

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

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TEROSON PU 8597 HMLC

SDS No. : 414697 V009.0 Revision: 09.06.2023 printing date: 24.07.2023 Replaces version from: 07.03.2022

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

1.1. Product identifier TEROSON PU 8597 HMLC

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

Intended use: adhesive and sealant for direct glazing

1.3. Details of the supplier of the safety data sheet Henkel Ltd Adhesives Wood Lane End HP2 4RQ Hemel Hempstead

Great Britain

Phone: +44 (1442) 278000

ua-productsafety.uk@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

24 Hours Emergency Tel: +44 0 8701 906777 - For further general health & safety, technical and practical advice on this product, please call +44 (0) 1606 593933 or write to: Technical Services; Henkel Limited; Road 5; Winsford Industrial Estate; Winsford; Cheshire; CW7 3QY-Email: technical.services@henkel.co.uk

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (CLP):	
Respiratory sensitizer	Category 1
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.	
Skin sensitizer	Category 1
H317 May cause an allergic skin reaction.	

2.2. Label elements

Label elements (CLP):

Hazard pictogram:



Contains

Hexanedioic acid, polymer with 1,6-hexanediol and 1,1'-methylenebis[4-isocyanatobenzene]

4,4'- methylenediphenyl diisocyanate

Signal word:	Danger
Hazard statement:	H317 May cause an allergic skin reaction. H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Supplemental information	As from 24 August 2023 adequate training is required before industrial or professional use. Further information: https://www.feica.eu/PUinfo
Precautionary statement: Prevention	P280 Wear protective gloves. P261 Avoid breathing dust/fume/spray.
Precautionary statement: Response	P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor.

2.3. Other hazards

Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

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
Oxydipropyl dibenzoate 27138-31-4 248-258-5 01-2119529241-49	1- < 3 %	Aquatic Chronic 3, H412		
Hexanedioic acid, polymer with 1,6-hexanediol and 1,1'- methylenebis[4- isocyanatobenzene] 31075-20-4	1- < 3 %	Skin Irrit. 2, H315 Skin Sens. 1, H317 Eye Irrit. 2, H319 STOT SE 3, H335 Resp. Sens. 1, H334 STOT RE 2, H373		
4,4'- methylenediphenyl diisocyanate 101-68-8 202-966-0 01-2119457014-47	0,1- < 1 %	Carc. 2, H351 Acute Tox. 4, Inhalation, H332 STOT RE 2, H373 Eye Irrit. 2, H319 STOT SE 3, H335 Skin Irrit. 2, H315 Resp. Sens. 1, H334 Skin Sens. 1, H317	Eye Irrit. 2; H319; C >= 5 % Skin Irrit. 2; H315; C >= 5 % Resp. Sens. 1; H334; C >= 0,1 % STOT SE 3; H335; 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:

Fresh air, oxygen supply, warmth; seek specialist medical attention. Delayed effects possible after inhalation.

Skin contact:

IF ON SKIN: Wash with plenty of soap and water. In case of adverse health effects seek medical advice.

Eve contact:

Rinse immediately with plenty of running water (for 10 minutes), seek medical attention from a specialist.

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

SKIN: Rash, Urticaria.

RESPIRATORY: Irritation, coughing, shortness of breath, chest tightness.

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

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: All common extinguishing agents are suitable.

Extinguishing media which must not be used for safety reasons: High pressure waterjet

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.

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

Remove mechanically. 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

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. Temperatures between + 5 °C and + 35 °C

7.3. Specific end use(s) adhesive and sealant for direct glazing

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure Limits

Valid for

Great Britain

Ingredient [Regulated substance]	ppm	mg/m ³	Value type	Short term exposure limit category / Remarks	Regulatory list
Carbon black 1333-86-4 [CARBON BLACK]		3,5	Time Weighted Average (TWA):		EH40 WEL
Carbon black 1333-86-4 [CARBON BLACK]		7	Short Term Exposure Limit (STEL):	15 minutes	EH40 WEL
Di-"isononyl" phthalate 28553-12-0 [Diisononyl phthalate]		5	Time Weighted Average (TWA):		EH40 WEL
4,4'-Methylenediphenyl diisocyanate 101-68-8 [ISOCYANATES, ALL (AS -NCO)]		0,02	Time Weighted Average (TWA):		EH40 WEL
4,4'-Methylenediphenyl diisocyanate 101-68-8 [ISOCYANATES, ALL (AS -NCO)]		0,07	Short Term Exposure Limit (STEL):	15 minutes	EH40 WEL

Occupational Exposure Limits

Valid for

Ireland

Ingredient [Regulated substance]	ppm	mg/m ³	Value type	Short term exposure limit category / Remarks	Regulatory list
Carbon black 1333-86-4 [CARBON BLACK]		3	Time Weighted Average (TWA):		IR_OEL
Di-"isononyl" phthalate 28553-12-0 [Diisononyl phthalate]		5	Time Weighted Average (TWA):		IR_OEL
4.4'-Methylenediphenyl diisocyanate 101-68-8 [4,4'-METHYLENE-DIPHENYL DIISOCYANATE (AS -NCO)]	0,005		Time Weighted Average (TWA):		IR_OEL
4,4'-Methylenediphenyl diisocyanate 101-68-8 [ISOCYANATES, ALL, EXCEPT METHYL ISOCYANATE (CAS NO. 624- 83-9) AND TOLUENE (2,4 OR 2,6 DIISOCYANATE (CAS NO. 584-84-9, 91- 08-7)]		0,02	Time Weighted Average (TWA):		IR_OEL
4,4'-Methylenediphenyl diisocyanate 101-68-8 [ISOCYANATES, ALL, EXCEPT METHYL ISOCYANATE (CAS NO. 624- 83-9) AND TOLUENE (2,4 OR 2,6 DIISOCYANATE (CAS NO. 584-84-9, 91- 08-7)]		0,07	Short Term Exposure Limit (STEL):	15 minutes	IR_OEL

Predicted No-Effect Concentration (PNEC):

Name on list	Environmental		Value				Remarks	
	Compartment	period			1			
			mg/l	ppm	mg/kg	others		
Oxydipropyl dibenzoate	aqua		0,0037					
27138-31-4	(freshwater)		mg/l					
Oxydipropyl dibenzoate	aqua (marine		0,00037					
27138-31-4	water)		mg/l					
Oxydipropyl dibenzoate	aqua		0,037 mg/l					
27138-31-4	(intermittent		_					
	releases)							
Oxydipropyl dibenzoate	sediment				1,49 mg/kg			
27138-31-4	(freshwater)							
Oxydipropyl dibenzoate	sediment				0,149			
27138-31-4	(marine water)				mg/kg			
Oxydipropyl dibenzoate	Soil				1 mg/kg			
27138-31-4					00			
Oxydipropyl dibenzoate	sewage		10 mg/l					
27138-31-4	treatment plant		U					
	(STP)							
Oxydipropyl dibenzoate	oral				333 mg/kg			
27138-31-4					00			
4,4'- methylenediphenyl diisocyanate	aqua		0,0037					
101-68-8	(freshwater)		mg/l					
4,4'- methylenediphenyl diisocyanate	aqua		0,037 mg/l					
101-68-8	(intermittent							
	releases)							
4,4'- methylenediphenyl diisocyanate	aqua (marine		0,00037					
101-68-8	water)		mg/l					
4,4'- methylenediphenyl diisocyanate	sediment				11,7 mg/kg			
101-68-8	(freshwater)							
4,4'- methylenediphenyl diisocyanate	sediment				1,17 mg/kg			
101-68-8	(freshwater)							
4,4'- methylenediphenyl diisocyanate	Soil				2,33 mg/kg			
101-68-8					,8			
4,4'- methylenediphenyl diisocyanate	Predator			1		1	no potential for	
101-68-8				1			bioaccumulation	

