# **Contact Sheet**



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# Safety Data Sheet according to Regulation (EC) No 1907/2006

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SDS No.: SET00023030H

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Replaces version from: 23.07.2018

# TEROSON PU PLASTIC REP SET

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

#### 1.1. Product identifier

TEROSON PU PLASTIC REP SET

#### 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

Wood Lane End

HP2 4RQ Hemel Hempstead

Great Britain

Phone: +44 1442 278000 Fax-no.: +44 1442 278071

ua-productsafety.uk@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 aerosols Category 1

H222 Extremely flammable aerosol.

H229 Pressurized container: May burst if heated.

Skin irritation Category 2

H315 Causes skin irritation.

Serious eye irritation Category 2

H319 Causes serious eye irritation.

Skin sensitizer Category 1

H317 May cause an allergic skin reaction.

Specific target organ toxicity - single exposure Category 3

H335 May cause respiratory irritation.

Target organ: respiratory tract irritation

Specific target organ toxicity - repeated exposure Category 2

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

Acute toxicity Category 4

H332 Harmful if inhaled. Route of Exposure: Inhalation

Specific target organ toxicity - single exposure Category 3

H336 May cause drowsiness or dizziness.

#### 2.2. Label elements

#### Label elements (CLP):



**Contains** Xylene - mixture of isomeres

Ethylbenzene

N-[3-(dimethoxymethylsilyl)propyl]ethylenediamine

p-tert-Butylphenyl 1-(2,3-epoxy)propyl ether

Signal word:	Danger
Hazard statement:	H222 Extremely flammable aerosol.
	H229 Pressurized container: May burst if heated.
	H315 Causes skin irritation.
	H317 May cause an allergic skin reaction.
	H319 Causes serious eye irritation.
	H332 Harmful if inhaled.
	H335 May cause respiratory irritation.
	H336 May cause drowsiness or dizziness.
	H373 May cause damage to organs through prolonged or repeated exposure.
-	

Precautionary statement:	P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.
Prevention	No smoking.
	P211 Do not spray on an open flame or other ignition source.
	P251 Do not pierce or burn, even after use.
	P260 Do not breathe dust/fume/gas/mist/vapours/spray.
	P280 Wear protective gloves.

Precautionary statement:	P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
Storage	

#### 2.3. Other hazards

The aerosol container is under pressure. Do not expose to high temperatures.

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.

Persons suffering from allergic reactions to amines should avoid contact with the product.

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

### **SECTION 3: Composition/information on ingredients**

#### 3.2. Mixtures

#### **General chemical description:**

Primer, containing solvents

### Base substances of preparation:

Mixture of organic solvents

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

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Dimethyl ether 115-10-6	204-065-8 01-2119472128-37	40- 60 %	Flam. Gas 1 H220 Press. Gas
Xylene - mixture of isomeres 1330-20-7	215-535-7 01-2119488216-32	40- 60 %	H280  Asp. Tox. 1  H304  Acute Tox. 4; Inhalation  H332  Acute Tox. 4; Dermal  H312  Skin Irrit. 2  H315  Flam. Liq. 3  H226  Eye Irrit. 2  H319  STOT SE 3  H335  STOT RE 2  H373
Ethylbenzene 100-41-4	202-849-4 01-2119489370-35	10- 20 %	Flam. Liq. 2
N-[3- (dimethoxymethylsilyl)propyl]ethylenedia mine 3069-29-2	221-336-6 01-2119963926-21	0,1-< 1 %	Skin Sens. 1A H317 Eye Dam. 1 H318 Acute Tox. 4 H302 Skin Irrit. 2 H315
p-tert-Butylphenyl 1-(2,3-epoxy)propyl ether 3101-60-8	221-453-2 01-2119959496-20	0,1-< 1 %	Skin Sens. 1 H317 Aquatic Chronic 2 H411
Toluene 108-88-3	203-625-9 01-2119471310-51	0,1-< 1 %	Flam. Liq. 2 H225 Repr. 2 H361d Asp. Tox. 1 H304 STOT RE 2; Inhalation H373 Skin Irrit. 2 H315 STOT SE 3; Inhalation H336 Aquatic Chronic 3 H412

For full text of the H - statements and other abbreviations see section 16 "Other information". Substances without classification may have community workplace exposure limits available.

### **SECTION 4: First aid measures**

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Inhalation:

Fresh air, oxygen supply, warmth; seek specialist medical attention.

Skin contact:

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

Eye contact:

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

Ingestion:

not relevant.

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

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

SKIN: Redness, inflammation.

Vapors may cause drowsiness and dizziness.

EYE: Irritation, conjunctivitis.

SKIN: Rash, Urticaria.

#### 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:

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 protective equipment.

Wear self-contained breathing apparatus.

#### **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

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### **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.

Take off contaminated clothing and wash before reuse.

### 7.2. Conditions for safe storage, including any incompatibilities

Ensure good ventilation/extraction.

Store in a cool place.

Protect from direct sunlight and temperatures above 50°C. The storage regulations for aerosols apply.

Storage at 15 to 25°C is recommended.

### 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 <sup>3</sup>	Value type	Short term exposure limit category / Remarks	Regulatory list
Dimethyl ether 115-10-6 [DIMETHYL ETHER]	500	958	Short Term Exposure Limit (STEL):		EH40 WEL
Dimethyl ether 115-10-6 [DIMETHYL ETHER]	400	766	Time Weighted Average (TWA):		EH40 WEL
Dimethyl ether 115-10-6 [DIMETHYLETHER]	1.000	1.920	Time Weighted Average (TWA):	Indicative	ECTLV
Xylene 1330-20-7 [XYLENE, O-, M-, P- OR MIXED ISOMERS]	100	441	Short Term Exposure Limit (STEL):		EH40 WEL
Xylene 1330-20-7 [XYLENE, O-, M-, P- OR MIXED ISOMERS]			Skin designation:	Can be absorbed through the skin.	EH40 WEL
Xylene 1330-20-7 [XYLENE, O-, M-, P- OR MIXED ISOMERS]	50	220	Time Weighted Average (TWA):		EH40 WEL
Xylene 1330-20-7 [XYLENE, MIXED ISOMERS, PURE]	50	221	Time Weighted Average (TWA):	Indicative	ECTLV
Xylene 1330-20-7 [XYLENE, MIXED ISOMERS, PURE]	100	442	Short Term Exposure Limit (STEL):	Indicative	ECTLV
Ethylbenzene 100-41-4 [ETHYLBENZENE]	125	552	Short Term Exposure Limit (STEL):		EH40 WEL
Ethylbenzene 100-41-4 [ETHYLBENZENE]			Skin designation:	Can be absorbed through the skin.	EH40 WEL
Ethylbenzene 100-41-4 [ETHYLBENZENE]	100	441	Time Weighted Average (TWA):		EH40 WEL
Ethylbenzene 100-41-4 [ETHYLBENZENE]	100	442	Time Weighted Average (TWA):	Indicative	ECTLV
Ethylbenzene 100-41-4 [ETHYLBENZENE]	200	884	Short Term Exposure Limit (STEL):	Indicative	ECTLV
Toluene 108-88-3 [TOLUENE]	50	191	Time Weighted Average (TWA):		EH40 WEL
Toluene 108-88-3 [TOLUENE]	100	384	Short Term Exposure Limit (STEL):		EH40 WEL
Toluene 108-88-3 [TOLUENE]			Skin designation:	Can be absorbed through the skin.	EH40 WEL
Toluene 108-88-3 [TOLUENE]	50	192	Time Weighted Average (TWA):	Indicative	ECTLV
Toluene 108-88-3 [TOLUENE]	100	384	Short Term Exposure Limit (STEL):	Indicative	ECTLV

### **Occupational Exposure Limits**

Valid for

Ireland

Ingredient [Regulated substance]	ppm	mg/m <sup>3</sup>	Value type	Short term exposure limit category / Remarks	Regulatory list
Dimethyl ether	1.000	1.920	Time Weighted Average	Indicative OELV	IR_OEL
115-10-6			(TWA):		
[DIMETHYL ETHER]	1.000	1.020	TD: XX : 1 . 1 A	T 1'	ECTIVI
Dimethyl ether	1.000	1.920	Time Weighted Average	Indicative	ECTLV
115-10-6 [DIMETHYLETHER]			(TWA):		
			at t t		ID OFF
Xylene			Skin designation:	Can be absorbed through the	IR_OEL
1330-20-7				skin.	
[XYLENE, MIXED ISOMERS]	50	221	TD: 337 : 1 4 1 A	I I' ' OFIN	ID OF
Xylene 1330-20-7	30	221	Time Weighted Average (TWA):	Indicative OELV	IR_OEL
[XYLENE, MIXED ISOMERS]			(IWA):		
Xylene Xylene	50	221	Time Weighted Average	Indicative	ECTLV
1330-20-7	30	221	(TWA):	indicative	ECILV
[XYLENE, MIXED ISOMERS, PURE]			(TWA).		
Xvlene	100	442	Short Term Exposure	Indicative	ECTLV
1330-20-7	100	442	Limit (STEL):	mulcative	ECILV
[XYLENE, MIXED ISOMERS, PURE]			Emit (GTEE).		
Xylene	100	442	Short Term Exposure	15 minutes	IR_OEL
1330-20-7	100	1772	Limit (STEL):	Indicative OELV	IK_OLL
[XYLENE, MIXED ISOMERS]			2 (8.122).	marcunive GEE v	
Ethylbenzene	100	442	Time Weighted Average	Indicative OELV	IR OEL
100-41-4	100	1772	(TWA):	indicative GLL v	IK_OLL
[ETHYLBENZENE]			(1 111).		
Ethylbenzene			Skin designation:	Can be absorbed through the	IR_OEL
100-41-4				skin.	III_UZZ
[ETHYLBENZENE]					
Ethylbenzene	100	442	Time Weighted Average	Indicative	ECTLV
100-41-4			(TWA):		
[ETHYLBENZENE]					
Ethylbenzene	200	884	Short Term Exposure	Indicative	ECTLV
100-41-4			Limit (STEL):		
[ETHYLBENZENE]					
Ethylbenzene	200	884	Short Term Exposure	15 minutes	IR_OEL
100-41-4			Limit (STEL):	Indicative OELV	
[ETHYLBENZENE]					
Toluene	50	192	Time Weighted Average	Indicative OELV	IR_OEL
108-88-3			(TWA):		
[TOLUENE]					
Toluene			Skin designation:	Can be absorbed through the	IR_OEL
108-88-3				skin.	
[TOLUENE]					
Toluene	50	192	Time Weighted Average	Indicative	ECTLV
108-88-3			(TWA):		
[TOLUENE]	1100	204	lat . The Tr		ECTI I
Toluene	100	384	Short Term Exposure	Indicative	ECTLV
108-88-3	1		Limit (STEL):		
[TOLUENE]	1100	204	Ch and Transac F	15	ID OEI
Toluene	100	384	Short Term Exposure	15 minutes	IR_OEL
108-88-3	1		Limit (STEL):	Indicative OELV	
[TOLUENE]			1		

### $\label{eq:predicted} \textbf{Predicted No-Effect Concentration (PNEC):}$

Name on list	Environmental Compartment	Exposure period	ure Value				Remarks	
		periou	mg/l ppm mg/kg others			others		
Dimethyl ether	aqua		0,155 mg/l	•				
115-10-6	(freshwater)				0.601			
Dimethyl ether 115-10-6	sediment (freshwater)				0,681 mg/kg			
Dimethyl ether	Soil				0,045			
115-10-6					mg/kg			
Dimethyl ether	sewage		160 mg/l					
115-10-6	treatment plant (STP)							
Dimethyl ether	aqua (marine		0,016 mg/l					
115-10-6 Dimethyl ether	water)		1,549 mg/l					
115-10-6	aqua (intermittent		1,549 mg/1					
113 10 0	releases)							
Dimethyl ether	sediment				0,069			
115-10-6	(marine water)				mg/kg			
Xylene - mixture of isomeres 1330-20-7	aqua (freshwater)		0,327 mg/l					
Xylene - mixture of isomeres	sediment				12,46			
1330-20-7	(freshwater)				mg/kg			
Xylene - mixture of isomeres 1330-20-7	Soil				2,31 mg/kg			
Xylene - mixture of isomeres	aqua (marine		0,327 mg/l					
1330-20-7	water)							
Xylene - mixture of isomeres	aqua		0,327 mg/l					
1330-20-7	(intermittent releases)							
Xylene - mixture of isomeres	sewage		6,58 mg/l					
1330-20-7	treatment plant (STP)		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
Xylene - mixture of isomeres	sediment				12,46			
1330-20-7	(marine water)				mg/kg			
Ethylbenzene	aqua		0,1 mg/l					
100-41-4	(intermittent releases)							
Ethylbenzene	aqua		0,1 mg/l					
100-41-4	(freshwater)		, ,					
Ethylbenzene	sediment				1,37 mg/kg			
100-41-4 Ethylbenzene	(marine water)				13,7 mg/kg			
100-41-4	(freshwater)				13,7 Hig/kg			
Ethylbenzene	sewage		9,6 mg/l					
100-41-4	treatment plant							
Ethylbenzene	(STP) aqua (marine		0,01 mg/l					
100-41-4	water)		0,01 mg/1					
Ethylbenzene 100-41-4	Soil				2,68 mg/kg			
Ethylbenzene	oral		+		20 mg/kg			
100-41-4					3,8			
p-tert-Butylphenyl 1-(2,3-epoxy)propyl ether			0,0075					
3101-60-8 p-tert-Butylphenyl 1-(2,3-epoxy)propyl ether	(freshwater)		mg/l 0,00075	-				
3101-60-8	water)		0,000/5 mg/l					
p-tert-Butylphenyl 1-(2,3-epoxy)propyl ether	sewage		100 mg/l					
3101-60-8	treatment plant							
p-tert-Butylphenyl 1-(2,3-epoxy)propyl ether	(STP) sediment	-			33,54			
3101-60-8	(freshwater)				mg/kg			
p-tert-Butylphenyl 1-(2,3-epoxy)propyl ether	sediment				3,354			
3101-60-8 p-tert-Butylphenyl 1-(2,3-epoxy)propyl ether	(marine water)		1		mg/kg 11,4 mg/kg			
3101-60-8					11,7 mg/kg			
Toluene	aqua		0,68 mg/l					
108-88-3 Toluene	(freshwater) sediment	-			16,39			
108-88-3	(freshwater)				mg/kg			
Toluene	sediment				16,39			
108-88-3	(marine water)				mg/kg			

