredient [Regulated substance]	Parameters	Biological specimen	Sampling time	Conc.	Basis of biol. exposure index	Remark	Additional Information
Butanone 78-93-3 [2-Butanone; Methylethylketone]	2-butanone	Urine	Sampling time: End of shift.	2 mg/l	DE BGW		

8.2. Exposure controls:

Engineering controls:
Use only in well ventilated areas.

Respiratory protection:
In case of aerosol formation, we recommend wearing of appropriate respiratory protection equipment with ABEK P2 filter (EN 14387).
This recommendation should be matched to local conditions.

Hand protection:
Chemical-resistant protective gloves (EN 374). Suitable materials for short-term contact or splashes (recommended: at least protection index 2, corresponding to > 30 minutes permeation time as per EN 374): Isobutylene-isoprene rubber (IIR; ≥ 0.7 mm thickness) Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374): Isobutylene-isoprene rubber (IIR; ≥ 0.7 mm thickness) This information is based on literature references and on information provided by glove manufacturers, or is derived by analogy with similar substances. Please note that in practice the working life of chemical-resistant protective gloves may be considerably shorter than the permeation time determined in accordance with EN 374 as a result of the many influencing factors (e.g. temperature). If signs of wear and tear are noticed then the gloves should be replaced.

Eye protection:
Goggles which can be tightly sealed.
Protective eye equipment should conform to EN166.

Skin protection:
Wear protective equipment.
Protective clothing that covers arms and legs.
Protective clothing should conform to EN 14605 for liquid splashes or to EN 13982 for dusts.

Advices to personal protection equipment:
Use only personal protection that's CE-labelled according to Directive 89/686/EEC (Europe) or to Regulation No. 819 of 19 August 1994 (Norway), or equivalent.
The information provided on personal protective equipment is for guidance purposes only. A full risk assessment should be conducted prior to using this product to determine the appropriate personal protective equipment to suit local conditions.
Personal protective equipment should conform to the relevant EN standard.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Delivery form	liquid
Colour	black
Odor	Of ester and keton
Physical state	liquid
Melting point	Not applicable, Product is a liquid
Solidification temperature	< -50 °C (< -58 °F)
Initial boiling point	80 °C (176 °F)no method / method unknown
Flammability	Currently under determination
Explosive limits	
lower	0,82 %(V); Upper explosion limit not applicable for safe processing practices.
Flash point	-5,5 °C (22.1 °F); ASTM D3278 Setaflash Closed Cup
Auto-ignition temperature	> 300 °C (> 572 °F)
Decomposition temperature	Not applicable, Substance/mixture is not self-reactive, no organic peroxide and does not decompose under foreseen conditions of use
pH	Not applicable, Product reacts with water.

Viscosity (kinematic) (20 °C (68 °F);)	11 mm ² /s
Viscosity, dynamic (Physica Rheolab; Instrument: Physica Rheolab; 23,0 °C (73.4 °F))	5 - 14 mPa.s Viscosity Physica; HT-Method
Solubility (qualitative) (20 °C (68 °F); Solvent: Water)	Partially miscible
Partition coefficient: n-octanol/water	Not applicable Mixture
Vapour pressure (55 °C (131 °F))	470 mbar;no method / method unknown
Vapour pressure (20 °C (68 °F))	94 hPa
Vapour pressure (50 °C (122 °F))	360 hPa
Density (20,0 °C (68 °F))	0,98 g/cm ³ calculated
Relative vapour density:	Not available.
Particle characteristics	Not applicable Product is a liquid

9.2. Other information

Other information not applicable for this product

SECTION 10: Stability and reactivity

10.1. Reactivity

Reaction with water, alcohols, amines.

Reacts with water: Pressure built up in closed vessel (CO₂).

Oxidizers.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

See section reactivity

10.4. Conditions to avoid

Humidity

Heat, flames, sparks and other sources of ignition.

10.5. Incompatible materials

See section reactivity.

10.6. Hazardous decomposition products

At higher temperatures isocyanate may be released.

Carbon dioxide is generated under contact with moisture, leading to pressure in the cans. Danger of cans bursting!