Derived No-Effect Level (DNEL):

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
Oxydipropyl dibenzoate 27138-31-4	Workers	dermal	Acute/short term exposure - systemic effects		170 mg/kg	
Oxydipropyl dibenzoate 27138-31-4	Workers	Inhalation	Acute/short term exposure - systemic effects		35,08 mg/m3	
Oxydipropyl dibenzoate 27138-31-4	Workers	Inhalation	Long term exposure - systemic effects		8,8 mg/m3	
Oxydipropyl dibenzoate 27138-31-4	Workers	dermal	Long term exposure - systemic effects		10 mg/kg	
Oxydipropyl dibenzoate 27138-31-4	General population	dermal	Acute/short term exposure - systemic effects		80 mg/kg	
Oxydipropyl dibenzoate 27138-31-4	General population	Inhalation	Acute/short term exposure - systemic effects		8,7 mg/m3	
Oxydipropyl dibenzoate 27138-31-4	General population	oral	Acute/short term exposure - systemic effects		80 mg/kg	
Oxydipropyl dibenzoate 27138-31-4	General population	dermal	Long term exposure - systemic effects		0,22 mg/kg	
Oxydipropyl dibenzoate 27138-31-4	General population	Inhalation	Long term exposure - systemic effects		8,69 mg/m3	
Oxydipropyl dibenzoate 27138-31-4	General population	oral	Long term exposure - systemic effects		5 mg/kg	
4,4'- methylenediphenyl diisocyanate 101-68-8	Workers	inhalation	Long term exposure - local effects		0,05 mg/m3	no potential for bioaccumulation
4,4'- methylenediphenyl diisocyanate 101-68-8	Workers	inhalation	Acute/short term exposure - local effects		0,1 mg/m3	no potential for bioaccumulation
4,4'- methylenediphenyl diisocyanate 101-68-8	General population	inhalation	Long term exposure - local effects		0,025 mg/m3	no potential for bioaccumulation
4,4'- methylenediphenyl diisocyanate 101-68-8	General population	inhalation	Acute/short term exposure - local effects		0,05 mg/m3	no potential for bioaccumulation

Biological Exposure Indices:

Ingredient [Regulated	Parameters	Biological	Sampling time	 	 Additional
substance]		specimen		exposure index	Information
4,4'-Methylenediphenyl	Isocyanate-	Creatinine in	Sampling time: At the	UKEH40BMG	
diisocyanate	derived	urine	end of the period of	V	
101-68-8	diamine		exposure.		
[ISOCYANATES (APPLIES TO			_		
HDI, IPDI, TDI AND MDI)]					

8.2. Exposure controls:

Engineering controls: Use only in well ventilated areas.

Respiratory protection: Ensure good ventilation/suction at the workplace.

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):

nitrile rubber (NBR; ≥ 0.4 mm thickness)

Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374):

nitrile rubber (NBR; >= 0.4 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	paste
Colour	black
Odor	Faintly, specific
Physical state	solid
Melting point	Not applicable, Determination technically not possible
Solidification temperature	Not applicable, Product is a solid.
Initial boiling point	Not applicable, Decomposes $> 140^{\circ}$ C (284°F).
Flammability	The product is not flammable.
Explosive limits	Not applicable, Product is a solid.
Flash point	Not applicable, Product is a solid.
Auto-ignition temperature	Not applicable, Product is a solid.
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)	Not applicable, Product is a solid.
Viscosity, dynamic	4.393.200 mPa.s no method / method unknown
0	
Solubility (qualitative)	Insoluble
(20 °C (68 °F); Solvent: Water)	
Partition coefficient: n-octanol/water	Not applicable
	Mixture
Vapour pressure	< 0,1 hPa
(20 °C (68 °F))	
Density	1,22 - 1,27 g/cm3 no method / method unknown
(20 °C (68 °F))	
Relative vapour density:	Not applicable, Product is a solid.
Particle characteristics	Not applicable, mixture is a paste.

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).

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

See section reactivity

10.4. Conditions to avoid Humidity

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
Oxydipropyl dibenzoate 27138-31-4	LD50	3.914 mg/kg	rat	OECD Guideline 401 (Acute Oral Toxicity)
4,4'- methylenediphenyl diisocyanate 101-68-8	LD50	> 2.000 mg/kg	rat	other guideline:

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
Oxydipropyl dibenzoate 27138-31-4	LD50	> 2.000 mg/kg	rat	OECD Guideline 402 (Acute Dermal Toxicity)
4,4'- methylenediphenyl diisocyanate 101-68-8	LD50	> 9.400 mg/kg	rabbit	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
Oxydipropyl dibenzoate 27138-31-4	LC50	> 200 mg/l	dust/mist	4 h	rat	not specified

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
Oxydipropyl dibenzoate 27138-31-4	not irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
4,4'- methylenediphenyl diisocyanate 101-68-8	irritating	4 h	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
Oxydipropyl dibenzoate 27138-31-4	not irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)

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
Oxydipropyl dibenzoate 27138-31-4	not sensitising	Guinea pig maximisation test	guinea pig	OECD Guideline 406 (Skin Sensitisation)
4,4'- methylenediphenyl diisocyanate 101-68-8	sensitising	Buehler test	guinea pig	OECD Guideline 406 (Skin Sensitisation)
4,4'- methylenediphenyl diisocyanate 101-68-8	sensitising	Respiratory sensitisation	guinea pig	not specified

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
Oxydipropyl dibenzoate 27138-31-4	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Oxydipropyl dibenzoate 27138-31-4	negative	in vitro mammalian chromosome aberration test	with and without		OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
Oxydipropyl dibenzoate 27138-31-4	negative	mammalian cell gene mutation assay	with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
4,4'- methylenediphenyl diisocyanate 101-68-8	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		EU Method B.13/14 (Mutagenicity)
4,4'- methylenediphenyl diisocyanate 101-68-8	negative	inhalation		rat	OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)

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
4,4'- methylenediphenyl diisocyanate 101-68-8	carcinogenic	inhalation: aerosol	2 y 6 h/d	rat	male/female	OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)

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
Oxydipropyl dibenzoate 27138-31-4	NOAEL P > 10000 ppm NOAEL F1 10000 ppm NOAEL F2 10000 ppm	Two generation study	oral: feed	rat	OECD Guideline 416 (Two- Generation Reproduction Toxicity Study)

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
Oxydipropyl dibenzoate 27138-31-4	NOAEL 1.000 mg/kg	oral: feed	13 w daily	rat	OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
4,4'- methylenediphenyl diisocyanate 101-68-8	NOAEL 0,0002 mg/l	inhalation: aerosol	main: 2 y; satellite:1 y 6 h/d; 5 d/w	rat	OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)

Aspiration hazard:

No data available.