Toluene 108-88-3	Soil		2,89 mg/kg	
Toluene 108-88-3	sewage treatment plant (STP)	13,61 mg/l		
Toluene 108-88-3	aqua (marine water)	0,68 mg/l		
Toluene 108-88-3	aqua (intermittent releases)	0,68 mg/l		

### **Derived No-Effect Level (DNEL):**

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
Dimethyl ether 115-10-6	Workers	inhalation	Long term exposure -		1894 mg/m3	
			systemic effects			
Dimethyl ether 115-10-6	General population	inhalation	Long term exposure - systemic effects		471 mg/m3	
Xylene - mixture of isomeres 1330-20-7	Workers	inhalation	Long term exposure -		221 mg/m3	
V-1	Workers	:11-4:	systemic effects Acute/short term		442/2	
Xylene - mixture of isomeres 1330-20-7	Workers	inhalation	exposure - systemic effects		442 mg/m3	
Xylene - mixture of isomeres 1330-20-7	Workers	inhalation	Long term exposure - local effects		221 mg/m3	
Xylene - mixture of isomeres 1330-20-7	Workers	inhalation	Acute/short term exposure - local effects		442 mg/m3	
Xylene - mixture of isomeres 1330-20-7	Workers	dermal	Long term exposure - systemic effects		212 mg/kg	
Xylene - mixture of isomeres 1330-20-7	General population	inhalation	Long term exposure - systemic effects		65,3 mg/m3	
Xylene - mixture of isomeres 1330-20-7	General population	inhalation	Acute/short term exposure - systemic effects		260 mg/m3	
Xylene - mixture of isomeres 1330-20-7	General population	inhalation	Long term exposure - local effects		65,3 mg/m3	
Xylene - mixture of isomeres 1330-20-7	General population	inhalation	Acute/short term exposure - local effects		260 mg/m3	
Xylene - mixture of isomeres	General	dermal	Long term		125 mg/kg	
1330-20-7	population		exposure - systemic effects			
Xylene - mixture of isomeres 1330-20-7	General population	oral	Long term exposure - systemic effects		12,5 mg/kg	
Ethylbenzene 100-41-4	Workers	inhalation	Acute/short term exposure - local effects		293 mg/m3	
Ethylbenzene 100-41-4	General population	inhalation	Long term exposure - systemic effects		15 mg/m3	
Ethylbenzene 100-41-4	General population	oral	Long term exposure -		1,6 mg/kg	
Ethylbenzene 100-41-4	Workers	dermal	systemic effects  Long term exposure -		180 mg/kg	
Ethylbenzene 100-41-4	Workers	inhalation	systemic effects  Long term exposure -		77 mg/m3	
p-tert-Butylphenyl 1-(2,3-epoxy)propyl ether 3101-60-8	Workers	inhalation	systemic effects  Long term exposure -		19,6 mg/m3	
p-tert-Butylphenyl 1-(2,3-epoxy)propyl ether 3101-60-8	Workers	inhalation	systemic effects Acute/short term exposure -		19,6 mg/m3	
p-tert-Butylphenyl 1-(2,3-epoxy)propyl ether 3101-60-8	Workers	inhalation	systemic effects Acute/short term exposure - local effects		19,6 mg/m3	
p-tert-Butylphenyl 1-(2,3-epoxy)propyl ether 3101-60-8	Workers	inhalation	Long term exposure - local effects		19,6 mg/m3	
p-tert-Butylphenyl 1-(2,3-epoxy)propyl ether 3101-60-8	Workers	dermal	Long term exposure - systemic effects		5,6 mg/kg	
Toluene	Workers	Inhalation	Acute/short term		384 mg/m3	
108-88-3			exposure - local		_	

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		1	effects		
Toluene 108-88-3	Workers	Inhalation	Acute/short term exposure - systemic effects	384 mg/m3	
Toluene 108-88-3	Workers	Inhalation	Long term exposure - local effects	192 mg/m3	
Toluene 108-88-3	Workers	Inhalation	Long term exposure - systemic effects	192 mg/m3	
Toluene 108-88-3	Workers	dermal	Long term exposure - systemic effects	384 mg/kg	
Toluene 108-88-3	General population	Inhalation	Acute/short term exposure - local effects	226 mg/m3	
Toluene 108-88-3	General population	Inhalation	Acute/short term exposure - systemic effects	226 mg/m3	
Toluene 108-88-3	General population	Inhalation	Long term exposure - systemic effects	56,5 mg/m3	
Toluene 108-88-3	General population	dermal	Long term exposure - systemic effects	226 mg/kg	
Toluene 108-88-3	General population	oral	Long term exposure - systemic effects	8,13 mg/kg	
Toluene 108-88-3	General population	inhalation	Long term exposure - local effects	56,5 mg/m3	

#### **Biological Exposure Indices:**

Ingredient [Regulated substance]	Parameters	Biological specimen	Sampling time	Conc.	Basis of biol. exposure index	 Additional Information
Xylene	Methylhippur	Creatinine in	Sampling time: End of		UKEH40BMG	
1330-20-7	ic acids	urine	shift.		V	
[XYLENE O-, M-, P-, OR						
MIXED ISOMERS]						

### 8.2. Exposure controls:

#### Engineering controls:

In case of aerosol forming ensure sufficient suction and ventilation.

#### 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): Fluorinated rubber (FKM; >= 0.7 mm thickness) Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374): Fluorinated rubber (FKM; >= 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.

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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).

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

Appearance aerosol

liquid yellowish

Odor aromatic

Odour threshold No data available / Not applicable

pH No data available / Not applicable
Melting point No data available / Not applicable
Solidification temperature No data available / Not applicable

Initial boiling point  $< 60 \,^{\circ}\text{C} (< 140 \,^{\circ}\text{F})$ 

Flash point -41 °C (-41.8 °F); no method Evaporation rate No data available / Not applicable Flammability No data available / Not applicable

Explosive limits

lower 1,1 %(V) upper 18,6 %(V) Vapour pressure 7500 mbar (55 °C (131 °F))

Vapour pressure 3900 mbar

(20 °C (68 °F))

Relative vapour density:

No data available / Not applicable

Density 0,77 g/cm<sup>3</sup>

(20 °C (68 °F))

Bulk density No data available / Not applicable Solubility No data available / Not applicable

Solubility (qualitative) Not miscible

(Solvent: Water)

Partition coefficient: n-octanol/water

Auto-ignition temperature

Decomposition temperature

No data available / Not applicable
Not applicable / Not applicabl

#### 9.2. Other information

Flow cup viscosity 10 - 15 s

(20 °C (68 °F); Type of cup: DIN-Cup; Nozzle: 4,0 mm;; Flowcup Viscosity; HT-Method)

max. VOC content: 749,2 g/l

#### **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

Temperatures over appr. 50 °C

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**

#### General toxicological information:

Persons suffering from allergic reactions to amines should avoid contact with the product.

### 11.1. Information on toxicological effects

#### 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
Xylene - mixture of isomeres 1330-20-7	LD50	3.523 mg/kg	rat	EU Method B.1 (Acute Toxicity (Oral))
Ethylbenzene 100-41-4	LD50	3.500 mg/kg	rat	not specified
N-[3- (dimethoxymethylsilyl)pr opyl]ethylenediamine 3069-29-2	LD50	200 - 2.000 mg/kg	rat	OECD Guideline 423 (Acute Oral toxicity)
p-tert-Butylphenyl 1-(2,3-epoxy)propyl ether 3101-60-8	LD50	> 2.000 mg/kg	rat	OECD Guideline 425 (Acute Oral Toxicity: Up-and-Down Procedure)
Toluene 108-88-3	LD50	5.580 mg/kg	rat	EU Method B.1 (Acute Toxicity (Oral))

### 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			
Xylene - mixture of	LD50	1.700 mg/kg	rabbit	not specified
isomeres				
1330-20-7				
Ethylbenzene	LD50	15.433 mg/kg	rabbit	not specified
100-41-4				
N-[3-	LD50	15.520 mg/kg	rabbit	not specified
(dimethoxymethylsilyl)pr				
opyl]ethylenediamine				
3069-29-2				
p-tert-Butylphenyl 1-(2,3-	LD50	> 2.000 mg/kg	rat	OECD Guideline 402 (Acute Dermal Toxicity)
epoxy)propyl ether				
3101-60-8				
Toluene	LD50	> 5.000 mg/kg	rabbit	not specified
108-88-3				-

### 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		
Dimethyl ether	LC50	164000 ppm		4 h	rat	not specified
115-10-6						
Xylene - mixture of	LC50	11 mg/l	vapour	4 h	rat	not specified
isomeres						
1330-20-7						
Ethylbenzene	LC50	17,2 mg/l	vapour	4 h	rat	not specified
100-41-4						
N-[3-	LC50	> 5,2 mg/l	aerosol	4 h	rat	OECD Guideline 403 (Acute
(dimethoxymethylsilyl)pr						Inhalation Toxicity)
opyl]ethylenediamine						
3069-29-2						
Toluene	LC50	28,1 mg/l	vapour	4 h	rat	OECD Guideline 403 (Acute
108-88-3						Inhalation Toxicity)

#### Skin corrosion/irritation:

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

Hazardous substances	Result	Exposure	Species	Method
CAS-No.		time		
Xylene - mixture of	moderately		rabbit	not specified
isomeres	irritating			
1330-20-7				
N-[3-	irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
(dimethoxymethylsilyl)pr				
opyl]ethylenediamine				
3069-29-2				
p-tert-Butylphenyl 1-(2,3-	not irritating	24 h	rat	other guideline:
epoxy)propyl ether				
3101-60-8				
Toluene	irritating	4 h	rabbit	EU Method B.4 (Acute Toxicity: Dermal Irritation /
108-88-3	8			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
Xylene - mixture of isomeres 1330-20-7	slightly irritating	tinc	rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
N-[3- (dimethoxymethylsilyl)pr opyl]ethylenediamine 3069-29-2	highly irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
p-tert-Butylphenyl 1-(2,3-epoxy)propyl ether 3101-60-8	not irritating	72 h	rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
Toluene 108-88-3	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	Result	Test type	Species	Method
CAS-No.				
Xylene - mixture of isomeres 1330-20-7	not sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
N-[3- (dimethoxymethylsilyl)pr opyl]ethylenediamine 3069-29-2	sensitising	Guinea pig maximisation test	guinea pig	not specified
p-tert-Butylphenyl 1-(2,3-epoxy)propyl ether 3101-60-8	sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
Toluene 108-88-3	not sensitising	Guinea pig maximisation test	guinea pig	EU Method B.6 (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
Dimethyl ether 115-10-6	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		not specified
Xylene - mixture of isomeres 1330-20-7	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Xylene - mixture of isomeres 1330-20-7	negative	in vitro mammalian chromosome aberration test	with and without		EU Method B.10 (Mutagenicity)
Xylene - mixture of isomeres 1330-20-7	negative	sister chromatid exchange assay in mammalian cells	with and without		EU Method B.19 (Sister Chromatid Exchange Assay In Vitro)
Ethylbenzene 100-41-4	negative	sister chromatid exchange assay in mammalian cells	with and without		not specified
Ethylbenzene 100-41-4	negative	in vitro mammalian chromosome aberration test	with and without		not specified
Ethylbenzene 100-41-4	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		not specified
Toluene 108-88-3	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		EU Method B.13/14 (Mutagenicity)
Toluene 108-88-3	negative	mammalian cell gene mutation assay	with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
Xylene - mixture of isomeres 1330-20-7	negative	intraperitoneal		rat	OECD Guideline 478 (Genetic Toxicology: Rodent Dominant Lethal Test)
Ethylbenzene 100-41-4	negative	intraperitoneal		mouse	Micronucleus assay

### 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
Xylene - mixture of isomeres 1330-20-7	not carcinogenic	oral: gavage	103 w 5 d/w	rat	male/female	EU Method B.32 (Carcinogenicity Test)

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### Reproductive toxicity:

No data available.