SECTION 11: Toxicological information**General toxicological information:**

An allergic reaction cannot be excluded after repeated skin contact.

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**Acute oral toxicity:**

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Species	Method
Butanone 78-93-3	LD50	2.737 mg/kg	rat	not specified
Ethyl acetate 141-78-6	LD50	6.100 mg/kg	rat	not specified
n-butyl acetate 123-86-4	LD50	10.760 mg/kg	rat	OECD Guideline 423 (Acute Oral toxicity)
Phenol, 4-isocyanato-, phosphorothioat 4151-51-3	LD50	> 675 mg/kg	rat	OECD Guideline 423 (Acute Oral toxicity)
Phenol, 4-isocyanato-, phosphorothioat 4151-51-3	Acute toxicity estimate (ATE)	676 mg/kg		Expert judgement
1,3-Diisocyanatomethylbenzene homopolymer 9017-01-0	LD50	> 2.000 mg/kg	rat	OECD Guideline 423 (Acute Oral toxicity)
2,4-Toluene diisocyanate, homopolymer 26006-20-2	LD50	> 5.000 mg/kg	rat	not specified
Acrylic acid 79-10-7	LD50	1.500 mg/kg	rat	equivalent or similar to OECD Guideline 401 (Acute Oral Toxicity)
4-isocyanatosulphonyltoluene 4083-64-1	LD50	2.330 mg/kg	rat	equivalent or similar to OECD Guideline 401 (Acute Oral Toxicity)

Acute dermal toxicity:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Species	Method
Butanone 78-93-3	LD50	> 6.400 mg/kg	rabbit	not specified
Ethyl acetate 141-78-6	LD50	> 20.000 mg/kg	rabbit	Draize Test
n-butyl acetate 123-86-4	LD50	> 14.112 mg/kg	rabbit	OECD Guideline 402 (Acute Dermal Toxicity)
2,4-Toluene diisocyanate, homopolymer 26006-20-2	Acute toxicity estimate (ATE)	> 5.000 mg/kg		Expert judgement
Acrylic acid 79-10-7	Acute toxicity estimate (ATE)	1.100 mg/kg		Expert judgement
4-isocyanatosulphonyltoluene 4083-64-1	LD50	> 2.000 mg/kg	rat	OECD Guideline 402 (Acute Dermal Toxicity)

Acute inhalative toxicity:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Test atmosphere	Exposure time	Species	Method
Butanone 78-93-3	LC50	34,5 mg/l	vapour	4 h	rat	not specified
Ethyl acetate 141-78-6	LC0	> 22,5 mg/l	dust/mist	6 h	rat	other guideline:
Ethyl acetate 141-78-6	LC50	> 22,5 mg/l	dust/mist	6 h	rat	other guideline:
n-butyl acetate 123-86-4	LC50	> 23,4 mg/l	mist	4 h	rat	OECD Guideline 403 (Acute Inhalation Toxicity)
Phenol, 4-isocyanato-, phosphorothioat 4151-51-3	LC50	> 5,721 mg/l	dust/mist	4 h	rat	OECD Guideline 403 (Acute Inhalation Toxicity)
Phenol, 4-isocyanato-, phosphorothioat 4151-51-3	Acute toxicity estimate (ATE)	5,7211 mg/l				Expert judgement
2,4-Toluene diisocyanate, homopolymer 26006-20-2	LC50	3,665 mg/l	dust/mist	4 h	rat	not specified
Acrylic acid 79-10-7	LC0	5,1 mg/l	vapour	4 h	rat	equivalent or similar to OECD Guideline 403 (Acute Inhalation Toxicity)
Acrylic acid 79-10-7	Acute toxicity estimate (ATE)	11 mg/l	vapour			Expert judgement

Skin corrosion/irritation:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result	Exposure time	Species	Method
Butanone 78-93-3	not irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
Ethyl acetate 141-78-6	slightly irritating	24 h	rabbit	equivalent or similar to OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
n-butyl acetate 123-86-4	not irritating		rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
Phenol, 4-isocyanato-, phosphorothioat 4151-51-3	not irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
1,3- Diisocyanatomethylbenze ne homopolymer 9017-01-0	slightly irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
2,4-Toluene diisocyanate, homopolymer 26006-20-2	slightly irritating	4 h	rabbit	not specified
Acrylic acid 79-10-7	Category 1 (corrosive)	3 min	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