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	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Oxydipropyl dibenzoate	LC50	3,7 mg/l	96 h	Pimephales promelas	OECD Guideline 203 (Fish,
27138-31-4					Acute Toxicity Test)
4,4'- methylenediphenyl	LL50	> 100 mg/l	96 h	Danio rerio	OECD Guideline 203 (Fish,
diisocyanate					Acute Toxicity Test)
101-68-8					

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	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Oxydipropyl dibenzoate 27138-31-4	EL50	19,3 mg/l	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
4,4'- methylenediphenyl diisocyanate 101-68-8	EC50	> 100 mg/l	48 h	Daphnia magna	EU Method C.2 (Acute Toxicity for Daphnia)

Chronic toxicity (aquatic invertebrates):

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

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
4,4'- methylenediphenyl	NOEC	10 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia
diisocyanate					magna, Reproduction Test)
101-68-8					

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
Oxydipropyl dibenzoate 27138-31-4	EL50	4,9 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Oxydipropyl dibenzoate 27138-31-4	EL10	0,89 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
4,4'- methylenediphenyl diisocyanate 101-68-8	EL50	> 100 mg/l	72 h	Desmodesmus subspicatus	OECD Guideline 201 (Alga, Growth Inhibition Test)
4,4'- methylenediphenyl diisocyanate 101-68-8	NOELR	100 mg/1	72 h	Desmodesmus subspicatus	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	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Oxydipropyl dibenzoate	EC50	> 100 mg/l	3 h	activated sludge of a	OECD Guideline 209
27138-31-4		-		predominantly domestic sewage	(Activated Sludge,
					Respiration Inhibition Test)
4,4'- methylenediphenyl	EC50	> 1.000 mg/l	3 h	activated sludge of a	OECD Guideline 209
diisocyanate		-		predominantly domestic sewage	(Activated Sludge,
101-68-8					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
Oxydipropyl dibenzoate 27138-31-4	readily biodegradable	aerobic	85 %	28 d	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)
4,4'- methylenediphenyl diisocyanate 101-68-8	not readily biodegradable.	aerobic	0 %	28 d	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry 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
4,4'- methylenediphenyl	92 - 200	28 d		Cyprinus carpio	OECD Guideline 305 E
diisocyanate					(Bioaccumulation: Flow-through
101-68-8					Fish Test)

12.4. Mobility in soil

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

Hazardous substances	LogPow	Temperature	Method
CAS-No.			
Oxydipropyl dibenzoate	3,9	20 °C	OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC
27138-31-4			Method)
4,4'- methylenediphenyl	4,51	22 °C	OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC
diisocyanate			Method)
101-68-8			

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
Oxydipropyl dibenzoate 27138-31-4	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
Hexanedioic acid, polymer with 1,6-hexanediol and 1,1'-methylenebis[4-isocyanatobenzene] 31075-20-4	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
4,4'- methylenediphenyl diisocyanate 101-68-8	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

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. 080409

SECTION 14: Transport information
UN number or ID number
Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.
UN proper shipping name
Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.
Transport hazard class(es)
Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.
Packing group
Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.
Environmental hazards
Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.
Special precautions for user
Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.
Maritime transport in bulk according to IMO instruments
not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental 1	egulations/legislation specific fo	r the substance or mixture
Ozone Depleting Substance (ODS) (Regu	lation (EC) No 1005/2009):	Not applicable
Prior Informed Consent (PIC) (Regulation (EU) No 649/2012):		Not applicable
Persistent organic pollutants (Regulation (EU) 2019/1021):		Not applicable
VOC content	0,3 %	
(2010/75/EU)		

15.2. Chemical safety assessment A chemical safety assessment has not been carried out.

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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:

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.

H351 Suspected of causing cancer.

H373 May cause damage to organs through prolonged or repeated exposure.

H412 Harmful 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:

This Safety Data Sheet has been produced for sales from Henkel to parties purchasing from Henkel, is based on Regulation (EC) No 1907/2006 and provides information in accordance with applicable regulations of the European Union only. In that respect, no statement, warranty or representation of any kind is given as to compliance with any statutory laws or regulations of any other jurisdiction or territory other than the European Union. When exporting to territories other than the European Union, please consult with the respective Safety Data Sheet of the concerned territory to ensure compliance or liaise with Henkel's Product Safety and Regulatory Affairs Department (SDSinfo.Adhesive@henkel.com) prior to export to other territories than the European Union.

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.

Dear Customer,

Henkel is committed to creating a sustainable future by promoting opportunities along the entire value chain. If you would like to contribute by switching from a paper to the electronic version of SDS, please contact the local Customer Service representative. We recommend to use a non-personal email address (e.g. SDS@your_company.com).

Relevant changes in this safety data sheet are indicated by vertical lines at the left margin in the body of this document. Corresponding text is displayed in a different color on shadowed fields.



Safety Data Sheet according to (EC) No 1907/2006 as amended Page 1 of 28

TEROSON PU 8597 HMLC

SDS No. : 284600 V009.0 Revision: 09.06.2023 printing date: 24.07.2023 Replaces version from: 08.06.2023

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

1.1. Product identifier

TEROSON PU 8597 HMLC

1.2. Relevant identified uses of the substance or mixture and uses advised against Intended use: Primer

1.3. Details of the supplier of the safety data sheet

Henkel Ltd Adhesives Wood Lane End HP2 4RQ Hemel Hempstead

Great Britain

Phone: +44 (1442) 278000

For Safety Data Sheet updates please visit our website https://mysds.henkel.com/index.html#/appSelection or www.henkeladhesives.com. SDSinfo.Adhesive@henkel.com

1.4. Emergency telephone number

24 Hours Emergency Tel: +44 0 8701 906777 - For further general health & safety, technical and practical advice on this product, please call +44 (0) 1606 593933 or write to: Technical Services; Henkel Limited; Road 5; Winsford Industrial Estate; Winsford; Cheshire; CW7 3QY-Email: technical.services@henkel.co.uk

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.
Precautionary statement: Prevention	P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.No smoking.P261 Avoid breathing vapors.P280 Wear protective gloves/eye protection.
Precautionary statement: Response	P370+P378 In case of fire: Use CO2, dry chemical, or foam for extinction.

2.3. Other hazards

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	OCLP	(EC) No 1272/2008:
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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) Primer