### 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	Species	Method
CAS-110.		application	treatment		
Dimethyl ether	NOAEL > 10000 ppm	inhalation	4 week	rat	not specified
115-10-6			6 hours/day, 5 days/week		
Xylene - mixture of	NOAEL 150 mg/kg	oral: gavage	90 d	rat	OECD Guideline 408
isomeres			daily		(Repeated Dose 90-Day
1330-20-7					Oral Toxicity in Rodents)
Ethylbenzene		inhalation	4weeks	mouse	OECD Guideline 412
100-41-4			6 hours/day, 5		(Repeated Dose
			days/week		Inhalation Toxicity:
					28/14-Day)
Toluene	NOAEL 625 mg/kg	oral: gavage	13 weeks	rat	EU Method B.26 (Sub-
108-88-3			daily, 5 days/ week		Chronic Oral Toxicity
					Test: Repeated Dose 90-
					Day Oral Toxicity Study
					in Rodents)

### Aspiration hazard:

The mixture is classified based on Viscosity data.

Hazardous substances	Viscosity (kinematic)	Temperature	Method	Remarks
CAS-No.	Value			
Ethylbenzene	0,641 mm2/s	40 °C	OECD Test Guideline 114	
100-41-4				
Toluene	0,57 mm2/s	40 °C	not specified	
108-88-3				

### **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.

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Dimethyl ether	LC50	> 4.000 mg/l	96 h	Poecilia reticulata	OECD Guideline 203 (Fish,
115-10-6					Acute Toxicity Test)
Xylene - mixture of isomeres	LC50	2,6 mg/l	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish,
1330-20-7					Acute Toxicity Test)
Ethylbenzene	LC50	4,2 mg/l	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish,
100-41-4					Acute Toxicity Test)
N-[3-	LC50	597 mg/l	96 h	Brachydanio rerio (new name:	EU Method C.1 (Acute
(dimethoxymethylsilyl)propyl]				Danio rerio)	Toxicity for Fish)
ethylenediamine					
3069-29-2					
p-tert-Butylphenyl 1-(2,3-	LC50	7,5 mg/l	96 h	Oncorhynchus mykiss	OECD Guideline 203 (Fish,
epoxy)propyl ether					Acute Toxicity Test)
3101-60-8					
Toluene	NOEC	3,2 mg/l	28 d	Cyprinodon variegatus	OECD Guideline 204 (Fish,
108-88-3					Prolonged Toxicity Test:
					14-day Study)
Toluene	LC50	5,5 mg/l	96 h	Oncorhynchus kisutch	OECD Guideline 203 (Fish,
108-88-3					Acute Toxicity Test)

### Toxicity (Daphnia):

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

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type		1	•	
Dimethyl ether	EC50	> 4.000 mg/l	48 h	Daphnia magna	OECD Guideline 202
115-10-6					(Daphnia sp. Acute
					Immobilisation Test)
Xylene - mixture of isomeres	EC50	3,1 mg/l	48 h	Daphnia magna	OECD Guideline 202
1330-20-7					(Daphnia sp. Acute
					Immobilisation Test)
Ethylbenzene	EC50	> 1,8 - 2,4 mg/l	48 h	Daphnia magna	OECD Guideline 202
100-41-4					(Daphnia sp. Acute
					Immobilisation Test)
N-[3-	EC50	> 100 mg/l	48 h	Daphnia magna	OECD Guideline 202
(dimethoxymethylsilyl)propyl]					(Daphnia sp. Acute
ethylenediamine					Immobilisation Test)
3069-29-2					
p-tert-Butylphenyl 1-(2,3-	EC50	67,9 mg/l	48 h	Daphnia magna	OECD Guideline 202
epoxy)propyl ether					(Daphnia sp. Acute
3101-60-8					Immobilisation Test)
Toluene	EC50	11,5 mg/l	48 h	Daphnia magna	OECD Guideline 202
108-88-3					(Daphnia sp. Acute
					Immobilisation Test)

### Chronic toxicity to aquatic invertebrates

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

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Ethylbenzene	NOEC	0,96 mg/l	7 d	Ceriodaphnia dubia	OECD 211 (Daphnia
100-41-4					magna, Reproduction Test)
Toluene	NOEC	0,74 mg/l	7 d	Ceriodaphnia dubia	other guideline:
108-88-3		-			_

### Toxicity (Algae):

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

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type		_		
Dimethyl ether 115-10-6	EC50	> 1.000 mg/l	72 h	not specified	OECD Guideline 201 (Alga, Growth Inhibition Test)
Xylene - mixture of isomeres 1330-20-7	ErC50	4,36 mg/l	73 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Xylene - mixture of isomeres 1330-20-7	EC10	1,9 mg/l	73 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Ethylbenzene 100-41-4	EC50	7,7 mg/l	96 h	Skeletonema costatum	OECD Guideline 201 (Alga, Growth Inhibition Test)
Ethylbenzene 100-41-4	NOEC	4,5 mg/l	96 h	Skeletonema costatum	OECD Guideline 201 (Alga, Growth Inhibition Test)
p-tert-Butylphenyl 1-(2,3-epoxy)propyl ether 3101-60-8	EC50	9 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Toluene 108-88-3	IC50	12 mg/l	72 h	Selenastrum capricornutum (new name: Pseudokirchneriella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)

### Toxicity to microorganisms

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

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type		1	1	
Dimethyl ether	EC10	> 1.600 mg/l	30 min	Pseudomonas putida	DIN 38412, part 27
115-10-6					(Bacterial oxygen consumption test)
Xylene - mixture of isomeres 1330-20-7	EC 50	> 1 - 10 mg/l			not specified
Ethylbenzene 100-41-4	EC 50	> 152 mg/l	30 min	not specified	OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)
N-[3- (dimethoxymethylsilyl)propyl] ethylenediamine 3069-29-2	EC10	25 mg/l	16 h	Pseudomonas putida	DIN 38412, part 8 (Pseudomonas Zellvermehrungshemm- Test)
p-tert-Butylphenyl 1-(2,3- epoxy)propyl ether 3101-60-8	EC50	> 1.000 mg/l	3 h	activated sludge of a predominantly domestic sewage	OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)
Toluene 108-88-3	NOEC	29 mg/l	16 h	Pseudomonas putida	DIN 38412, part 8 (Pseudomonas Zellvermehrungshemm- Test)

### 12.2. Persistence and degradability

Hazardous substances CAS-No.	Result	Test type	Degradability	Exposure time	Method
Dimethyl ether 115-10-6	not readily biodegradable.	aerobic	5 %	28 d	EU Method C.4-A (Determination of the "Ready" BiodegradabilityDissolved Organic Carbon (DOC) Die-Away Test)
Xylene - mixture of isomeres 1330-20-7	readily biodegradable	aerobic	90 %	28 day	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)
Ethylbenzene 100-41-4	readily biodegradable	aerobic	69 %	33 d	OECD Guideline 301 C (Ready Biodegradability: Modified MITI Test (I))
N-[3- (dimethoxymethylsilyl)propyl] ethylenediamine 3069-29-2	not readily biodegradable.	aerobic	39 %	28 day	OECD Guideline 301 A (new version) (Ready Biodegradability: DOC Die Away Test)
p-tert-Butylphenyl 1-(2,3-epoxy)propyl ether 3101-60-8	not readily biodegradable.	aerobic	1,1 %	28 d	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
Toluene 108-88-3	readily biodegradable	aerobic	80 %	20 d	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)

#### 12.3. Bioaccumulative potential

Hazardous substances	Bioconcentratio	Exposure time	Temperature	Species	Method
CAS-No.	n factor (BCF)				
Xylene - mixture of isomeres 1330-20-7	25,9	56 day		Oncorhynchus mykiss	not specified
Ethylbenzene 100-41-4	1	42 d	10 °C	Oncorhynchus kisutch	OECD Guideline 305 (Bioconcentration: Flow-through Fish Test)
Toluene 108-88-3	90	3 d		Leuciscus idus melanotus	OECD Guideline 305 (Bioconcentration: Flow-through Fish Test)

#### 12.4. Mobility in soil

Hazardous substances	LogPow	Temperature	Method
CAS-No.		-	
Dimethyl ether 115-10-6	0,07	25 °C	QSAR (Quantitative Structure Activity Relationship)
Xylene - mixture of isomeres 1330-20-7	3,16	20 °C	
Ethylbenzene 100-41-4	3,6	20 °C	EU Method A.8 (Partition Coefficient)
N-[3- (dimethoxymethylsilyl)propyl] ethylenediamine 3069-29-2	1	20 °C	QSAR (Quantitative Structure Activity Relationship)
p-tert-Butylphenyl 1-(2,3-epoxy)propyl ether 3101-60-8	3,59	20 °C	OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)
Toluene 108-88-3	2,73	20 °C	EU Method A.8 (Partition Coefficient)

#### 12.5. Results of PBT and vPvB assessment

Hazardous substances	PBT / vPvB
CAS-No.	
Dimethyl ether	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
115-10-6	Bioaccumulative (vPvB) criteria.
Xylene - mixture of isomeres	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
1330-20-7	Bioaccumulative (vPvB) criteria.
Ethylbenzene	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
100-41-4	Bioaccumulative (vPvB) criteria.
N-[3-	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
(dimethoxymethylsilyl)propyl]ethylenediamine	Bioaccumulative (vPvB) criteria.
3069-29-2	
p-tert-Butylphenyl 1-(2,3-epoxy)propyl ether	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
3101-60-8	Bioaccumulative (vPvB) criteria.
Toluene	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
108-88-3	Bioaccumulative (vPvB) criteria.

#### 12.6. 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

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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

ADR	1950
RID	1950
ADN	1950
IMDG	1950
IATA	1950

#### 14.2. UN proper shipping name

ADR	AEROSOLS
RID	AEROSOLS
ADN	AEROSOLS
IMDG	AEROSOLS
IATA	Aerosols, flammable

### 14.3. Transport hazard class(es)

ADR	2.1
RID	2.1
ADN	2.1
IMDG	2.1
IATA	2.1

### 14.4. Packing group

ADR RID ADN IMDG IATA

### 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	not applicable
	Tunnelcode: (D)
RID	not applicable
ADN	not applicable
IMDG	not applicable
IATA	not applicable

#### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

(2010/75/EU)

### **SECTION 15: Regulatory information**

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

VOC content 97,3 %
(VOCV 814.018 VOC regulation
CH)
VOC content 97,3 %

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**VOC Paints and Varnishes (EU):** 

Regulatory Basis: Directive 2004/42/EC Product (sub)category: B(e) Special finishes

Phase I (from 1.1.2007): 840 g/l max. VOC content: 749,2 g/l

#### 15.2. Chemical safety assessment

A chemical safety assessment has not been carried out.

#### **SECTION 16: Other information**

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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:

H220 Extremely flammable gas.

H225 Highly flammable liquid and vapor.

H226 Flammable liquid and vapor.

H280 Contains gas under pressure; may explode if heated.

H302 Harmful if swallowed.

H304 May be fatal if swallowed and enters airways.

H312 Harmful in contact with skin.

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.

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

H361d Suspected of damaging the unborn child.

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

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

H411 Toxic to aquatic life with long lasting effects.

H412 Harmful to aquatic life with long lasting effects.

#### **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 (ua-productsafety.de@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.

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 Regulation (EC) No 1907/2006

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SDS No.: 220157 V011.0

Revision: 06.06.2019

printing date: 27.06.2019

Replaces version from: 23.07.2018

Category 2

Category 2

TEROSON PU PLASTIC REP SET

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

#### 1.1. Product identifier

TEROSON PU PLASTIC REP SET

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

Intended use:

Part A for 2-K-Polyurethane adhesive and sealant

### 1.3. Details of the supplier of the safety data sheet

Henkel Ltd

Wood Lane End

HP2 4RQ Hemel Hempstead

Great Britain

Phone: +44 1442 278000 Fax-no.: +44 1442 278071

ua-productsafety.uk@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):

Skin irritation

H315 Causes skin irritation.

H319 Causes serious eye irritation.

Serious eye irritation

#### 2.2. Label elements

#### Label elements (CLP):

Hazard pictogram:



Signal word: Warning

**Hazard statement:** H315 Causes skin irritation.

H319 Causes serious eye irritation.

**Precautionary statement:** 

Prevention

P280 Wear protective gloves/eye protection.