Serious eye damage/irritation:

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result	Exposure time	Species	Method
Butanone 78-93-3	irritating		rabbit	equivalent or similar to OECD Guideline 405 (Acute Eye Irritation / Corrosion)
Ethyl acetate 141-78-6	slightly irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
n-butyl acetate 123-86-4	not irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
Phenol, 4-isocyanato-, phosphorothioat 4151-51-3	not irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
1,3- Diisocyanatomethylbenze ne homopolymer 9017-01-0	slightly irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
2,4-Toluene diisocyanate, homopolymer 26006-20-2	irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
Acrylic acid 79-10-7	Category 1 (irreversible effects on the eye)		rabbit	BASF Test

Respiratory or skin sensitization:

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result	Test type	Species	Method
Butanone 78-93-3	not sensitising	Buehler test	guinea pig	equivalent or similar to OECD Guideline 406 (Skin Sensitisation)
Ethyl acetate 141-78-6	not sensitising	Guinea pig maximisation test	guinea pig	OECD Guideline 406 (Skin Sensitisation)
n-butyl acetate 123-86-4	not sensitising	Guinea pig maximisation test	guinea pig	not specified
Phenol, 4-isocyanato-, phosphorothioat 4151-51-3	not sensitising	Buehler test	guinea pig	OECD Guideline 406 (Skin Sensitisation)
1,3- Diisocyanatomethylbenze ne homopolymer 9017-01-0	sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
Acrylic acid 79-10-7	not sensitising	Freund's complete adjuvant test	guinea pig	Klecak Method
Acrylic acid 79-10-7	not sensitising	Split adjuvant test	guinea pig	Maguire Method

Germ cell mutagenicity:

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
Butanone 78-93-3	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		equivalent or similar to OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Butanone 78-93-3	negative	in vitro mammalian chromosome aberration test	not applicable		equivalent or similar to OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
Butanone 78-93-3	negative	mammalian cell gene mutation assay	with and without		equivalent or similar to OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
Ethyl acetate 141-78-6	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		equivalent or similar to OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Ethyl acetate 141-78-6	negative	in vitro mammalian chromosome aberration test	with and without		equivalent or similar to OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
n-butyl acetate 123-86-4	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
n-butyl acetate 123-86-4	negative	mammalian cell gene mutation assay	with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
1,3- Diisocyanatomethylbenze ne homopolymer 9017-01-0	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
1,3- Diisocyanatomethylbenze ne homopolymer 9017-01-0	negative	in vitro mammalian chromosome aberration test	with and without		OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
1,3- Diisocyanatomethylbenze ne homopolymer 9017-01-0	negative	mammalian cell gene mutation assay	with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
Acrylic acid 79-10-7	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		equivalent or similar to OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Acrylic acid 79-10-7	negative	mammalian cell gene mutation assay	with and without		equivalent or similar to OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
Acrylic acid 79-10-7	negative	DNA damage and repair assay, unscheduled DNA synthesis in mammalian cells in vitro	without		equivalent or similar to OECD Guideline 482 (Genetic Toxicology: DNA Damage and Repair, Unscheduled DNA Synthesis in Mammalian Cells)
4- isocyanatosulphonyltolue ne 4083-64-1	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		not specified
4- isocyanatosulphonyltolue ne 4083-64-1	negative	in vitro mammalian chromosome aberration test	with and without		not specified
Butanone 78-93-3	negative	intraperitoneal		mouse	equivalent or similar to OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)
Ethyl acetate 141-78-6	negative	oral: gavage		hamster, Chinese	equivalent or similar to OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)
n-butyl acetate	negative	oral: gavage		mouse	OECD Guideline 474

123-86-4					(Mammalian Erythrocyte Micronucleus Test)
Acrylic acid 79-10-7	negative	oral: gavage		rat	equivalent or similar to OECD Guideline 475 (Mammalian Bone Marrow Chromosome Aberration Test)
Acrylic acid 79-10-7	negative	oral: gavage		mouse	not specified