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure Limits

Valid for

Great Britain

Ingredient [Regulated substance]	ppm	mg/m ³	Value type	Short term exposure limit category / Remarks	Regulatory list
Butanone 78-93-3 [BUTAN-2-ONE (METHYL ETHYL			Skin designation:	Can be absorbed through the skin.	EH40 WEL
KETONE)]	200	600			
Butanone 78-93-3 [BUTAN-2-ONE (METHYL ETHYL VETTONE)]	200	600	Time Weighted Average (TWA):		EH40 WEL
KETONE)] Butanone 78-93-3 [BUTANONE]	200	600	Time Weighted Average (TWA):	Indicative	ECTLV
Butanone 78-93-3	300	900	Short Term Exposure Limit (STEL):	Indicative	ECTLV
[BUTANONE] Butanone 78-93-3 [BUTAN-2-ONE (METHYL ETHYL KETONE)]	300	899	Short Term Exposure Limit (STEL):	15 minutes	EH40 WEL
Ethyl acetate 141-78-6 [ETHYL ACETATE]	200	734	Time Weighted Average (TWA):	Indicative	ECTLV
Ethyl acetate 141-78-6 [ETHYL ACETATE]	400	1.468	Short Term Exposure Limit (STEL):	Indicative	ECTLV
Ethyl acetate 141-78-6 [ETHYL ACETATE]	200	734	Time Weighted Average (TWA):		EH40 WEL
Ethyl acetate 141-78-6 [ETHYL ACETATE]	400	1.468	Short Term Exposure Limit (STEL):	15 minutes	EH40 WEL
Carbon black 1333-86-4 [CARBON BLACK]		3,5	Time Weighted Average (TWA):		EH40 WEL
Carbon black 1333-86-4 [CARBON BLACK]		7	Short Term Exposure Limit (STEL):	15 minutes	EH40 WEL
n-Butyl acetate 123-86-4 [BUTYL ACETATE]	150	724	Time Weighted Average (TWA):		EH40 WEL
n-Butyl acetate 123-86-4 [N-BUTYL ACETATE]	150	723	Short Term Exposure Limit (STEL):	Indicative	ECTLV
n-Butyl acetate 123-86-4 [N-BUTYL ACETATE]	50	241	Time Weighted Average (TWA):	Indicative	ECTLV
n-Butyl acetate 123-86-4 [BUTYL ACETATE]	200	966	Short Term Exposure Limit (STEL):	15 minutes	EH40 WEL
Tris(p-isocyanatophenyl) thiophosphate 4151-51-3 [ISOCYANATES, ALL (AS -NCO)]		0,02	Time Weighted Average (TWA):		EH40 WEL
Tris(p-isocyanatophenyl) thiophosphate 4151-51-3 [ISOCYANATES, ALL (AS -NCO)]		0,07	Short Term Exposure Limit (STEL):	15 minutes	EH40 WEL
1,3-Diisocyanatomethylbenzene homopolymer 9017-01-0 [ISOCYANATES, ALL (AS -NCO)]		0,02	Time Weighted Average (TWA):		EH40 WEL
1,3-Diisocyanatomethylbenzene homopolymer 9017-01-0 [ISOCYANATES, ALL (AS -NCO)]		0,07	Short Term Exposure Limit (STEL):	15 minutes	EH40 WEL

2,4-Toluene diisocyanate, homopolymer 26006-20-2 [ISOCYANATES, ALL (AS -NCO)]		0,02	Time Weighted Average (TWA):		EH40 WEL
2,4-Toluene diisocyanate, homopolymer 26006-20-2 [ISOCYANATES, ALL (AS -NCO)]		0,07	Short Term Exposure Limit (STEL):	15 minutes	EH40 WEL
Acrylic acid 79-10-7 [ACRYLIC ACID (PROP-2-ENOIC ACID)]	10	29	Time Weighted Average (TWA):	Indicative	ECTLV
Acrylic acid 79-10-7 [ACRYLIC ACID (PROP-2-ENOIC ACID)]	20	59	Short Term Exposure Limit (STEL):	Indicative	ECTLV
Acrylic acid 79-10-7 [ACRYLIC ACID]	10	29	Time Weighted Average (TWA):		EH40 WEL
Acrylic acid 79-10-7 [Acrylic acid]	20	59	Short Term Exposure Limit (STEL):	1 minute	EH40 WEL
p-Toluenesulphonyl isocyanate 4083-64-1 [ISOCYANATES, ALL (AS -NCO)]		0,02	Time Weighted Average (TWA):		EH40 WEL
p-Toluenesulphonyl isocyanate 4083-64-1 [ISOCYANATES, ALL (AS -NCO)]		0,07	Short Term Exposure Limit (STEL):	15 minutes	EH40 WEL

Occupational Exposure Limits

Valid for

Ireland

Ingredient [Regulated substance]	ent [Regulated substance] ppm mg/m ³ Value type		Short term exposure limit category / Remarks	Regulatory list	
Butanone 78-93-3 [METHYL ETHYL KETONE (MEK)]	200	600	Time Weighted Average (TWA):	Indicative OELV	IR_OEL
Butanone 78-93-3 METHYL ETHYL KETONE (MEK)]			Skin designation:	Can be absorbed through the skin.	IR_OEL
Butanone 78-93-3 BUTANONE]	200	600	Time Weighted Average (TWA):	Indicative	ECTLV
Butanone 8-93-3 BUTANONE]	300	900	Short Term Exposure Limit (STEL):	Indicative	ECTLV
Butanone 8-93-3 METHYL ETHYL KETONE (MEK)]	300	900	Short Term Exposure Limit (STEL):	15 minutes Indicative OELV	IR_OEL
Sthyl acetate .41-78-6 ETHYL ACETATE]	200	734	Time Weighted Average (TWA):	Indicative	ECTLV
Ethyl acetate 41-78-6 ETHYL ACETATE]	400	1.468	Short Term Exposure Limit (STEL):	Indicative	ECTLV
Ethyl acetate 41-78-6 ETHYL ACETATE]	200	734	Time Weighted Average (TWA):	Indicative OELV	IR_OEL
Sthyl acetate 41-78-6 ETHYL ACETATE]	400	1.468	Short Term Exposure Limit (STEL):	15 minutes Indicative OELV	IR_OEL
Carbon black 333-86-4 CARBON BLACK]		3	Time Weighted Average (TWA):		IR_OEL
-Butyl acetate 23-86-4 N-BUTYL ACETATE]	150	723	Short Term Exposure Limit (STEL):	Indicative	ECTLV
-Butyl acetate 23-86-4 N-BUTYL ACETATE]	50	241	Time Weighted Average (TWA):	Indicative	ECTLV
-Butyl acetate 23-86-4 Butyl acetate]	150	723	Short Term Exposure Limit (STEL):	15 minutes Indicative OELV	IR_OEL
n-Butyl acetate 123-86-4	50	241	Time Weighted Average (TWA):	Indicative OELV	IR_OEL

[Butyl acetate]					
Tris(p-isocyanatophenyl) thiophosphate		0,02	Time Weighted Average		IR_OEL
4151-51-3 [ISOCYANATES, ALL, EXCEPT METHYL ISOCYANATE (CAS NO. 624- 83-9) AND TOLUENE (2,4 OR 2,6 DIISOCYANATE (CAS NO. 584-84-9, 91- 08-7)]			(TWA):		
Tris(p-isocyanatophenyl) thiophosphate 4151-51-3 [ISOCYANATES, ALL, EXCEPT METHYL ISOCYANATE (CAS NO. 624- 83-9) AND TOLUENE (2,4 OR 2,6 DIISOCYANATE (CAS NO. 584-84-9, 91- 08-7)]		0,07	Short Term Exposure Limit (STEL):	15 minutes	IR_OEL
1,3-Diisocyanatomethylbenzene homopolymer 9017-01-0 [ISOCYANATES, ALL, EXCEPT METHYL ISOCYANATE (CAS NO. 624- 83-9) AND TOLUENE (2,4 OR 2,6 DIISOCYANATE (CAS NO. 584-84-9, 91- 08-7)]		0,07	Short Term Exposure Limit (STEL):	15 minutes	IR_OEL
1,3-Diisocyanatomethylbenzene homopolymer 9017-01-0 [ISOCYANATES, ALL, EXCEPT METHYL ISOCYANATE (CAS NO. 624- 83-9) AND TOLUENE (2,4 OR 2,6 DIISOCYANATE (CAS NO. 584-84-9, 91- 08-7)]		0,02	Time Weighted Average (TWA):		IR_OEL
2,4-Toluene diisocyanate, homopolymer 26006-20-2 [ISOCYANATES, ALL, EXCEPT METHYL ISOCYANATE (CAS NO. 624- 83-9) AND TOLUENE (2,4 OR 2,6 DIISOCYANATE (CAS NO. 584-84-9, 91- 08-7)]		0,02	Time Weighted Average (TWA):		IR_OEL
2,4-Toluene diisocyanate, homopolymer 26006-20-2 [ISOCYANATES, ALL, EXCEPT METHYL ISOCYANATE (CAS NO. 624- 83-9) AND TOLUENE (2,4 OR 2,6 DIISOCYANATE (CAS NO. 584-84-9, 91- 08-7)]		0,07	Short Term Exposure Limit (STEL):	15 minutes	IR_OEL
Acrylic acid 79-10-7 [ACRYLIC ACID (PROP-2-ENOIC	10	29	Time Weighted Average (TWA):	Indicative	ECTLV
ACID)] Acrylic acid 79-10-7 [ACRYLIC ACID (PROP-2-ENOIC ACID)]	20	59	Short Term Exposure Limit (STEL):	Indicative	ECTLV
Acrylic acid 79-10-7 [ACRYLIC ACID]	20	59	Short Term Exposure Limit (STEL):	1 minute Indicative OELV	IR_OEL
Acrylic acid 79-10-7 [ACRYLIC ACID]	10	29	Time Weighted Average (TWA):	Indicative OELV	IR_OEL
p-Toluenesulphonyl isocyanate 4083-64-1 [ISOCYANATES, ALL, EXCEPT METHYL ISOCYANATE (CAS NO. 624- 83-9) AND TOLUENE (2,4 OR 2,6 DIISOCYANATE (CAS NO. 584-84-9, 91- 08-7)]		0,07	Short Term Exposure Limit (STEL):	15 minutes	IR_OEL
p-Toluenesulphonyl isocyanate 4083-64-1 [ISOCYANATES, ALL, EXCEPT METHYL ISOCYANATE (CAS NO. 624- 83-9) AND TOLUENE (2,4 OR 2,6 DIISOCYANATE (CAS NO. 584-84-9, 91- 08-7)]		0,02	Time Weighted Average (TWA):		IR_OEL