#### 2.3. Other hazards

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

### **SECTION 3: Composition/information on ingredients**

#### 3.2. Mixtures

#### General chemical description:

2-Component polyurethane adhesive

#### Base substances of preparation:

Polyol

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

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Polyether polyol based on ethylenediamine and propyleneoxide~ 25214-63-5	500-035-6 500-035-6 01-2119471485-32	10- 20 %	Eye Irrit. 2 H319
2,4,6-Tris(dimethylaminomethyl)phenol 90-72-2	202-013-9 01-2119560597-27	1-< 3 %	Skin Corr. 1C H314 Acute Tox. 4 H302 Eye Dam. 1 H318

For full text of the H - statements and other abbreviations see section 16 "Other information". Substances without classification may have community workplace exposure limits available.

### **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

Inhalation

Move to fresh air, consult doctor if complaint persists.

Skin contact:

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

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.

SKIN: Redness, inflammation.

#### 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 protective equipment.

Wear self-contained breathing apparatus.

### **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.

Take off contaminated clothing and wash before reuse.

#### 7.2. Conditions for safe storage, including any incompatibilities

Ensure good ventilation/extraction.

Store in a cool, dry place.

Temperatures between + 10 °C and + 25 °C

Protect from direct sun-light and temperature above 50°C in any case.

### 7.3. Specific end use(s)

Part A for 2-K-Polyurethane adhesive and sealant

### **SECTION 8: Exposure controls/personal protection**

### 8.1. Control parameters

### **Occupational Exposure Limits**

Valid for

Great Britain

Ingredient [Regulated substance]	ppm	mg/m³	Value type	Short term exposure limit category / Remarks	Regulatory list
Calcium carbonate 471-34-1 [CALCIUM CARBONATE, INHALABLE DUST]		10	Time Weighted Average (TWA):		EH40 WEL
Calcium carbonate 471-34-1 [CALCIUM CARBONATE, RESPIRABLE DUST]		4	Time Weighted Average (TWA):		EH40 WEL
Calcium carbonate 471-34-1 [LIMESTONE, RESPIRABLE MARBLE, RESPIRABLE]		4	Time Weighted Average (TWA):		EH40 WEL
Calcium carbonate 471-34-1 [LIMESTONE, TOTAL INHALABLE MARBLE, TOTAL INHALABLE]		10	Time Weighted Average (TWA):		EH40 WEL
Limestone 1317-65-3 [CALCIUM CARBONATE, INHALABLE DUST]		10	Time Weighted Average (TWA):		EH40 WEL
Limestone 1317-65-3 [CALCIUM CARBONATE, RESPIRABLE DUST]		4	Time Weighted Average (TWA):		EH40 WEL
Limestone 1317-65-3 [LIMESTONE, RESPIRABLE MARBLE, RESPIRABLE]		4	Time Weighted Average (TWA):		EH40 WEL
Limestone 1317-65-3 [LIMESTONE, TOTAL INHALABLE MARBLE, TOTAL INHALABLE]		10	Time Weighted Average (TWA):		EH40 WEL
Zeolites 68989-22-0 [ALUMINIUM OXIDES, INHALABLE DUST]		10	Time Weighted Average (TWA):		EH40 WEL
Zeolites 68989-22-0 [ALUMINIUM OXIDES, RESPIRABLE DUST]		4	Time Weighted Average (TWA):		EH40 WEL

### **Occupational Exposure Limits**

Valid for

Ireland

Ingredient [Regulated substance]	ppm	mg/m³	Value type	Short term exposure limit category / Remarks	Regulatory list
Calcium carbonate 471-34-1 [CALCIUM CARBONATE, RESPIRABLE DUST]		4	Time Weighted Average (TWA):		IR_OEL
Calcium carbonate 471-34-1 [CALCIUM CARBONATE, TOTAL INHALABLE DUST]		10	Time Weighted Average (TWA):		IR_OEL
Limestone 1317-65-3 [CALCIUM CARBONATE, RESPIRABLE DUST]		4	Time Weighted Average (TWA):		IR_OEL
Limestone		10	Time Weighted Average		IR_OEL

1317-65-3		(TWA):	
[CALCIUM CARBONATE, TOTAL			
INHALABLE DUST]			

### **Predicted No-Effect Concentration (PNEC):**

Name on list	Environmental Compartment	Exposure period	Value				Remarks
			mg/l	ppm	mg/kg	others	
Polyether polyol based on ethylenediamine and propyleneoxide~ 25214-63-5	aqua (freshwater)		0,085 mg/l				
Polyether polyol based on ethylenediamine and propyleneoxide~ 25214-63-5	aqua (marine water)		0,0085 mg/l				
Polyether polyol based on ethylenediamine and propyleneoxide~ 25214-63-5	aqua (intermittent releases)		1,51 mg/l				
Polyether polyol based on ethylenediamine and propyleneoxide~ 25214-63-5	sewage treatment plant (STP)		70 mg/l				
Polyether polyol based on ethylenediamine and propyleneoxide~ 25214-63-5	sediment (freshwater)				0,193 mg/kg		
Polyether polyol based on ethylenediamine and propyleneoxide~ 25214-63-5	sediment (marine water)				0,0193 mg/kg		
Polyether polyol based on ethylenediamine and propyleneoxide~ 25214-63-5	Soil				0,0183 mg/kg		
2,4,6-Tris(dimethylaminomethyl)phenol 90-72-2	aqua (freshwater)		0,084 mg/l				
2,4,6-Tris(dimethylaminomethyl)phenol 90-72-2	aqua (marine water)		0,0084 mg/l				
2,4,6-Tris(dimethylaminomethyl)phenol 90-72-2	aqua (intermittent releases)		0,84 mg/l				
2,4,6-Tris(dimethylaminomethyl)phenol 90-72-2	sewage treatment plant (STP)		0,2 mg/l				

### **Derived No-Effect Level (DNEL):**

Name on list	Application	Route of	Health Effect	Exposure	Value	Remarks
	Area	Exposure		Time		
Polyether polyol based on ethylenediamine and propyleneoxide~ 25214-63-5	Workers	dermal	Long term exposure - systemic effects		13,9 mg/kg	
Polyether polyol based on ethylenediamine and propyleneoxide~ 25214-63-5	Workers	Inhalation	Long term exposure - systemic effects		98 mg/m3	
Polyether polyol based on ethylenediamine and propyleneoxide~ 25214-63-5	General population	dermal	Long term exposure - systemic effects		8,3 mg/kg	
Polyether polyol based on ethylenediamine and propyleneoxide~ 25214-63-5	General population	Inhalation	Long term exposure - systemic effects		29 mg/m3	
Polyether polyol based on ethylenediamine and propyleneoxide~ 25214-63-5	General population	oral	Long term exposure - systemic effects		8,3 mg/kg	

### **Biological Exposure Indices:**

None

### 8.2. Exposure controls:

Engineering controls:

Ensure good ventilation/extraction.

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): Polychloroprene (CR; >= 1 mm thickness) or natural rubber (NR; >= 1 mm thickness) Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374): Polychloroprene (CR; >= 1 mm thickness) or natural rubber (NR; >= 1 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).

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

Appearance paste

pasty yellow

Odor characteristic

Odour threshold No data available / Not applicable

pH Not available.

Melting point

No data available / Not applicable
Solidification temperature

No data available / Not applicable
Initial boiling point

No data available / Not applicable

Flash point Not applicable

Evaporation rate

No data available / Not applicable
Flammability

No data available / Not applicable
Explosive limits

No data available / Not applicable
Vapour pressure

No data available / Not applicable
Relative vapour density:

No data available / Not applicable

Density 1,4 g/cm<sup>3</sup> (20 °C (68 °F))

Bulk density

No data available / Not applicable
Solubility

No data available / Not applicable

Solubility (qualitative) Insoluble

(20 °C (68 °F); Solvent: Water)

Partition coefficient: n-octanol/water

Auto-ignition temperature

Decomposition temperature

No data available / Not applicable
No data available / Not applicable
No data available / Not applicable
Viscosity

No data available / Not applicable
Viscosity (kinematic)

No data available / Not applicable
Explosive properties

No data available / Not applicable
Oxidising properties

No data available / Not applicable

Solid content 100 %

#### 9.2. Other information

No data available / Not applicable

### **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

None if used for intended purpose.

#### 10.2. Chemical stability

Stable under recommended storage conditions.

### 10.3. Possibility of hazardous reactions

See section reactivity

#### 10.4. Conditions to avoid

None if used for intended purpose.

#### 10.5. Incompatible materials

None if used properly.

#### 10.6. Hazardous decomposition products

No decomposition if used according to specifications.

### **SECTION 11: Toxicological information**

### 11.1. Information on toxicological effects

### 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	Value	Species	Method
	type			
Polyether polyol based on	LD50	> 2.000  mg/kg	rat	not specified
ethylenediamine and				
propyleneoxide~				
1 1 "				
25214-63-5				
2,4,6-	LD50	1.200 mg/kg	rat	not specified
Tris(dimethylaminomethy				
1)phenol				
90-72-2				

#### 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			
Polyether polyol based on ethylenediamine and propyleneoxide~ 25214-63-5	LD50	> 2.000 mg/kg	rabbit	not specified

### 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	Result	Exposure	Species	Method
CAS-No.		time		
2,4,6-	corrosive	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
Tris(dimethylaminomethy				
l)phenol				
90-72-2				

#### Serious eye damage/irritation:

No data available.

#### 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.				
2,4,6-	not sensitising	Buehler test	guinea pig	OECD Guideline 406 (Skin Sensitisation)
Tris(dimethylaminomethy				
l)phenol				
90-72-2				

### 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
2,4,6- Tris(dimethylaminomethy l)phenol 90-72-2	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
2,4,6- Tris(dimethylaminomethy l)phenol 90-72-2	negative	in vitro mammalian chromosome aberration test	with and without		OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
2,4,6- Tris(dimethylaminomethy l)phenol 90-72-2	negative	mammalian cell gene mutation assay	with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)

### Carcinogenicity

No data available.

### Reproductive toxicity:

No data available.

### STOT-single exposure:

No data available.

STOT-repeated exposure::
No data available.
Aspiration hazard:
No data available.

#### **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.

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
Polyether polyol based on ethylenediamine and propyleneoxide~ 25214-63-5	LC50	4.500 mg/l	48 h	Leuciscus idus	OECD Guideline 203 (Fish, Acute Toxicity Test)
2,4,6- Tris(dimethylaminomethyl)ph enol 90-72-2	LC50	153 mg/l	96 h	Brachydanio rerio (new name: Danio rerio)	ISO 7346-1 (Determination of the Acute Lethal Toxicity of Substances to a Freshwater Fish [Brachydanio rerio Hamilton-Buchanan (Teleostei, Cyprinidae)]

TET • • 4	(D 1 · )	
TOXICITY	(Daphnia)	•
I GILLELY	(Dupiniu)	•

No data available.

Chronic toxicity to aquatic invertebrates

No data available.

Toxicity (Algae):

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

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
2,4,6-	EC50	84 mg/l	72 h	Scenedesmus subspicatus (new	OECD Guideline 201 (Alga,
Tris(dimethylaminomethyl)ph				name: Desmodesmus	Growth Inhibition Test)
enol				subspicatus)	
90-72-2					
2,4,6-	NOEC	6,25 mg/l	72 h	Desmodesmus subspicatus	OECD Guideline 201 (Alga,
Tris(dimethylaminomethyl)ph				_	Growth Inhibition Test)
enol					
90-72-2					

#### Toxicity to microorganisms

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

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
2,4,6-	EC0	27 mg/l	16 h	Pseudomonas putida	DIN 38412, part 8
Tris(dimethylaminomethyl)ph					(Pseudomonas
enol					Zellvermehrungshemm-
90-72-2					Test)

### 12.2. Persistence and degradability

Hazardous substances	Result	Test type	Degradability	Exposure	Method
CAS-No.				time	
2,4,6-	not readily biodegradable.	aerobic	4 %	28 d	OECD Guideline 301 D (Ready
Tris(dimethylaminomethyl)ph					Biodegradability: Closed Bottle
enol					Test)
90-72-2					

### 12.3. Bioaccumulative potential

No data available.