Carcinogenicity

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous components CAS-No.	Result	Route of application	Exposure time / Frequency of treatment	Species	Sex	Method
Acrylic acid 79-10-7	not carcinogenic	oral: drinking water	26 - 28 m continuously	rat	male/female	OECD Guideline 451 (Carcinogenicity Studies)
Acrylic acid 79-10-7	not carcinogenic	dermal	21 m 3 times/w	mouse	male/female	not specified

Reproductive toxicity:

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result / Value	Test type	Route of application	Species	Method
Butanone 78-93-3	NOAEL P 10.000 mg/l NOAEL F1 10.000 mg/l	two-generation study	oral: drinking water	rat	equivalent or similar to OECD Guideline 416 (Two-Generation Reproduction Toxicity Study)
Ethyl acetate 141-78-6	NOAEL P 1500 ppm	other:	inhalation	rat	other guideline:
Acrylic acid 79-10-7	NOAEL P 83 mg/kg NOAEL F1 250 mg/kg	one-generation study	oral: drinking water	rat	equivalent or similar to OECD Guideline 415 (One-Generation Reproduction Toxicity Study)
Acrylic acid 79-10-7	NOAEL P 240 mg/kg NOAEL F1 53 mg/kg NOAEL F2 53 mg/kg	two-generation study	oral: drinking water	rat	OECD Guideline 416 (Two-Generation Reproduction Toxicity Study)
4-isocyanatosulphonyltoluene 4083-64-1	NOAEL F1 300 mg/kg	one-generation study	oral: gavage	rat	OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)

STOT-single exposure:

No data available.

STOT-repeated exposure:

The mixture is classified based on threshold limits referring to the classified substances present in the mixture.

Hazardous substances CAS-No.	Result / Value	Route of application	Exposure time / Frequency of treatment	Species	Method
Butanone 78-93-3	NOAEL 2500 ppm	inhalation	90 days 6 hours/day, 5 days/week	rat	not specified
Ethyl acetate 141-78-6	NOAEL 900 mg/kg	oral: gavage	90 d daily	rat	EPA OTS 795.2600 (Subchronic Oral Toxicity Test)
n-butyl acetate 123-86-4	NOAEL 125 mg/kg	oral: gavage	6 (interim sacrifice) or 13 w daily	rat	EPA OTS 798.2650 (90- Day Oral Toxicity in Rodents)
Acrylic acid 79-10-7	NOAEL 40 mg/kg	oral: drinking water	12 m daily	rat	equivalent or similar to OECD Guideline 452 (Chronic Toxicity Studies)
Acrylic acid 79-10-7	NOAEL 0,015 mg/l	inhalation: vapour	90 d 6 h/d, 5 d/w	mouse	equivalent or similar to OECD Guideline 413 (Subchronic Inhalation Toxicity: 90-Day)

Aspiration hazard:

The mixture is classified based on Viscosity data.

Hazardous substances CAS-No.	Viscosity (kinematic) Value	Temperature	Method	Remarks
Butanone 78-93-3	0,51 mm ² /s	20 °C	ASTM Standard D7042	

11.2 Information on other hazards

not applicable

SECTION 12: Ecological information

General ecological information:

Do not empty into drains, soil or bodies of water.

12.1. Toxicity

Toxicity (Fish):