Predicted No-Effect Concentration (PNEC):

Name on list	Environmental Compartment	Exposure period	Value				Remarks
	Compartment	periou	mg/l	ppm	mg/kg	others	
Butanone	aqua		55,8 mg/l				
78-93-3	(freshwater)						
Butanone 78-93-3	aqua (marine		55,8 mg/l				
78-93-3 Butanone	water) aqua		55,8 mg/l				
78-93-3	(intermittent releases)		55,8 mg/1				
Butanone	sewage		709 mg/l				
78-93-3	treatment plant (STP)		6				
Butanone 78-93-3	sediment (freshwater)				284,74 mg/kg		
Butanone	sediment				284,7		
78-93-3	(marine water)				mg/kg		
Butanone 78-93-3	Soil				22,5 mg/kg		
Butanone 78-93-3	oral				1000 mg/kg		
Ethyl acetate	aqua		0,24 mg/l				
141-78-6	(freshwater)						
Ethyl acetate	aqua (marine		0,024 mg/l				
141-78-6 Ethyl acetate	water) aqua		1,65 mg/l				
141-78-6	(intermittent releases)		1,05 mg/1				
Ethyl acetate	sewage		650 mg/l				
141-78-6	treatment plant (STP)						
Ethyl acetate 141-78-6	sediment (freshwater)				1,15 mg/kg		
Ethyl acetate	sediment				0,115		
141-78-6	(marine water)				mg/kg		
Ethyl acetate	Air						no hazard identified
141-78-6	0.11				0.140		
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	aqua (marine		0,018 mg/l				
123-86-4	water)		0.26 /1				
n-Butyl acetate 123-86-4	aqua (intermittent releases)		0,36 mg/l				
n-Butyl acetate	sewage		35,6 mg/l				
123-86-4	treatment plant (STP)						
n-Butyl acetate	sediment				0,981		
123-86-4	(freshwater)				mg/kg		
n-Butyl acetate	sediment				0,0981		
123-86-4 n-Butyl acetate	(marine water) Soil				mg/kg 0,0903		
123-86-4	3011				0,0903 mg/kg		
n-Butyl acetate 123-86-4	Air				00		no hazard identified
n-Butyl acetate 123-86-4	Predator						no potential for bioaccumulation
Tris(p-isocyanatophenyl) thiophosphate	aqua		0,1 mg/l				
4151-51-3 Tris(p-isocyanatophenyl) thiophosphate	(freshwater) aqua (marine		0,01 mg/l				
4151-51-3	water)		_				
Tris(p-isocyanatophenyl) thiophosphate 4151-51-3	aqua (intermittent		1 mg/l				
Tris(p-isocyanatophenyl) thiophosphate	releases) sewage		100 mg/l				
4151-51-3	treatment plant (STP)		100 119/1				
Tris(p-isocyanatophenyl) thiophosphate	sediment				2557		

4151-51-3	(freshwater)		mg/kg	I
Tris(p-isocyanatophenyl) thiophosphate	sediment		155 mg/kg	
4151-51-3	(marine water)			
Tris(p-isocyanatophenyl) thiophosphate 4151-51-3	Soil		510 mg/kg	
1,3-Diisocyanatomethylbenzene	aqua	0,1 mg/l		
homopolymer 9017-01-0	(freshwater)			
1,3-Diisocyanatomethylbenzene	aqua (marine	0,01 mg/l		
homopolymer 9017-01-0	water)			
1,3-Diisocyanatomethylbenzene	aqua	0,1 mg/l		
homopolymer 9017-01-0	(intermittent releases)			
1,3-Diisocyanatomethylbenzene	sewage	0,1 mg/l		
homopolymer 9017-01-0	treatment plant (STP)			
1,3-Diisocyanatomethylbenzene	sediment		3302	
homopolymer 9017-01-0	(freshwater)		mg/kg	
1,3-Diisocyanatomethylbenzene	sediment		330 mg/kg	
homopolymer 9017-01-0	(marine water)			
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	sewage	0,9 mg/l		
79-10-7	treatment plant (STP)	0,7 mg/1		
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 - systemic effects		35,7 mg/m3	no hazard identified
n-Butyl acetate 123-86-4	General population	inhalation	Acute/short term exposure -		300 mg/m3	no hazard identified