### 12.4. Mobility in soil

Hazardous substances CAS-No.	LogPow	Temperature	Method
2,4,6- Tris(dimethylaminomethyl)ph	-0,66	21,5 °C	EPA OPPTS 830.7550 (Partition Coefficient, n-octanol / H2O, Shake Flask Method)
enol 90-72-2			

### 12.5. Results of PBT and vPvB assessment

Hazardous substances CAS-No.	PBT / vPvB
Polyether polyol based on ethylenediamine and propyleneoxide~ 25214-63-5	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
2,4,6-Tris(dimethylaminomethyl)phenol 90-72-2	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

### 12.6. 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**

#### 14.1. UN 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. Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

### **SECTION 15: Regulatory information**

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

VOC content 0 %

(VOCV 814.018 VOC regulation

CH)

VOC content 0 %

(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 not 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:

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

#### **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 (ua-productsafety.de@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 Regulation (EC) No 1907/2006

Page 1 of 11

SDS No.: 76952 V011.0

Revision: 06.06.2019

printing date: 27.06.2019

Replaces version from: 01.02.2018

TEROSON PU PLASTIC REP SET

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

#### 1.1. Product identifier

TEROSON PU PLASTIC REP SET

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

Intended use:

Part A for 2-K-Polyurethane adhesive and sealant

#### 1.3. Details of the supplier of the safety data sheet

Henkel Ltd

Wood Lane End

HP2 4RQ Hemel Hempstead

Great Britain

Phone: +44 1442 278000 Fax-no.: +44 1442 278071

ua-productsafety.uk@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):

Serious eye irritation H319 Causes serious eye irritation. Category 2

#### 2.2. Label elements

#### Label elements (CLP):

Hazard pictogram:



Signal word: Warning

**Hazard statement:** H319 Causes serious eye irritation.

**Precautionary statement:** P280 Wear eye protection.

Prevention

#### 2.3. Other hazards

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

### **SECTION 3: Composition/information on ingredients**

#### 3.2. Mixtures

#### General chemical description:

Adhesive

#### Base substances of preparation:

Polyol mixture with fillers

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

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Polyether polyol based on ethylenediamine and propyleneoxide~ 25214-63-5	500-035-6 500-035-6 01-2119471485-32	10-< 20 %	Eye Irrit. 2 H319

For full text of the H - statements and other abbreviations see section 16 "Other information". Substances without classification may have community workplace exposure limits available.

### **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.

### 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 protective equipment.

Wear self-contained breathing apparatus.

# **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

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.

Store in a cool, dry place.

Temperatures between + 10 °C and + 25 °C

Protect from direct sun-light and temperature above  $50^{\circ}\mathrm{C}$  in any case.

Supplier recommends that this product be stored with a vented bung.

### 7.3. Specific end use(s)

Part A for 2-K-Polyurethane adhesive and sealant

# **SECTION 8: Exposure controls/personal protection**

# 8.1. Control parameters

# **Occupational Exposure Limits**

Valid for

Great Britain

Ingredient [Regulated substance]	ppm	mg/m³	Value type	Short term exposure limit category / Remarks	Regulatory list
Calcium carbonate 471-34-1 [CALCIUM CARBONATE, INHALABLE DUST]		10	Time Weighted Average (TWA):		EH40 WEL
Calcium carbonate 471-34-1 [CALCIUM CARBONATE, RESPIRABLE DUST]		4	Time Weighted Average (TWA):		EH40 WEL
Calcium carbonate 471-34-1 [LIMESTONE, RESPIRABLE MARBLE, RESPIRABLE]		4	Time Weighted Average (TWA):		EH40 WEL
Calcium carbonate 471-34-1 [LIMESTONE, TOTAL INHALABLE MARBLE, TOTAL INHALABLE]		10	Time Weighted Average (TWA):		EH40 WEL
Limestone 1317-65-3 [CALCIUM CARBONATE, INHALABLE DUST]		10	Time Weighted Average (TWA):		EH40 WEL
Limestone 1317-65-3 [CALCIUM CARBONATE, RESPIRABLE DUST]		4	Time Weighted Average (TWA):		EH40 WEL
Limestone 1317-65-3 [LIMESTONE, RESPIRABLE MARBLE, RESPIRABLE]		4	Time Weighted Average (TWA):		EH40 WEL
Limestone 1317-65-3 [LIMESTONE, TOTAL INHALABLE MARBLE, TOTAL INHALABLE]		10	Time Weighted Average (TWA):		EH40 WEL
Zeolites 68989-22-0 [ALUMINIUM OXIDES, INHALABLE DUST]		10	Time Weighted Average (TWA):		EH40 WEL
Zeolites 68989-22-0 [ALUMINIUM OXIDES, RESPIRABLE DUST]		4	Time Weighted Average (TWA):		EH40 WEL

# **Occupational Exposure Limits**

Valid for

Ireland

Ingredient [Regulated substance]	ppm	mg/m³	Value type	Short term exposure limit category / Remarks	Regulatory list
Calcium carbonate 471-34-1 [CALCIUM CARBONATE, RESPIRABLE DUST]		4	Time Weighted Average (TWA):		IR_OEL
Calcium carbonate 471-34-1 [CALCIUM CARBONATE, TOTAL INHALABLE DUST]		10	Time Weighted Average (TWA):		IR_OEL
Limestone 1317-65-3 [CALCIUM CARBONATE, RESPIRABLE DUST]		4	Time Weighted Average (TWA):		IR_OEL
Limestone		10	Time Weighted Average		IR_OEL

1317-65-3		(TWA):	
[CALCIUM CARBONATE, TOTAL			
INHALABLE DUST]			

# **Predicted No-Effect Concentration (PNEC):**

Name on list	Environmental Compartment	Exposure period	Value	Value			Remarks
			mg/l	ppm	mg/kg	others	
Polyether polyol based on ethylenediamine and propyleneoxide~ 25214-63-5	aqua (freshwater)		0,085 mg/l				
Polyether polyol based on ethylenediamine and propyleneoxide~ 25214-63-5	aqua (marine water)		0,0085 mg/l				
Polyether polyol based on ethylenediamine and propyleneoxide~ 25214-63-5	aqua (intermittent releases)		1,51 mg/l				
Polyether polyol based on ethylenediamine and propyleneoxide~ 25214-63-5	sewage treatment plant (STP)		70 mg/l				
Polyether polyol based on ethylenediamine and propyleneoxide~ 25214-63-5	sediment (freshwater)				0,193 mg/kg		
Polyether polyol based on ethylenediamine and propyleneoxide~ 25214-63-5	sediment (marine water)				0,0193 mg/kg		
Polyether polyol based on ethylenediamine and propyleneoxide~ 25214-63-5	Soil				0,0183 mg/kg		

# **Derived No-Effect Level (DNEL):**

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
Polyether polyol based on ethylenediamine and propyleneoxide~ 25214-63-5	Workers	dermal	Long term exposure - systemic effects		13,9 mg/kg	
Polyether polyol based on ethylenediamine and propyleneoxide~ 25214-63-5	Workers	Inhalation	Long term exposure - systemic effects		98 mg/m3	
Polyether polyol based on ethylenediamine and propyleneoxide~ 25214-63-5	General population	dermal	Long term exposure - systemic effects		8,3 mg/kg	
Polyether polyol based on ethylenediamine and propyleneoxide~ 25214-63-5	General population	Inhalation	Long term exposure - systemic effects		29 mg/m3	
Polyether polyol based on ethylenediamine and propyleneoxide~ 25214-63-5	General population	oral	Long term exposure - systemic effects		8,3 mg/kg	

# **Biological Exposure Indices:**

None

# 8.2. Exposure controls:

Engineering controls:

Ensure good ventilation/extraction.

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): Polychloroprene (CR; >= 1 mm thickness) or natural rubber (NR; >= 1 mm thickness) Suitable materials for longer, direct contact (recommended: protection index 6, corresponding to > 480 minutes permeation time as per EN 374): Polychloroprene (CR; >= 1 mm thickness) or natural rubber (NR; >= 1 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).

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

Appearance liquid

liquid vellow

Odor odourless

Odour threshold No data available / Not applicable

pH Not available.

Melting point

No data available / Not applicable
Solidification temperature

No data available / Not applicable
Initial boiling point

No data available / Not applicable

Flash point Not applicable

Evaporation rate

No data available / Not applicable
Flammability

No data available / Not applicable
Explosive limits

No data available / Not applicable
Vapour pressure

No data available / Not applicable
No data available / Not applicable
Relative vapour density:

No data available / Not applicable

Density 1,43 g/cm<sup>3</sup>

(20 °C (68 °F))

Bulk density

No data available / Not applicable
Solubility

No data available / Not applicable

Solubility (qualitative) Not miscible

(20 °C (68 °F); Solvent: Water)

Partition coefficient: n-octanol/water

Auto-ignition temperature

Decomposition temperature

Viscosity

Viscosity (kinematic)

Explosive properties

Oxidising properties

No data available / Not applicable / N

#### 9.2. Other information

No data available / Not applicable

# **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

None if used for intended purpose.

# 10.2. Chemical stability

Stable under recommended storage conditions.

# 10.3. Possibility of hazardous reactions

See section reactivity

#### 10.4. Conditions to avoid

None if used for intended purpose.

#### 10.5. Incompatible materials

None if used properly.

#### 10.6. Hazardous decomposition products

No decomposition if used according to specifications.

# **SECTION 11: Toxicological information**

### 11.1. Information on toxicological effects

#### 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			
Polyether polyol based on	LD50	> 2.000 mg/kg	rat	not specified
ethylenediamine and				
propyleneoxide~				
25214-63-5				

#### 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			
Polyether polyol based on	LD50	> 2.000 mg/kg	rabbit	not specified
ethylenediamine and				
propyleneoxide~				
25214-63-5				

#### Acute inhalative toxicity:

No data available.

### Skin corrosion/irritation:

No data available.

### Serious eye damage/irritation:

No data available.

# Respiratory or skin sensitization:

No data available.

Germ cell mutagenicity:
No data available.  Carcinogenicity
No data available.
Reproductive toxicity:  No data available.
STOT-single exposure:
No data available.
STOT-repeated exposure::
No data available.
Aspiration hazard:
No data available.
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.

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Polyether polyol based on ethylenediamine and propyleneoxide~ 25214-63-5	LC50	4.500 mg/l	48 h		OECD Guideline 203 (Fish, Acute Toxicity Test)

Toxicity	(Daphnia)	:
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No data available.

Chronic toxicity to aquatic invertebrates

No data available.

**Toxicity (Algae):** 

No data available.

#### Toxicity to microorganisms

No data available.

### 12.2. Persistence and degradability

No data available.

### 12.3. Bioaccumulative potential

No data available.

### 12.4. Mobility in soil

No data available.

#### 12.5. Results of PBT and vPvB assessment

Hazardous substances	PBT / vPvB
CAS-No.	
Polyether polyol based on ethylenediamine and	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
propyleneoxide~	Bioaccumulative (vPvB) criteria.
25214-63-5	

### 12.6. 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**

#### 14.1. UN 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. Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

# **SECTION 15: Regulatory information**

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

VOC content 0 9

(VOCV 814.018 VOC regulation

CH)

VOC content 0 %

(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 not 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: H319 Causes serious eye irritation.

#### **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 (ua-productsafety.de@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 Regulation (EC) No 1907/2006

Page 1 of 19

SDS No.: 76477 V011.0

Revision: 06.06.2019

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Replaces version from: 18.12.2017

TEROSON PU PLASTIC REP SET

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

#### 1.1. Product identifier

TEROSON PU PLASTIC REP SET

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

Intended use:

2-Component polyurethane adhesive

#### 1.3. Details of the supplier of the safety data sheet

Henkel Ltd

Wood Lane End

HP2 4RQ Hemel Hempstead

Great Britain

Phone: +44 1442 278000 Fax-no.: +44 1442 278071

ua-productsafety.uk@henkel.com

# 1.4. Emergency telephone number

24 Hours Emergency Tel: +44 (0)1442 278497

### **SECTION 2: Hazards identification**

#### 2.1. Classification of the substance or mixture

#### Classification (CLP):

Skin irritation Category 2

H315 Causes skin irritation.

Serious eye irritation Category 2

H319 Causes serious eye irritation.

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.

Carcinogenicity Category 2

H351 Suspected of causing cancer.

Specific target organ toxicity - single exposure Category 3

H335 May cause respiratory irritation.

Target organ: respiratory tract irritation

Specific target organ toxicity - repeated exposure Category 2

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

#### 2.2. Label elements

# Label elements (CLP):

Hazard pictogram:



**Contains** Diphenylmethane diisocyanate, isomers and homologues

Danger Signal word:

H315 Causes skin irritation. **Hazard statement:** 

H317 May cause an allergic skin reaction. H319 Causes serious eye irritation.

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

H335 May cause respiratory irritation. H351 Suspected of causing cancer.

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

**Precautionary statement:** S22 Do not breathe dust.

Prevention P280 Wear protective gloves/protective clothing/eye protection/face protection.

**Precautionary statement:** P308+P313 IF exposed or concerned: Get medical advice/attention.

Response

#### 2.3. Other hazards

Persons suffering from allergic reactions to isocyanates should avoid contact with the product. Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.