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

The table below presents the data of the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
Butanone 78-93-3	LC50	3.220 mg/l	96 h	Pimephales promelas	OECD Guideline 203 (Fish, Acute Toxicity Test)
Ethyl acetate 141-78-6	LC50	220 mg/l	96 h	Pimephales promelas	other guideline:
n-butyl acetate 123-86-4	LC50	18 mg/l	96 h	Pimephales promelas	OECD Guideline 203 (Fish, Acute Toxicity Test)
Phenol, 4-isocyanato-, phosphorothioat 4151-51-3	LC50	Toxicity > Water solubility		Brachydanio rerio (new name: Danio rerio)	OECD Guideline 203 (Fish, Acute Toxicity Test)
1,3- Diisocyanatomethylbenzene homopolymer 9017-01-0	LC50	> 100 mg/l	96 h	Brachydanio rerio (new name: Danio rerio)	OECD Guideline 203 (Fish, Acute Toxicity Test)
2,4-Toluene diisocyanate, homopolymer 26006-20-2	LC50	Toxicity > Water solubility	96 h	Danio rerio	OECD Guideline 203 (Fish, Acute Toxicity Test)
Acrylic acid 79-10-7	LC50	27 mg/l	96 h	Salmo gairdneri (new name: Oncorhynchus mykiss)	EPA OTS 797.1400 (Fish Acute Toxicity Test)
Acrylic acid 79-10-7	NOEC	>= 10,1 mg/l	45 d	Oryzias latipes	OECD Guideline 210 (fish early lite stage toxicity test)
4-isocyanatosulphonyltoluene 4083-64-1	LC50	> 45 mg/l	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish, Acute Toxicity Test)

Toxicity (aquatic invertebrates):

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

The table below presents the data of the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
Butanone 78-93-3	EC50	5.091 mg/l	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Ethyl acetate 141-78-6	EC50	164 mg/l	48 h	Daphnia cucullata	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
n-butyl acetate 123-86-4	EC50	44 mg/l	48 h	Daphnia sp.	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
1,3- Diisocyanatomethylbenzene homopolymer 9017-01-0	EC50	> 100 mg/l	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
2,4-Toluene diisocyanate, homopolymer 26006-20-2	EC50	Toxicity > Water solubility	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Acrylic acid 79-10-7	EC50	95 mg/l	48 h	Daphnia magna	EPA OTS 797.1300 (Aquatic Invertebrate Acute Toxicity Test, Freshwater Daphnids)
4-isocyanatosulphonyltoluene 4083-64-1	EC50	> 100 mg/l	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)

Chronic toxicity (aquatic invertebrates):

The table below presents the data of the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
Ethyl acetate 141-78-6	NOEC	2,4 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)
n-butyl acetate 123-86-4	NOEC	23,2 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)
Acrylic acid 79-10-7	NOEC	19 mg/l	21 d	Daphnia magna	EPA OTS 797.1330 (Daphnid Chronic Toxicity Test)

Toxicity (Algae):

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

The table below presents the data of the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
Butanone 78-93-3	EC50	1.240 mg/l	96 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Butanone 78-93-3	EC10	1.010 mg/l	96 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Ethyl acetate 141-78-6	EC50	> 2.000 mg/l	96 h	Selenastrum capricornutum (new name: Pseudokirchneriella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Ethyl acetate 141-78-6	NOEC	2.000 mg/l	96 h	Selenastrum capricornutum (new name: Pseudokirchneriella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
n-butyl acetate 123-86-4	EC50	674,7 mg/l	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
n-butyl acetate 123-86-4	EC10	295,5 mg/l	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Phenol, 4-isocyanato-, phosphorothioat 4151-51-3	EC50	Toxicity > Water solubility		Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Phenol, 4-isocyanato-, phosphorothioat 4151-51-3	NOEC	Toxicity > Water solubility		Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
1,3- Diisocyanatomethylbenzene homopolymer 9017-01-0	EC50	> 100 mg/l	72 h	Desmodesmus subspicatus	OECD Guideline 201 (Alga, Growth Inhibition Test)
1,3- Diisocyanatomethylbenzene homopolymer 9017-01-0	NOEC	100 mg/l	72 h	Desmodesmus subspicatus	OECD Guideline 201 (Alga, Growth Inhibition Test)
2,4-Toluene diisocyanate, homopolymer 26006-20-2	EC50	Toxicity > Water solubility	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Acrylic acid 79-10-7	EC10	0,03 mg/l	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	EU Method C.3 (Algal Inhibition test)
Acrylic acid 79-10-7	EC50	0,13 mg/l	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	EU Method C.3 (Algal Inhibition test)
4-isocyanatosulphonyltoluene 4083-64-1	EC50	30 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
4-isocyanatosulphonyltoluene 4083-64-1	EC10	23 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)

Toxicity (microorganisms):

The mixture is classified based on calculation method referring to the classified substances present in the mixture.