	1		systemic effects		
n-Butyl acetate	General	inhalation	Acute/short term	300 mg/m3	no hazard identified
123-86-4	population		exposure - local		
			effects	<i>c</i> . 1	
n-Butyl acetate	General	dermal	Long term	6 mg/kg	no hazard identified
123-86-4	population		exposure - systemic effects		
n-Butyl acetate	General	dermal	Acute/short term	6 mg/kg	no hazard identified
123-86-4	population	uermai	exposure -	0 mg/kg	no nazaru identified
	population		systemic effects		
n-Butyl acetate	General	oral	Long term	2 mg/kg	no hazard identified
123-86-4	population		exposure -		
			systemic effects		
n-Butyl acetate	General	oral	Acute/short term	2 mg/kg	no hazard identified
123-86-4	population		exposure -		
			systemic effects	25.7 (2	1 111
n-Butyl acetate 123-86-4	General	inhalation	Long term	35,7 mg/m3	no hazard identified
123-80-4	population		exposure - local effects		
Tris(p-isocyanatophenyl) thiophosphate	Workers	inhalation	Long term	0,047 mg/m3	
4151-51-3	Workers	minutation	exposure - local	0,047 mg/m5	
			effects		
1,3-Diisocyanatomethylbenzene	Workers	inhalation	Long term	0,345 mg/m3	
homopolymer			exposure - local	_	
9017-01-0			effects		
Acrylic acid	Workers	inhalation	Long term	30 mg/m3	no hazard identified
79-10-7			exposure - local		
	Workers	:	effects Acute/short term	20	no hazard identified
Acrylic acid 79-10-7	workers	inhalation	exposure - local	30 mg/m3	no nazard identified
/9-10-7			effects		
Acrylic acid	Workers	dermal	Acute/short term	1 mg/cm2	no hazard identified
79-10-7			exposure - local	8	
			effects		
Acrylic acid	General	dermal	Acute/short term	1 mg/cm2	no hazard identified
79-10-7	population		exposure - local		
	~ .		effects		
Acrylic acid	General	inhalation	Acute/short term	3,6 mg/m3	no hazard identified
79-10-7	population		exposure - local effects		
Acrylic acid	General	inhalation	Long term	3,6 mg/m3	no hazard identified
79-10-7	population	minanation	exposure - local	5,0 mg/m5	no nazaru identified
	population		effects		
p-Toluenesulphonyl isocyanate	Workers	inhalation	Long term	3,24 mg/m3	
4083-64-1			exposure -	-	
			systemic effects		
p-Toluenesulphonyl isocyanate	Workers	dermal	Long term	0,92 mg/kg	
4083-64-1			exposure -		
n Taluanagulahanyi ing musik	Comor-1	inh al-ti-	systemic effects	0.9 m - /2	
p-Toluenesulphonyl isocyanate 4083-64-1	General population	inhalation	Long term exposure -	0,8 mg/m3	
+005-0+-1	population		systemic effects		
p-Toluenesulphonyl isocyanate	General	dermal	Long term	0,46 mg/kg	
4083-64-1	population	acrinar	exposure -	0,10 116/116	
	1 1		systemic effects		
p-Toluenesulphonyl isocyanate	General	oral	Long term	0,46 mg/kg	
4083-64-1	population		exposure -		
			systemic effects		

Ingredient [Regulated substance]	Parameters	Biological specimen	Sampling time	Conc.	Basis of biol. exposure index	Remark	Additional Information
Butanone 78-93-3 [BUTAN-2-ONE]	Butan-2-one	Urine	Sampling time: End of shift.		UKEH40BMG V		
Tris(p-isocyanatophenyl) thiophosphate 4151-51-3 [ISOCYANATES (APPLIES TO HDI, IPDI, TDI AND MDI)]	Isocyanate- derived diamine	Creatinine in urine	Sampling time: At the end of the period of exposure.		UKEH40BMG V		
1,3-Diisocyanatomethylbenzene homopolymer 9017-01-0 [ISOCYANATES (APPLIES TO HDI, IPDI, TDI AND MDI)]	Isocyanate- derived diamine	Creatinine in urine	Sampling time: At the end of the period of exposure.		UKEH40BMG V		
2,4-Toluene diisocyanate, homopolymer 26006-20-2 [ISOCYANATES (APPLIES TO HDI, IPDI, TDI AND MDI)]	Isocyanate- derived diamine	Creatinine in urine	Sampling time: At the end of the period of exposure.		UKEH40BMG V		
p-Toluenesulphonyl isocyanate 4083-64-1 [ISOCYANATES (APPLIES TO HDI, IPDI, TDI AND MDI)]	Isocyanate- derived diamine	Creatinine in urine	Sampling time: At the end of the period of exposure.		UKEH40BMG V		

Biological Exposure Indices:

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)	11 mm2/s
(20 °C (68 °F);)	1 1 mm <i>i</i> 2/ 5
Viscosity, dynamic	5 - 14 mPa.s Viscosity Physica; HT-Method
(Physica Rheolab; Instrument: Physica Rheolab;	
23,0 °C (73.4 °F))	
Solubility (qualitative)	Partially miscible
$(20 \ ^{\circ}C \ (68 \ ^{\circ}F); Solvent: Water)$	
Partition coefficient: n-octanol/water	Not applicable
	Mixture
Vapour pressure	470 mbar;no method / method unknown
(55 °C (131 °F))	
Vapour pressure	94 hPa
(20 °C (68 °F))	
Vapour pressure	360 hPa
(50 °C (122 °F))	
Density	0,98 g/cm3 calculated
(20,0 °C (68 °F))	-,,
Relative vapour density:	Not available.
Particle characteristics	Not applicable
i article characteristics	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	Value	Value	Species	Method
CAS-No.	type			
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- Diisocyanatomethylbenze ne 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- isocyanatosulphonyltolue ne 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	Value	Value	Species	Method
CAS-No.	type			
Butanone	LD50	> 6.400 mg/kg	rabbit	not specified
78-93-3				
Ethyl acetate	LD50	> 20.000 mg/kg	rabbit	Draize Test
141-78-6				
n-butyl acetate	LD50	> 14.112 mg/kg	rabbit	OECD Guideline 402 (Acute Dermal Toxicity)
123-86-4				
2,4-Toluene diisocyanate,	Acute	> 5.000 mg/kg		Expert judgement
homopolymer	toxicity			
26006-20-2	estimate			
	(ATE)			
Acrylic acid	Acute	1.100 mg/kg		Expert judgement
79-10-7	toxicity			
	estimate			
	(ATE)			
Acrylic acid	LD50	> 2.000 mg/kg	rabbit	OECD Guideline 402 (Acute Dermal Toxicity)
79-10-7				
4-	LD50	> 2.000 mg/kg	rat	OECD Guideline 402 (Acute Dermal Toxicity)
isocyanatosulphonyltolue				
ne				
4083-64-1				

Acute inhalative toxicity:

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

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

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

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 123-86-4	negative	oral: gavage		mouse	OECD Guideline 474 (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- isocyanatosulphonyltolue ne 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 mm2/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	Value	Value	Exposure time	Species	Method
CAS-No.	type		_		
Butanone	EC50	5.091 mg/l	48 h	Daphnia magna	OECD Guideline 202
78-93-3					(Daphnia sp. Acute
					Immobilisation Test)
Ethyl acetate	EC50	164 mg/l	48 h	Daphnia cucullata	OECD Guideline 202
141-78-6					(Daphnia sp. Acute
					Immobilisation Test)
n-butyl acetate	EC50	44 mg/l	48 h	Daphnia sp.	OECD Guideline 202
123-86-4					(Daphnia sp. Acute
					Immobilisation Test)
1,3-	EC50	> 100 mg/l	48 h	Daphnia magna	OECD Guideline 202
Diisocyanatomethylbenzene					(Daphnia sp. Acute
homopolymer					Immobilisation Test)
9017-01-0					
2,4-Toluene diisocyanate,	EC50	Toxicity > Water	48 h	Daphnia magna	OECD Guideline 202
homopolymer		solubility			(Daphnia sp. Acute
26006-20-2					Immobilisation Test)
Acrylic acid	EC50	95 mg/l	48 h	Daphnia magna	EPA OTS 797.1300
79-10-7					(Aquatic Invertebrate Acute
					Toxicity Test, Freshwater
					Daphnids)
4-isocyanatosulphonyltoluene	EC50	> 100 mg/l	48 h	Daphnia magna	OECD Guideline 202
4083-64-1					(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	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Ethyl acetate	NOEC	2,4 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia
141-78-6					magna, Reproduction Test)
n-butyl acetate	NOEC	23,2 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia
123-86-4					magna, Reproduction Test)
Acrylic acid	NOEC	19 mg/l	21 d	Daphnia magna	EPA OTS 797.1330
79-10-7					(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	Value	Value	Exposure time	Species	Method
CAS-No.	type				
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,
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	Value	Exposure time	Species	Method
Butanone 78-93-3	type 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, homopolymer 26006-20-2	EC50	Toxicity > Water solubility	3 h	activated sludge	OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)
Acrylic acid	EC20	900 mg/l	30 min	activated sludge, domestic	ISO 8192 (Test for