# **SECTION 3: Composition/information on ingredients**

#### 3.2. Mixtures

# General chemical description:

Hardening component of a 2-component PU adhesive

# Base substances of preparation:

Isocyanate

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

Hazardous components CAS-No.	EC Number REACH-Reg No.	content	Classification
Diphenylmethane diisocyanate, isomers and homologues 9016-87-9		20- 40 %	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
4,4'- methylenediphenyl diisocyanate 101-68-8	202-966-0 01-2119457014-47	1-< 5 %	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. 1B H317
o-(p-Isocyanatobenzyl)phenyl isocyanate 5873-54-1	227-534-9 01-2119480143-45	1-< 5 %	STOT RE 2  H373  Carc. 2  H351  Acute Tox. 4; Inhalation  H332  Eye Irrit. 2  H319  STOT SE 3  H335  Skin Irrit. 2  H315  Skin Sens. 1  H317  Resp. Sens. 1  H334
2,2'-Methylenediphenyl diisocyanate 2536-05-2	219-799-4 01-2119927323-43	0,1-< 1 %	STOT RE 2 H373 Carc. 2 H351 Acute Tox. 4; Inhalation H332 Eye Irrit. 2 H319 STOT SE 3 H335 Skin Irrit. 2 H315 Resp. Sens. 1 H334 Skin Sens. 1 H317

For full text of the H - statements and other abbreviations see section 16 "Other information". Substances without classification may have community workplace exposure limits available.

### **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

#### General information:

Symptoms of poisoning may occur even after several hours, continue medical observation for at least 48 hours after the accident.

#### 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.

#### 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

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

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

SKIN: Redness, inflammation.

EYE: Irritation, conjunctivitis.

SKIN: Rash, Urticaria.

#### 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 protective equipment.

Wear self-contained breathing apparatus.

# **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:

Do not eat, drink or smoke while working.

Wash hands before work breaks and after finishing work.

Take off contaminated clothing and wash before reuse.

# 7.2. Conditions for safe storage, including any incompatibilities

Ensure good ventilation/extraction.

Store in a cool, dry place.

Temperatures between + 10 °C and + 25 °C

Protect from direct sun-light and temperature above 50°C in any case.

#### 7.3. Specific end use(s)

2-Component polyurethane adhesive

# **SECTION 8: Exposure controls/personal protection**

# 8.1. Control parameters

# **Occupational Exposure Limits**

Valid for

Great Britain

Ingredient [Regulated substance]	ppm mg/m³		Value type	Short term exposure limit category / Remarks	Regulatory list	
Limestone 1317-65-3 [CALCIUM CARBONATE, INHALABLE DUST]		10	Time Weighted Average (TWA):		EH40 WEL	
Limestone 1317-65-3 [CALCIUM CARBONATE, RESPIRABLE DUST]		4	Time Weighted Average (TWA):		EH40 WEL	
Limestone 1317-65-3 [LIMESTONE, RESPIRABLE MARBLE, RESPIRABLE]		4	Time Weighted Average (TWA):		EH40 WEL	
Limestone 1317-65-3 [LIMESTONE, TOTAL INHALABLE MARBLE, TOTAL INHALABLE]		10	Time Weighted Average (TWA):		EH40 WEL	
Diphenylmethane diisocyanate, isomers and homologs 9016-87-9 [ISOCYANATES, ALL (AS -NCO)]		0,07	Short Term Exposure Limit (STEL):		EH40 WEL	
Diphenylmethane diisocyanate, isomers and homologs 9016-87-9 [ISOCYANATES, ALL (AS -NCO)]		0,02	Time Weighted Average (TWA):		EH40 WEL	
Zeolites 68989-22-0 [ALUMINIUM OXIDES, INHALABLE DUST]		10	Time Weighted Average (TWA):		EH40 WEL	
Zeolites 68989-22-0 [ALUMINIUM OXIDES, RESPIRABLE DUST]		4	Time Weighted Average (TWA):		EH40 WEL	
Calcium carbonate 471-34-1 [CALCIUM CARBONATE, INHALABLE DUST]		10	Time Weighted Average (TWA):		EH40 WEL	
Calcium carbonate 471-34-1 [CALCIUM CARBONATE, RESPIRABLE DUST]		4	Time Weighted Average (TWA):		EH40 WEL	
Calcium carbonate 471-34-1 [LIMESTONE, RESPIRABLE MARBLE, RESPIRABLE]		4	Time Weighted Average (TWA):		EH40 WEL	
Calcium carbonate 471-34-1 [LIMESTONE, TOTAL INHALABLE MARBLE, TOTAL INHALABLE]		10	Time Weighted Average (TWA):		EH40 WEL	
4,4'-Methylenediphenyl diisocyanate 101-68-8 [ISOCYANATES, ALL (AS -NCO)]		0,07	Short Term Exposure Limit (STEL):		EH40 WEL	
4,4'-Methylenediphenyl diisocyanate 101-68-8 [ISOCYANATES, ALL (AS -NCO)]		0,02	Time Weighted Average (TWA):		EH40 WEL	
o-(p-Isocyanatobenzyl)phenyl isocyanate 5873-54-1 [ISOCYANATES, ALL (AS -NCO)]		0,07	Short Term Exposure Limit (STEL):		EH40 WEL	
o-(p-Isocyanatobenzyl)phenyl isocyanate 5873-54-1 [ISOCYANATES, ALL (AS -NCO)]		0,02	Time Weighted Average (TWA):		EH40 WEL	
2,2'-Methylenediphenyl diisocyanate		0,07	Short Term Exposure		EH40 WEL	

2536-05-2		Limit (STEL):	
[ISOCYANATES, ALL (AS -NCO)]			
2,2'-Methylenediphenyl diisocyanate	0,02	Time Weighted Average	EH40 WEL
2536-05-2		(TWA):	
[ISOCYANATES, ALL (AS -NCO)]			

# **Occupational Exposure Limits**

Valid for Ireland

Ingredient [Regulated substance]	ppm	mg/m <sup>3</sup>	Value type	Short term exposure limit category / Remarks	Regulatory list
Limestone 1317-65-3 [CALCIUM CARBONATE, RESPIRABLE DUST]		4	Time Weighted Average (TWA):		IR_OEL
Limestone 1317-65-3 [CALCIUM CARBONATE, TOTAL INHALABLE DUST]		10	Time Weighted Average (TWA):		IR_OEL
Diphenylmethane diisocyanate, isomers and homologs 9016-87-9 [ISOCYANATES (ALL, AS -NCO)]		0,02	Time Weighted Average (TWA):		IR_OEL
Diphenylmethane diisocyanate, isomers and homologs 9016-87-9 [ISOCYANATES (ALL, AS -NCO)]		0,07	Short Term Exposure Limit (STEL):	15 minutes	IR_OEL
Calcium carbonate 471-34-1 [CALCIUM CARBONATE, RESPIRABLE DUST]		4	Time Weighted Average (TWA):		IR_OEL
Calcium carbonate 471-34-1 [CALCIUM CARBONATE, TOTAL INHALABLE DUST]		10	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
o-(p-Isocyanatobenzyl)phenyl isocyanate 5873-54-1 [ISOCYANATES (ALL, AS -NCO)]		0,02	Time Weighted Average (TWA):		IR_OEL
o-(p-Isocyanatobenzyl)phenyl isocyanate 5873-54-1 [ISOCYANATES (ALL, AS -NCO)]		0,07	Short Term Exposure Limit (STEL):	15 minutes	IR_OEL
2,2'-Methylenediphenyl diisocyanate 2536-05-2 [ISOCYANATES (ALL, AS -NCO)]		0,02	Time Weighted Average (TWA):		IR_OEL
2,2'-Methylenediphenyl diisocyanate 2536-05-2 [ISOCYANATES (ALL, AS -NCO)]		0,07	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	
4,4'- methylenediphenyl diisocyanate 101-68-8	aqua (freshwater)		1 mg/l				
4,4'- methylenediphenyl diisocyanate 101-68-8	aqua (marine water)		0,1 mg/l				
4,4'- methylenediphenyl diisocyanate 101-68-8	Soil				1 mg/kg		
4,4'- methylenediphenyl diisocyanate 101-68-8	sewage treatment plant (STP)		1 mg/l				
4,4'- methylenediphenyl diisocyanate 101-68-8	Air						
4,4'- methylenediphenyl diisocyanate 101-68-8	Predator						
4,4'- methylenediphenyl diisocyanate 101-68-8	aqua (intermittent releases)		10 mg/l				
o-(p-Isocyanatobenzyl)phenyl isocyanate 5873-54-1	aqua (marine water)		0,1 mg/l				
o-(p-Isocyanatobenzyl)phenyl isocyanate 5873-54-1	sewage treatment plant (STP)		1 mg/l				
o-(p-Isocyanatobenzyl)phenyl isocyanate 5873-54-1	aqua (intermittent releases)		10 mg/l				
o-(p-Isocyanatobenzyl)phenyl isocyanate 5873-54-1	aqua (freshwater)		1 mg/l				
o-(p-Isocyanatobenzyl)phenyl isocyanate 5873-54-1	Soil				1 mg/kg		
2,2'-Methylenediphenyl diisocyanate 2536-05-2	aqua (freshwater)		1 mg/l				
2,2'-Methylenediphenyl diisocyanate 2536-05-2	aqua (marine water)		0,1 mg/l				
2,2'-Methylenediphenyl diisocyanate 2536-05-2	Soil				1 mg/kg		
2,2'-Methylenediphenyl diisocyanate 2536-05-2	sewage treatment plant (STP)		1 mg/l				
2,2'-Methylenediphenyl diisocyanate 2536-05-2	aqua (intermittent releases)		10 mg/l				

# **Derived No-Effect Level (DNEL):**

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
4,4'- methylenediphenyl diisocyanate 101-68-8	Workers	inhalation	Long term exposure - local effects		0,05 mg/m3	
4,4'- methylenediphenyl diisocyanate 101-68-8	Workers	inhalation	Acute/short term exposure - local effects		0,1 mg/m3	
4,4'- methylenediphenyl diisocyanate 101-68-8	General population	inhalation	Long term exposure - local effects		0,025 mg/m3	
4,4'- methylenediphenyl diisocyanate 101-68-8	General population	inhalation	Acute/short term exposure - local effects		0,05 mg/m3	
o-(p-Isocyanatobenzyl)phenyl isocyanate 5873-54-1	Workers	inhalation	Acute/short term exposure - local effects		0,1 mg/m3	
o-(p-Isocyanatobenzyl)phenyl isocyanate 5873-54-1	Workers	inhalation	Long term exposure - local effects		0,05 mg/m3	
o-(p-Isocyanatobenzyl)phenyl isocyanate 5873-54-1	General population	inhalation	Acute/short term exposure - local effects		0,05 mg/m3	
o-(p-Isocyanatobenzyl)phenyl isocyanate 5873-54-1	General population	inhalation	Long term exposure - local effects		0,025 mg/m3	
2,2'-Methylenediphenyl diisocyanate 2536-05-2	Workers	dermal	Acute/short term exposure - systemic effects		50 mg/kg	
2,2'-Methylenediphenyl diisocyanate 2536-05-2	Workers	Inhalation	Acute/short term exposure - systemic effects		0,1 mg/m3	
2,2'-Methylenediphenyl diisocyanate 2536-05-2	Workers	dermal	Acute/short term exposure - local effects		28,7 mg/cm2	
2,2'-Methylenediphenyl diisocyanate 2536-05-2	Workers	Inhalation	Acute/short term exposure - local effects		0,1 mg/m3	
2,2'-Methylenediphenyl diisocyanate 2536-05-2	Workers	Inhalation	Long term exposure - systemic effects		0,05 mg/m3	
2,2'-Methylenediphenyl diisocyanate 2536-05-2	Workers	Inhalation	Long term exposure - local effects		0,05 mg/m3	
2,2'-Methylenediphenyl diisocyanate 2536-05-2	General population	dermal	Acute/short term exposure - systemic effects		25 mg/kg	
2,2'-Methylenediphenyl diisocyanate 2536-05-2	General population	Inhalation	Acute/short term exposure - systemic effects		0,05 mg/m3	
2,2'-Methylenediphenyl diisocyanate 2536-05-2	General population	oral	Acute/short term exposure - systemic effects		20 mg/kg	
2,2'-Methylenediphenyl diisocyanate 2536-05-2	General population	dermal	Acute/short term exposure - local effects		17,2 mg/cm2	
2,2'-Methylenediphenyl diisocyanate 2536-05-2	General population	Inhalation	Acute/short term exposure - local effects		0,05 mg/m3	
2,2'-Methylenediphenyl diisocyanate 2536-05-2	General population	Inhalation	Long term exposure - systemic effects		0,025 mg/m3	
2,2'-Methylenediphenyl diisocyanate 2536-05-2	General population	Inhalation	Long term exposure - local effects		0,025 mg/m3	

#### **Biological Exposure Indices:**

None

#### 8.2. Exposure controls:

#### Engineering controls:

Use only in well ventilated areas.

Draw off vapors and fumes directly at the point of generation or release. In the case of regular work use bench-mounted extraction equipment.