The table below presents the data of the classified substances present in the mixture.

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
Butanone 78-93-3	EC50	1.150 mg/l	16 h	Pseudomonas putida	DIN 38412, part 8 (Pseudomonas Zellvermehrungshemm- Test)
Ethyl acetate 141-78-6	EC10	2.900 mg/l	18 h	Pseudomonas putida	DIN 38412, part 8 (Pseudomonas Zellvermehrungshemm- Test)
n-butyl acetate 123-86-4	IC50	356 mg/l	40 h	Ciliate (Tetrahymena pyriformis)	other guideline:
1,3- Diisocyanatomethylbenzene homopolymer 9017-01-0	EC50	> 1.000 mg/l	3 h	activated sludge	OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)
2,4-Toluene diisocyanate,	EC50	Toxicity > Water	3 h	activated sludge	OECD Guideline 209

homopolymer 26006-20-2		solubility			(Activated Sludge, Respiration Inhibition Test)
Acrylic acid 79-10-7	EC20	900 mg/l	30 min	activated sludge, domestic	ISO 8192 (Test for Inhibition of Oxygen Consumption by Activated Sludge)
4-isocyanatosulphonyltoluene 4083-64-1	EC 50	2.511 mg/l			OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)

12.2. Persistence and degradability

The table below presents the data of the classified substances present in the mixture.

Hazardous substances CAS-No.	Result	Test type	Degradability	Exposure time	Method
Butanone 78-93-3	readily biodegradable	aerobic	98 %	28 d	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
Ethyl acetate 141-78-6	readily biodegradable	aerobic	100 %	28 d	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
n-butyl acetate 123-86-4	readily biodegradable	aerobic	83 %	28 d	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
Phenol, 4-isocyanato-, phosphorothioat 4151-51-3		aerobic	58,2 %	28 d	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)
1,3- Diisocyanatomethylbenzene homopolymer 9017-01-0	not readily biodegradable.	aerobic	4 %	28 d	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)
1,3- Diisocyanatomethylbenzene homopolymer 9017-01-0	not inherently biodegradable	aerobic	8 %	28 d	OECD Guideline 302 C (Inherent Biodegradability: Modified MITI Test (II))
2,4-Toluene diisocyanate, homopolymer 26006-20-2	not readily biodegradable.	aerobic	> 0 - < 60 %	28 d	OECD 301 A - F
Acrylic acid 79-10-7	inherently biodegradable	aerobic	100 %	28 d	OECD Guideline 302 B (Inherent biodegradability: Zahn- Wellens/EMPA Test)
Acrylic acid 79-10-7	readily biodegradable	aerobic	81 %	28 d	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
4-isocyanatosulphonyltoluene 4083-64-1	readily biodegradable	aerobic	83 %	28 d	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)

12.3. Bioaccumulative potential

The table below presents the data of the classified substances present in the mixture.

Hazardous substances CAS-No.	Bioconcentratio n factor (BCF)	Exposure time	Temperature	Species	Method
Ethyl acetate 141-78-6	30	3 d	22,5 °C	Leuciscus idus melanotus	other guideline:
1,3- Diisocyanatomethylbenzene homopolymer 9017-01-0	< 1	56 d		Carassius sp.	not specified
Acrylic acid 79-10-7	3,16				QSAR (Quantitative Structure Activity Relationship)

12.4. Mobility in soil

The table below presents the data of the classified substances present in the mixture.

Hazardous substances CAS-No.	LogPow	Temperature	Method
Butanone 78-93-3	0,3	40 °C	OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method)
Ethyl acetate 141-78-6	0,68	25 °C	EPA OPPTS 830.7560 (Partition Coefficient, n-octanol / H ₂ O, Generator Column Method)
n-butyl acetate 123-86-4	2,3	25 °C	OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method)
Phenol, 4-isocyanato-, phosphorothioat 4151-51-3	8,27		not specified
Acrylic acid 79-10-7	0,46	25 °C	OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)
4-isocyanatosulphonyltoluene 4083-64-1	0,6	30 °C	OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method)

12.5. Results of PBT and vPvB assessment

The table below presents the data of the classified substances present in the mixture.