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

12.4. Mobility in soil

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

Hazardous substances	LogPow	Temperature	Method
CAS-No.			
Butanone	0,3	40 °C	OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC
78-93-3			Method)
Ethyl acetate	0,68	25 °C	EPA OPPTS 830.7560 (Partition Coefficient, n-octanol / H2O, Generator
141-78-6			Column Method)
n-butyl acetate	2,3	25 °C	OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC
123-86-4			Method)
Phenol, 4-isocyanato-,	8,27		not specified
phosphorothioat			
4151-51-3			
Acrylic acid	0,46	25 °C	OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake
79-10-7			Flask Method)
4-isocyanatosulphonyltoluene	0,6	30 °C	OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC
4083-64-1			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	PBT / vPvB
CAS-No.	
Butanone	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
78-93-3	Bioaccumulative (vPvB) criteria.
Ethyl acetate	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
141-78-6	Bioaccumulative (vPvB) criteria.
n-butyl acetate	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
123-86-4	Bioaccumulative (vPvB) criteria.
Phenol, 4-isocyanato-, phosphorothioat	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
4151-51-3	Bioaccumulative (vPvB) criteria.
1,3-Diisocyanatomethylbenzene homopolymer	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
9017-01-0	Bioaccumulative (vPvB) criteria.
Acrylic acid	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
79-10-7	Bioaccumulative (vPvB) criteria.
4-isocyanatosulphonyltoluene	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
4083-64-1	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	Π
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): Prior Informed Consent (PIC) (Regulation (EU) No 649/2012): Persistent organic pollutants (Regulation (EU) 2019/1021): Not applicable Not applicable Hexachlorobenzene CAS 118-74-1

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

15.2. Chemical safety assessment

A chemical safety assessment has been carried out.

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 Substance listed in Annex II, Reg (EC) No. 2019/1148 EU EXPLD 2 Substance of very high concern (REACH Candidate List) SVHC: PBT: Substance fulfilling persistent, bioaccumulative and toxic criteria Substance fulfilling persistent, bioaccumulative and toxic plus very persistent and very PBT/vPvB: bioaccumulative criteria

vPvB:

Further information:

This Safety Data Sheet has been produced for sales from Henkel to parties purchasing from Henkel, is based on Regulation (EC) No 1907/2006 and provides information in accordance with applicable regulations of the European Union only. In that respect, no statement, warranty or representation of any kind is given as to compliance with any statutory laws or regulations of any other jurisdiction or territory other than the European Union. When exporting to territories other than the European Union, please consult with the respective Safety Data Sheet of the concerned territory to ensure compliance or liaise with Henkel's Product Safety and Regulatory Affairs Department (SDSinfo.Adhesive@henkel.com) prior to export to other territories than the European Union.

Substance fulfilling very persistent and very bioaccumulative criteria

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.

Dear Customer,

Henkel is committed to creating a sustainable future by promoting opportunities along the entire value chain. If you would like to contribute by switching from a paper to the electronic version of SDS, please contact the local Customer Service representative. We recommend to use a non-personal email address (e.g. SDS@your_company.com).

Relevant changes in this safety data sheet are indicated by vertical lines at the left margin in the body of this document. Corresponding text is displayed in a different color on shadowed fields.

Annex - Exposure Scenarios:

Exposure Scenarios for butanone (MEK) can be downloaded under the following link: https://mysds.henkel.com/index.html#/appSelection



Safety Data Sheet according to (EC) No 1907/2006 as amended Page 1 of 12

TEROSON PU 8597 HMLC

SDS No. : 298868 V009.0 Revision: 09.06.2023 printing date: 24.07.2023 Replaces version from: 10.03.2023

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

1.1. Product identifier TEROSON PU 8597 HMLC

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

cleaning tissue

1.3. Details of the supplier of the safety data sheet

Henkel Ltd Adhesives Wood Lane End HP2 4RQ Hemel Hempstead

Great Britain

Phone: +44 (1442) 278000

For Safety Data Sheet updates please visit our website https://mysds.henkel.com/index.html#/appSelection or www.henkeladhesives.com. SDSinfo.Adhesive@henkel.com

1.4. Emergency telephone number

24 Hours Emergency Tel: +44 0 8701 906777 - For further general health & safety, technical and practical advice on this product, please call +44 (0) 1606 593933 or write to: Technical Services; Henkel Limited; Road 5; Winsford Industrial Estate; Winsford; Cheshire; CW7 3QY-Email: technical.services@henkel.co.uk

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.	

2.2. Label elements

Label elements (CLP):

Hazard pictogram:



Contains

Propan-2-ol

Signal word:	Danger
Hazard statement:	H225 Highly flammable liquid and vapour. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness.
Precautionary statement:	P210 Keep away from sparks/open flames/hot surfaces No smoking. P261 Avoid breathing vapors. P280 Wear eye protection/face protection.

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

General chemical description: cleaning tissue Base substances of preparation: isopropanol

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
Propan-2-ol 67-63-0 200-661-7 01-2119457558-25	80- 100 %	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336		

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". Declaration of ingredients according to Detergent Regulation 648/2004/EC

The preparation does not contain any ingredients to be labelled according to this regulation.

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.

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.

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.

6.2. Environmental precautions Do not empty into drains / surface water / ground water.

6.3. Methods and material for containment and cleaning up

Dispose of contaminated material as waste according to Section 13. Remove mechanically.

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. Ground/bond container and receiving equipment. Use explosion proof electric equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

Hygiene measures:

Do not eat, drink or smoke while working. Wash hands before work breaks and after finishing work. **7.2. Conditions for safe storage, including any incompatibilities** Ensure good ventilation/extraction. Keep container in a well ventilated place. Store in a cool, dry place.

7.3. Specific end use(s) cleaning tissue

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure Limits

Valid for

Great Britain

Ingredient [Regulated substance]	ррт	mg/m ³	~ 1	Short term exposure limit category / Remarks	Regulatory list
Propan-2-ol 67-63-0 [PROPAN-2-OL]	400	999	Time Weighted Average (TWA):		EH40 WEL
Propan-2-ol 67-63-0 [PROPAN-2-OL]	500	1.250	Short Term Exposure Limit (STEL):	15 minutes	EH40 WEL

Occupational Exposure Limits

Valid for Ireland

Irelai	IU	

Ingredient [Regulated substance]	ррт	mg/m ³	Value type	Short term exposure limit category / Remarks	Regulatory list
Propan-2-ol 67-63-0 [ISOPROPYL ALCOHOL]	200		Time Weighted Average (TWA):		IR_OEL
Propan-2-ol 67-63-0 [ISOPROPYL ALCOHOL]			Skin designation:	Can be absorbed through the skin.	IR_OEL
Propan-2-ol 67-63-0 [ISOPROPYL ALCOHOL]	400		Short Term Exposure Limit (STEL):	15 minutes	IR_OEL

Predicted No-Effect Concentration (PNEC):