#### 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.

#### 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).

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

Appearance paste pasty black
Odor earthy

Odour threshold No data available / Not applicable

рΗ No data available / Not applicable No data available / Not applicable Melting point Solidification temperature No data available / Not applicable No data available / Not applicable Initial boiling point  $> 110 \, ^{\circ}\text{C} (> 230 \, ^{\circ}\text{F}); \text{ no method}$ Flash point Evaporation rate No data available / Not applicable No data available / Not applicable Flammability Explosive limits No data available / Not applicable

Vapour pressure No data available / Not applicable Relative vapour density: No data available / Not applicable

Density 1,7 g/cm3

(20 °C (68 °F))

Bulk density No data available / Not applicable Solubility No data available / Not applicable

Solubility (qualitative) Insoluble

(Solvent: alcohol)

Partition coefficient: n-octanol/water
Auto-ignition temperature
Decomposition temperature
Viscosity
No data available / Not applicable
No data available / Not applicable
Vodata available / Not applicable
Vodata available / Not applicable
Vodata available / Not applicable

(Brookfield; 20 °C (68 °F); Conc.: 100 %

product)

Viscosity (kinematic)

Explosive properties

No data available / Not applicable

No data available / Not applicable

No data available / Not applicable

Solid content 100 %

#### 9.2. Other information

No data available / Not applicable

# **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

Reaction with water, alcohols, amines. Reaction with water, formation of 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

Temperatures over appr. 250 °C

### 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:

Persons suffering from allergic reactions to isocyanates should avoid contact with the product.

### 11.1. Information on toxicological effects

# 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			
Diphenylmethane diisocyanate, isomers and homologues 9016-87-9	LD50	> 10.000 mg/kg	rat	OECD Guideline 401 (Acute Oral Toxicity)
4,4'- methylenediphenyl diisocyanate 101-68-8	LD50	> 2.000 mg/kg	rat	other guideline:
o-(p- Isocyanatobenzyl)phenyl isocyanate 5873-54-1	LD50	> 2.000 mg/kg	rat	other guideline:
2,2'-Methylenediphenyl diisocyanate 2536-05-2	LD50	> 2.000 mg/kg	rat	EU Method B.1 (Acute Toxicity (Oral))

### 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			
Diphenylmethane	LD50	> 9.400 mg/kg	rat	OECD Guideline 402 (Acute Dermal Toxicity)
diisocyanate, isomers and				
homologues				
9016-87-9				
4,4'- methylenediphenyl	LD50	> 9.400 mg/kg	rabbit	OECD Guideline 402 (Acute Dermal Toxicity)
diisocyanate				
101-68-8				
o-(p-	LD50	> 9.400 mg/kg	rabbit	OECD Guideline 402 (Acute Dermal Toxicity)
Isocyanatobenzyl)phenyl				
isocyanate				
5873-54-1				
2,2'-Methylenediphenyl	LD50	> 9.400 mg/kg	rabbit	OECD Guideline 402 (Acute Dermal Toxicity)
diisocyanate				
2536-05-2				

# 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	Result	Exposure	Species	Method
CAS-No.		time		
Diphenylmethane	irritating		rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
diisocyanate, isomers and				
homologues				
9016-87-9				
4,4'- methylenediphenyl	irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
diisocyanate				
101-68-8				
o-(p-	irritating		rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
Isocyanatobenzyl)phenyl				
isocyanate				
5873-54-1				

# 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
Diphenylmethane diisocyanate, isomers and homologues 9016-87-9	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	Result	Test type	Species	Method
CAS-No.				
Diphenylmethane diisocyanate, isomers and	sensitising	Skin sensitisation	guinea pig	OECD Guideline 406 (Skin Sensitisation)
homologues 9016-87-9				
4,4'- methylenediphenyl diisocyanate 101-68-8	sensitising	Buehler test	guinea pig	OECD Guideline 406 (Skin Sensitisation)
o-(p- Isocyanatobenzyl)phenyl isocyanate 5873-54-1	sensitising	Respiratory sensitisation	guinea pig	not specified
o-(p- Isocyanatobenzyl)phenyl isocyanate 5873-54-1	not sensitising	Buehler test	guinea pig	OECD Guideline 406 (Skin Sensitisation)
o-(p- Isocyanatobenzyl)phenyl isocyanate 5873-54-1	sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
2,2'-Methylenediphenyl diisocyanate 2536-05-2	sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
2,2'-Methylenediphenyl diisocyanate 2536-05-2	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	Metabolic activation /	Species	Method
CAS-NO.		administration	Exposure time		
Diphenylmethane diisocyanate, isomers and homologues 9016-87-9	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	bacterial reverse mutation assay (e.g Ames test)	with and without		EU Method B.13/14 (Mutagenicity)
o-(p- Isocyanatobenzyl)phenyl isocyanate 5873-54-1	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
2,2'-Methylenediphenyl diisocyanate 2536-05-2	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
4,4'- methylenediphenyl diisocyanate 101-68-8	negative	inhalation		rat	OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)
o-(p- Isocyanatobenzyl)phenyl isocyanate 5873-54-1	negative	inhalation		rat	OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)
2,2'-Methylenediphenyl diisocyanate 2536-05-2	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)
o-(p- Isocyanatobenzyl)phenyl isocyanate 5873-54-1	carcinogenic	inhalation: aerosol	2 y 6 h/d, 5 d/w	rat	male/female	OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)
2,2'-Methylenediphenyl diisocyanate 2536-05-2	carcinogenic	inhalation: aerosol	2 y 6 h/d, 5 d/w	rat	male/female	OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)

<b>D</b>		
Ranrac	III CTIVA	tovicity.
IXCDI OC	ucuvc	toxicity:

No data available.

# 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	Result / Value	Route of	Exposure time /	Species	Method
CAS-No.		application	Frequency of		
			treatment		
Diphenylmethane	NOAEL 0,0002 mg/l	inhalation:	2 y	rat	OECD Guideline 453
diisocyanate, isomers and		aerosol	6 h per d, 5 d per		(Combined Chronic
homologues			week		Toxicity / Carcinogenicity
9016-87-9					Studies)
4,4'- methylenediphenyl		inhalation:	main: 2 y; satellite:1	rat	OECD Guideline 453
diisocyanate		aerosol	y		(Combined Chronic
101-68-8			6 h/d; 5 d/w		Toxicity / Carcinogenicity
					Studies)
o-(p-	NOAEL 0,2 mg/m <sup>3</sup>	inhalation:	2 y	rat	OECD Guideline 453
Isocyanatobenzyl)phenyl		aerosol	6 h/d, 5 d/w		(Combined Chronic
isocyanate					Toxicity / Carcinogenicity
5873-54-1					Studies)
2,2'-Methylenediphenyl	NOAEL 0,2 mg/m <sup>3</sup>	inhalation:	2 y	rat	OECD Guideline 453
diisocyanate		aerosol	6 h/d, 5 d/w		(Combined Chronic
2536-05-2					Toxicity / Carcinogenicity
					Studies)

# **Aspiration hazard:**

No data available.

# **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.

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Diphenylmethane	LC50	> 1.000 mg/l	96 h	Brachydanio rerio (new name:	OECD Guideline 203 (Fish,
diisocyanate, isomers and				Danio rerio)	Acute Toxicity Test)
homologues					
9016-87-9					
4,4'- methylenediphenyl	LC50	> 1.000 mg/l	96 h	Danio rerio	OECD Guideline 203 (Fish,
diisocyanate					Acute Toxicity Test)
101-68-8					
o-(p-Isocyanatobenzyl)phenyl	LC50	> 1.000 mg/l	96 h	Danio rerio	OECD Guideline 203 (Fish,
isocyanate					Acute Toxicity Test)
5873-54-1					
2,2'-Methylenediphenyl	LC50	> 1.000 mg/l	96 h	Danio rerio	OECD Guideline 203 (Fish,
diisocyanate					Acute Toxicity Test)
2536-05-2					

### Toxicity (Daphnia):

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

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Diphenylmethane diisocyanate, isomers and homologues 9016-87-9	EC50	> 1.000 mg/l	24 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
4,4'- methylenediphenyl diisocyanate 101-68-8	EC50	129,7 mg/l	24 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)

### Chronic toxicity to aquatic invertebrates

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

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Diphenylmethane	NOEC	10 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia
diisocyanate, isomers and					magna, Reproduction Test)
homologues					
9016-87-9					
4,4'- methylenediphenyl	NOEC	10 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia
diisocyanate					magna, Reproduction Test)
101-68-8	1				

# Toxicity (Algae):

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

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type		_		
Diphenylmethane	EC50	> 1.640 mg/l	72 h	Desmodesmus subspicatus	OECD Guideline 201 (Alga,
diisocyanate, isomers and					Growth Inhibition Test)
homologues					
9016-87-9					
4,4'- methylenediphenyl	EC50	> 1.640 mg/l	72 h	Scenedesmus subspicatus (new	OECD Guideline 201 (Alga,
diisocyanate				name: Desmodesmus	Growth Inhibition Test)
101-68-8				subspicatus)	
4,4'- methylenediphenyl	NOELR	1.640 mg/l	72 h	Scenedesmus subspicatus (new	OECD Guideline 201 (Alga,
diisocyanate				name: Desmodesmus	Growth Inhibition Test)
101-68-8				subspicatus)	

# Toxicity to microorganisms

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

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Diphenylmethane	EC50	> 100 mg/l	3 h	activated sludge	OECD Guideline 209
diisocyanate, isomers and					(Activated Sludge,
homologues					Respiration Inhibition Test)
9016-87-9					
4,4'- methylenediphenyl	EC50	> 100 mg/l	3 h	activated sludge	OECD Guideline 209
diisocyanate					(Activated Sludge,
101-68-8					Respiration Inhibition Test)

# 12.2. Persistence and degradability

Hazardous substances CAS-No.	Result	Test type	Degradability	Exposure time	Method
Diphenylmethane diisocyanate, isomers and homologues 9016-87-9	not inherently biodegradable	aerobic	0 %	28 d	OECD Guideline 302 C (Inherent Biodegradability: Modified MITI Test (II))
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

Hazardous substances	Bioconcentratio	Exposure time	Temperature	Species	Method
CAS-No.	n factor (BCF)				
Diphenylmethane diisocyanate, isomers and homologues 9016-87-9	200			Cyprinus carpio	OECD Guideline 305 (Bioconcentration: Flow-through Fish Test)
4,4'- methylenediphenyl diisocyanate 101-68-8	92 - 200	28 d		Cyprinus carpio	OECD Guideline 305 E (Bioaccumulation: Flow-through Fish Test)

# 12.4. Mobility in soil

Hazardous substances CAS-No.	LogPow	Temperature	Method
4,4'- methylenediphenyl diisocyanate 101-68-8	4,51	22 °C	OECD Guideline 117 (Partition Coefficient (n-octanol / water), HPLC Method)
o-(p-Isocyanatobenzyl)phenyl isocyanate 5873-54-1	5,22		not specified

#### 12.5. Results of PBT and vPvB assessment

Hazardous substances	PBT / vPvB
CAS-No.	
4,4'- methylenediphenyl diisocyanate	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
101-68-8	Bioaccumulative (vPvB) criteria.
o-(p-Isocyanatobenzyl)phenyl isocyanate	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
5873-54-1	Bioaccumulative (vPvB) criteria.
2,2'-Methylenediphenyl diisocyanate	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
2536-05-2	Bioaccumulative (vPvB) criteria.

#### 12.6. 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**

#### 14.1. UN 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. Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

# **SECTION 15: Regulatory information**

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

VOC content 0 %

(VOCV 814.018 VOC regulation

CH)

VOC content 0,2 %

(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 not 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:

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.

### **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 (ua-productsafety.de@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 Regulation (EC) No 1907/2006

Page 1 of 14

SDS No.: 382012

V011.0 Revision: 06.06.2019

printing date: 27.06.2019

Replaces version from: 13.03.2017

TEROSON PU PLASTIC REP SET

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

#### 1.1. Product identifier

TEROSON PU PLASTIC REP SET

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

Intended use:

**Industrial Cleaning Agents** 

#### 1.3. Details of the supplier of the safety data sheet

Henkel Ltd

Wood Lane End

HP2 4RQ Hemel Hempstead

Great Britain

Phone: +44 1442 278000 Fax-no.: +44 1442 278071

ua-productsafety.uk@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 vapor.

Skin irritation Category 2

H315 Causes skin irritation.

Specific target organ toxicity - single exposure Category 3

H336 May cause drowsiness or dizziness.

Aspiration hazard Category 1

H304 May be fatal if swallowed and enters airways.

Chronic hazards to the aquatic environment Category 2

H411 Toxic to aquatic life with long lasting effects.

# 2.2. Label elements

#### Label elements (CLP):

Hazard pictogram:



Contains Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane

Signal word: Danger

**Hazard statement:** H225 Highly flammable liquid and vapor.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H336 May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.