Hazardous substances CAS-No.	PBT / vPvB
Butanone 78-93-3	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
Ethyl acetate 141-78-6	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
n-butyl acetate 123-86-4	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
Phenol, 4-isocyanato-, phosphorothioat 4151-51-3	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
1,3-Diisocyanatomethylbenzene homopolymer 9017-01-0	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
Acrylic acid 79-10-7	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
4-isocyanatosulphonyltoluene 4083-64-1	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

12.6. Endocrine disrupting properties

not applicable

12.7. Other adverse effects

No data available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product disposal:

In consultation with the responsible local authority, must be subjected to special treatment.

Waste code

080409

Waste code

The valid EWC waste code numbers are source-related. The manufacturer is therefore unable to specify EWC waste codes for the articles or products used in the various sectors. The EWC codes listed are intended as a recommendation for users. We will be happy to advise you.

SECTION 14: Transport information

14.1. UN number or ID number

ADR	1139
RID	1139
ADN	1139
IMDG	1139
IATA	1139

14.2. UN proper shipping name

ADR	COATING SOLUTION
RID	COATING SOLUTION
ADN	COATING SOLUTION
IMDG	COATING SOLUTION
IATA	Coating solution

14.3. Transport hazard class(es)

ADR	3
RID	3
ADN	3
IMDG	3
IATA	3

14.4. Packing group

ADR	II
RID	II
ADN	II
IMDG	II
IATA	II

14.5. Environmental hazards

ADR	not applicable
RID	not applicable
ADN	not applicable
IMDG	not applicable
IATA	not applicable

14.6. Special precautions for user

ADR	Special provision 640D Tunnelcode: (D/E)
RID	Special provision 640D
ADN	Special provision 640D
IMDG	not applicable
IATA	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

Ozone Depleting Substance (ODS) (Regulation (EC) No 1005/2009):	Not applicable
Prior Informed Consent (PIC) (Regulation (EU) No 649/2012):	Not applicable
Persistent organic pollutants (Regulation (EU) 2019/1021):	Hexachlorobenzene CAS 118-74-1

VOC content 66,5 %
(2010/75/EU)

15.2. Chemical safety assessment

A chemical safety assessment has been carried out.

National regulations/information (Germany):

WGK: WGK 2: significantly water endangering (Ordinance on facilities for handling substances that are hazardous to water (AwSV))
Classification according to AwSV, Annex 1 (5.2)

BG regulations, rules, infos:

BG data sheet: BGI 621 Solvents
BG data sheet: BGI 524 Hazardous substances: polyurethane production
and processing / isocyanates (M 044)

Storage class according to TRGS 510: 3

SECTION 16: Other information

The labelling of the product is indicated in Section 2. The full text of all abbreviations indicated by codes in this safety data sheet are as follows:

H225 Highly flammable liquid and vapour.
H226 Flammable liquid and vapour.
H302 Harmful if swallowed.
H312 Harmful in contact with skin.
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.
H336 May cause drowsiness or dizziness.
H400 Very toxic to aquatic life.
H411 Toxic to aquatic life with long lasting effects.

ED:	Substance identified as having endocrine disrupting properties
EU OEL:	Substance with a Union workplace exposure limit
EU EXPLD 1:	Substance listed in Annex I, Reg (EC) No. 2019/1148
EU EXPLD 2	Substance listed in Annex II, Reg (EC) No. 2019/1148
SVHC:	Substance of very high concern (REACH Candidate List)
PBT:	Substance fulfilling persistent, bioaccumulative and toxic criteria
PBT/vPvB:	Substance fulfilling persistent, bioaccumulative and toxic plus very persistent and very bioaccumulative criteria
vPvB:	Substance fulfilling very persistent and very bioaccumulative criteria

Further information:

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This information is based on our current level of knowledge and relates to the product in the state in which it is delivered. It is intended to describe our products from the point of view of safety requirements and is not intended to guarantee any particular properties.

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