Name on list	Environmental Compartment	Exposure period	Value			Remarks	
			mg/l	ppm	mg/kg	others	
Propan-2-ol 67-63-0	aqua (freshwater)		140,9 mg/l				
Propan-2-ol 67-63-0	aqua (marine water)		140,9 mg/l				
Propan-2-ol 67-63-0	sediment (freshwater)				552 mg/kg		
Propan-2-ol 67-63-0	sediment (marine water)				552 mg/kg		
Propan-2-ol 67-63-0	Soil				28 mg/kg		
Propan-2-ol 67-63-0	aqua (intermittent releases)		140,9 mg/l				
Propan-2-ol 67-63-0	sewage treatment plant (STP)		2251 mg/l				
Propan-2-ol 67-63-0	oral				160 mg/kg		

Derived No-Effect Level (DNEL):

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
Propan-2-ol 67-63-0	Workers	dermal	Long term exposure - systemic effects		888 mg/kg	
Propan-2-ol 67-63-0	Workers	inhalation	Long term exposure - systemic effects		500 mg/m3	
Propan-2-ol 67-63-0	General population	dermal	Long term exposure - systemic effects		319 mg/kg	
Propan-2-ol 67-63-0	General population	inhalation	Long term exposure - systemic effects		89 mg/m3	
Propan-2-ol 67-63-0	General population	oral	Long term exposure - systemic effects		26 mg/kg	

Biological Exposure Indices:

None

8.2. Exposure controls:

Engineering controls: Use only in well ventilated areas.

Respiratory protection:

In case of dust formation, we recommend wearing of appropriate respiratory protection equipment with particle filter P (EN 14387).

This recommendation should be matched to local conditions. Filter type: A (EN 14387) Suitable breathing mask when there is inadequate ventilation.

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; \geq 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; \geq 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 Colour liquid, on inert carrier material white

Odor

Physical state Melting point Solidification temperature Initial boiling point Flammability Explosive limits lower

Flash point Auto-ignition temperature Decomposition temperature

pH (20 °C (68 °F); Conc.: 100 %) Viscosity (kinematic) Solubility (qualitative) (20 °C (68 °F); Solvent: Water) Partition coefficient: n-octanol/water

Vapour pressure Density (20 °C (68 °F)) Relative vapour density: Particle characteristics

9.2. Other information

Other information not applicable for this product

of solvent solid -89,5 °C (-129.1 °F) Not applicable, Product is a solid. 82 °C (179.6 °F) Currently under determination

12 %(V);
Upper explosion limit not applicable for safe processing practices.
12 °C (53.6 °F); no method / method unknown Not applicable, Product is a solid.
Not applicable, Substance/mixture is not self-reactive, no organic peroxide and does not decompose under foreseen conditions of use 9,11 Mixture is a tissue/fabric, provided pH is from applied solution.
Not applicable, Product is a solid.
Insoluble

Not applicable Mixture 48 hPa 0,785 g/cm3 no method / method unknown

Not applicable, Product is a solid. Currently under determination

SECTION 10: Stability and reactivity

10.1. Reactivity Oxidizers.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

See section reactivity

10.4. Conditions to avoid

Heat, flames, sparks and other sources of ignition.

10.5. Incompatible materials

See section reactivity.

10.6. Hazardous decomposition products

No decomposition if used according to specifications.

SECTION 11: Toxicological information

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
Propan-2-ol 67-63-0	LD50	5.840 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
Propan-2-ol 67-63-0	LD50	12.870 mg/kg	rabbit	OECD Guideline 402 (Acute Dermal Toxicity)

Acute inhalative toxicity:

No data available.

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
Propan-2-ol 67-63-0	slightly irritating	4 h	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
Propan-2-ol 67-63-0	Category II		rabbit	equivalent or similar to OECD Guideline 405 (Acute Eye Irritation / Corrosion)

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
Propan-2-ol 67-63-0	not sensitising	Buehler test	guinea pig	OECD Guideline 406 (Skin Sensitisation)

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
Propan-2-ol 67-63-0	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		equivalent or similar to OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Propan-2-ol 67-63-0	negative	mammalian cell gene mutation assay	with and without		equivalent or similar to OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
Propan-2-ol 67-63-0	negative	intraperitoneal		mouse	equivalent or similar to OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)

Carcinogenicity

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

Hazardous components	Result	Route of	Exposure	Species	Sex	Method
CAS-No.		application	time /			
			Frequency			
			of treatment			
Propan-2-ol		inhalation:	104 w	rat	male/female	OECD Guideline 451
67-63-0		vapour	6 h/d, 5 d/w			(Carcinogenicity
						Studies)

Reproductive toxicity:

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

Hazardous substances	Result / Value	Test type	Route of	Species	Method
CAS-No.			application		
Propan-2-ol 67-63-0	NOAEL P 853 mg/kg	One generation study	oral: drinking water	rat	equivalent or similar to OECD Guideline 415 (One- Generation Reproduction Toxicity Study)
Propan-2-ol 67-63-0	NOAEL P 500 mg/kg NOAEL F1 1.000 mg/kg	Two generation study	oral: gavage	rat	equivalent or similar to OECD Guideline 416 (Two- Generation Reproduction Toxicity Study)

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
Propan-2-ol 67-63-0		inhalation: vapour	at least 104 w 6 h/d, 5 d/w	rat	OECD Guideline 451 (Carcinogenicity Studies)

Aspiration hazard:

The mixture is classified based on Viscosity data.

Hazardous substances CAS-No.	Viscosity (kinematic) Value	Temperature	Method	Remarks
Propan-2-ol 67-63-0	1,8 mm2/s	40 °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
Propan-2-ol 67-63-0	LC50	> 9.640 - 10.000 mg/l	96 h	Pimephales promelas	OECD Guideline 203 (Fish, Acute Toxicity Test)

Toxicity (aquatic invertebrates):

No data available.

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
Propan-2-ol 67-63-0	NOEC	30 mg/1	21 d	· · · · · · · · · · · · · · · · · · ·	OECD 211 (Daphnia magna, Reproduction 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
Propan-2-ol 67-63-0	EC50	> 1.000 mg/l	96 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Propan-2-ol 67-63-0	NOEC	1.000 mg/l	96 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	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
Propan-2-ol 67-63-0	EC50	> 1.000 mg/l	3 h		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
Propan-2-ol 67-63-0	readily biodegradable	aerobic	70 - 84 %		EU Method C.4-E (Determination of the "Ready" BiodegradabilityClosed Bottle Test)

12.3. Bioaccumulative potential

No data available.

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
Propan-2-ol 67-63-0	0,05		OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask 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
Propan-2-ol 67-63-0	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

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.

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	SECTION 14: Transport information
14.1.	UN number or ID number
	Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.
14.2.	UN proper shipping name
	Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.
14.3.	Transport hazard class(es)
	Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.
14.4.	Packing group
	Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.
14.5.	Environmental hazards
	Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.
14.6.	Special precautions for user
	Not hazardous according to RID, ADR, ADN, IMDG, IATA-DGR.
14.7.	Maritime transport in bulk according to IMO instruments
	not applicable

SECTION 15: Regulatory information

15.1. Safety, health and environ	mental regulations/legislation specific fo	r the substance or mixture
Ozone Depleting Substance (OD	S) (Regulation (EC) No 1005/2009):	Not applicable
Prior Informed Consent (PIC) (Regulation (EU) No 649/2012):		Not applicable
Persistent organic pollutants (Reg	gulation (EU) 2019/1021):	Not applicable
VOC content	90 %	
(2010/75/EU)		

VOC Paints and Varnishes (EU):

Product (sub)category:

This product is not a subject of the Directive 2004/42/EC

15.2. Chemical safety assessment

A chemical safety assessment has been carried out.

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.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

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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