**Precautionary statement:** P102 Keep out of reach of children.

**Precautionary statement:** P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

**Prevention** No smoking.

P261 Avoid breathing vapors.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

**Precautionary statement:** P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor.

**Response** P331 Do NOT induce vomiting.

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

#### 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.

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

### **SECTION 3: Composition/information on ingredients**

### 3.2. Mixtures

**General chemical description:** 

Surface pretreatment

Base substances of preparation:

Solvent

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

Hazardous components	EC Number	content	Classification
CAS-No.	REACH-Reg No.		
Hydrocarbons, C6-C7, n-alkanes,	295-763-1, 921-	80- 100 %	Flam. Liq. 2
isoalkanes, cyclics, <5% n-hexane	024-6		H225
92128-66-0	01-2119475514-35		Asp. Tox. 1
			H304
			Skin Irrit. 2
			H315
			STOT SE 3
			H336
			Aquatic Chronic 2
			H411
n-Hexane	203-777-6	1-< 3 %	Flam. Liq. 2
110-54-3	01-2119480412-44		H225
			Repr. 2
			H361f
			Asp. Tox. 1
			H304
			STOT RE 2
			H373
			Skin Irrit. 2
			H315
			STOT SE 3
			H336
			Aquatic Chronic 2
			H411

For full text of the H - statements and other abbreviations see section 16 "Other information". Substances without classification may have community workplace exposure limits available.

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

> 30 %

aliphatic hydrocarbons

# **SECTION 4: First aid measures**

#### 4.1. Description of first aid measures

Inhalation:

Fresh air, oxygen supply, warmth; seek specialist medical attention.

Skin contact:

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

Eye 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.

After ingestion or vomit: danger of product entering the lung.

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

ASPIRATION: Coughing, shortness of breath, nausea. Delayed effect: bronchopneumonia or pulmonary oedema

SKIN: Redness, inflammation.

Vapors may cause drowsiness and dizziness.

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

Do not induce vomiting.

Seek medical attention from a specialist.

Small amounts of liquid aspirated into the respiratory system during ingestion or from vomiting may cause bronchopneumonia or pulmonary oedema.

Swallowing may cause irritation of mouth, throat and digestive tract, diarrhea and vomiting

# **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:

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 protective equipment.

Wear self-contained breathing apparatus.

#### **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

Wear protective equipment.

Avoid contact with skin and eyes.

Danger of slipping on spilled product.

Keep unprotected persons away.

#### 6.2. Environmental precautions

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

Inform authorities in the event of product spillage to water courses or sewage systems.

### 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.

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.

Store in a cool, dry place.

Keep away from heat and direct sunlight.

Do not store near sources of heat or ignition, or reactive materials.

< +25 °C

**7.3. Specific end use(s)** Industrial Cleaning Agents

# **SECTION 8: Exposure controls/personal protection**

# **8.1.** Control parameters

# Occupational Exposure Limits

Valid for

Great Britain

Ingredient [Regulated substance]	ppm	mg/m³	Value type	Short term exposure limit category / Remarks	Regulatory list
n-Hexane 110-54-3 [N-HEXANE]	20	72	Time Weighted Average (TWA):		EH40 WEL
n-Hexane 110-54-3 [N-HEXANE]	20	72	Time Weighted Average (TWA):	Indicative	ECTLV

# **Occupational Exposure Limits**

Valid for

Ireland

Ingredient [Regulated substance]	ppm	mg/m <sup>3</sup>	Value type	Short term exposure limit category / Remarks	Regulatory list
n-Hexane 110-54-3 [N-HEXANE]	20	72	Time Weighted Average (TWA):	Indicative OELV	IR_OEL
n-Hexane 110-54-3 [N-HEXANE]			Skin designation:	Can be absorbed through the skin.	IR_OEL
n-Hexane 110-54-3 [N-HEXANE]	20	72	Time Weighted Average (TWA):	Indicative	ECTLV

### **Derived No-Effect Level (DNEL):**

Name on list	Application Area	Route of Exposure	Health Effect	Exposure Time	Value	Remarks
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane 92128-66-0		dermal	Long term exposure - systemic effects	Time	773 mg/kg	
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane 92128-66-0	Workers	inhalation	Long term exposure - systemic effects		2035 mg/m3	
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane 92128-66-0	General population	dermal	Long term exposure - systemic effects		699 mg/kg	
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane 92128-66-0	General population	inhalation	Long term exposure - systemic effects		608 mg/m3	
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane 92128-66-0	General population	oral	Long term exposure - systemic effects		699 mg/kg	
n-Hexane 110-54-3	General population	inhalation	Long term exposure - systemic effects		16 mg/m3	
n-Hexane 110-54-3	Workers	dermal	Long term exposure - systemic effects		11 mg/kg	
n-Hexane 110-54-3	General population	dermal	Long term exposure - systemic effects		5,3 mg/kg	
n-Hexane 110-54-3	Workers	inhalation	Long term exposure - systemic effects		75 mg/m3	
n-Hexane 110-54-3	General population	oral	Long term exposure - systemic effects		4 mg/kg	

# **Biological Exposure Indices:**

None

#### 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):

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).

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

Appearance liquid clear

Colorless

Odor Solvent

Odour threshold No data available / Not applicable

pH No data available / Not applicable
Melting point No data available / Not applicable
Solidification temperature No data available / Not applicable

Initial boiling point 88,0 °C (190.4 °F) Flash point -12 °C (10.4 °F)

Evaporation rate No data available / Not applicable Flammability No data available / Not applicable Explosive limits No data available / Not applicable Vapour pressure No data available / Not applicable Relative vapour density: No data available / Not applicable

Density 0,705 g/cm3

(20 °C (68 °F))

Bulk density No data available / Not applicable Solubility No data available / Not applicable

Solubility (qualitative)

(20 °C (68 °F); Solvent: Water)

Partition coefficient: n-octanol/water
Auto-ignition temperature
Decomposition temperature
Viscosity
No data available / Not applicable

Viscosity (kinematic) 0,61 mm2/s

Explosive properties No data available / Not applicable Oxidising properties No data available / Not applicable

#### 9.2. Other information

No data available / Not applicable

max. VOC content: 695 g/l

# **SECTION 10: Stability and reactivity**

Not miscible

#### 10.1. Reactivity

Reaction with strong oxidants.

#### 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 toxicological effects

### 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			
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane 92128-66-0	LD50	> 5.000 mg/kg	rat	OECD Guideline 401 (Acute Oral Toxicity)
n-Hexane 110-54-3	LD50	16.000 mg/kg	rat	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			
Hydrocarbons, C6-C7, n-	LD50	> 2.000 mg/kg	rat	OECD Guideline 402 (Acute Dermal Toxicity)
alkanes, isoalkanes,				
cyclics, <5% n-hexane				
92128-66-0				
n-Hexane	LD50	> 2.000 mg/kg	rabbit	not specified
110-54-3				

### 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
n-Hexane	LC50	> 31,86 mg/l	vapour	4 h	rat	not specified
110-54-3						

#### Skin corrosion/irritation:

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

Hazardous substances	Result	Exposure	Species	Method
CAS-No.		time		
n-Hexane	not irritating		rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
110-54-3				

### 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
n-Hexane 110-54-3	not irritating		rabbit	not specified

# 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.				
n-Hexane	not sensitising	Mouse local lymphnode	mouse	OECD Guideline 429 (Skin Sensitisation:
110-54-3		assay (LLNA)		Local Lymph Node Assay)

#### 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
n-Hexane 110-54-3	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
n-Hexane 110-54-3	negative	mammalian cell gene mutation assay	with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
n-Hexane 110-54-3	negative	inhalation: vapour		mouse	not specified
n-Hexane 110-54-3	negative	inhalation: vapour		rat	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
n-Hexane 110-54-3	not carcinogenic	inhalation: vapour	2 y 6 h/d; 5 d/w	mouse	female	OECD Guideline 451 (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		
n-Hexane	NOAEL P 9000 ppm	Two	inhalation:	rat	OECD Guideline 416 (Two-
110-54-3		generation	vapour		Generation Reproduction
	NOAEL F1 3000 ppm	study			Toxicity Study)
	NOAEL F2 3000 ppm				

# 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	Species	Method
			treatment		
n-Hexane	NOAEL 568 mg/kg	oral: gavage	90 d	rat	not specified
110-54-3			5 d/w		
n-Hexane	NOAEL 500 ppm	inhalation:	90 d	mouse	OECD Guideline 413
110-54-3		vapour	6 h/d; 5 d/w		(Subchronic Inhalation
					Toxicity: 90-Day)

# Aspiration hazard:

No data available.

# **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.

Hazardous substances CAS-No.	Value	Value	Exposure time	Species	Method
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics,	type LL50	11,4 mg/l	96 h	, ,	OECD Guideline 203 (Fish, Acute Toxicity Test)
<5% n-hexane 92128-66-0					
n-Hexane 110-54-3	LC50	> 1 - 10 mg/l	96 h	not specified	OECD Guideline 203 (Fish, Acute Toxicity Test)

### Toxicity (Daphnia):

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

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Hydrocarbons, C6-C7, n-	EL50	3 mg/l	48 h	Daphnia magna	OECD Guideline 202
alkanes, isoalkanes, cyclics,					(Daphnia sp. Acute
<5% n-hexane					Immobilisation Test)
92128-66-0					
n-Hexane	EC50	2,1 mg/l	48 h	Daphnia magna	OECD Guideline 202
110-54-3					(Daphnia sp. Acute
					Immobilisation Test)

# Chronic toxicity to aquatic invertebrates

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

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Hydrocarbons, C6-C7, n-	NOEC	0,17 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia
alkanes, isoalkanes, cyclics,		_			magna, Reproduction Test)
<5% n-hexane					
92128-66-0					

# Toxicity (Algae):

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

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
Hydrocarbons, C6-C7, n-	EL50	> 30 - 100 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga,
alkanes, isoalkanes, cyclics,					Growth Inhibition Test)
<5% n-hexane					
92128-66-0					
Hydrocarbons, C6-C7, n-	NOELR	3 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga,
alkanes, isoalkanes, cyclics,					Growth Inhibition Test)
<5% n-hexane					
92128-66-0					
n-Hexane	EC50	> 1 - 10 mg/l	72 h	not specified	OECD Guideline 201 (Alga,
110-54-3					Growth Inhibition Test)

# Toxicity to microorganisms

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

Hazardous substances	Value	Value	Exposure time	Species	Method
CAS-No.	type				
n-Hexane	EC50	> 1 - 10 mg/l	3 h	not specified	OECD Guideline 209
110-54-3					(Activated Sludge,
					Respiration Inhibition Test)

# 12.2. Persistence and degradability

Hazardous substances	Result	Test type	Degradability	Exposure	Method
CAS-No.				time	
Hydrocarbons, C6-C7, n-	readily biodegradable	aerobic	98 %	28 d	OECD Guideline 301 F (Ready
alkanes, isoalkanes, cyclics,					Biodegradability: Manometric
<5% n-hexane					Respirometry Test)
92128-66-0					
n-Hexane	readily biodegradable	aerobic	81 %	28 d	OECD Guideline 301 F (Ready
110-54-3					Biodegradability: Manometric
					Respirometry Test)

### 12.3. Bioaccumulative potential

No data available.

### 12.4. Mobility in soil

Hazardous substances CAS-No.	LogPow	Temperature	Method
n-Hexane	4	20 °C	other guideline:
110-54-3			

### 12.5. Results of PBT and vPvB assessment

Hazardous substances	PBT / vPvB
CAS-No.	
Hydrocarbons, C6-C7, n-alkanes, isoalkanes,	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
cyclics, <5% n-hexane	Bioaccumulative (vPvB) criteria.
92128-66-0	
n-Hexane	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very
110-54-3	Bioaccumulative (vPvB) criteria.

# 12.6. 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.

14 06 03 - other solvents and solvent mixtures

# **SECTION 14: Transport information**

#### 14.1. UN number

ADR	1268
RID	1268
ADN	1268
IMDG	1268
IATA	1268

### 14.2. UN proper shipping name

ADR	PETROLEUM DISTILLATES, N.O.S.
RID	PETROLEUM DISTILLATES, N.O.S.
ADN	PETROLEUM DISTILLATES, N.O.S.
IMDG	PETROLEUM DISTILLATES, N.O.S. (Petroleum naphtha)

IATA Petroleum distillates, n.o.s.

# 14.3. Transport hazard class(es)

ADR	3
RID	3
ADN	3
IMDG	3
ΙΔΤΔ	3

### 14.4. Packing group

ADR	II
RID	II
ADN	II
IMDG	II
IATA	II

# 14.5. Environmental hazards

ADR	Environmentally Hazardous
RID	Environmentally Hazardous
ADN	Environmentally Hazardous
IMDG	Marina pollutant

IMDG Marine pollutant 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. Transport in bulk according to Annex II of Marpol and the IBC Code

not applicable

# **SECTION 15: Regulatory information**

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

VOC content 98,6 %

(VOCV 814.018 VOC regulation

CH)

VOC content 3 %

(2010/75/EU)

#### **VOC Paints and Varnishes (EU):**

Regulatory Basis: Directive 2004/42/EC

Product (sub)category: B(a) Preparatory and cleaning products

Phase I (from 1.1.2007): 850 g/l max. VOC content: 695 g/l

### 15.2. Chemical safety assessment

A chemical safety assessment has not 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 vapor.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H336 May cause drowsiness or dizziness.

H361f Suspected of damaging fertility.

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

H411 Toxic to aquatic life with long lasting effects.

#### **Further information:**

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

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