



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

Page 1 of 8

TEROSON PU 9161 AF DC50ML EGFD

SDS No. : 573040  
V003.0

Revision: 06.08.2019  
printing date: 07.04.2021

Replaces version from: 07.09.2018

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

#### 1.1. Product identifier

TEROSON PU 9161 AF DC50ML EGFD

#### 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 AG & Co. KGaA

Henkelstr. 67

40589 Düsseldorf

Germany

Phone: +49 211 797 0

Fax-no.: +49 211 798 2009

ua-productsafety.de@henkel.com

#### 1.4. Emergency telephone number

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

### SECTION 2: Hazards identification

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

##### Classification (CLP):

The substance or mixture is not hazardous according to Regulation (EC) No 1272/2008 (CLP).

#### 2.2. Label elements

##### Label elements (CLP):

|| The substance or mixture is not hazardous according to Regulation (EC) No 1272/2008 (CLP).

#### 2.3. Other hazards

None if used properly.

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:**

Polyurethane adhesive

**Base substances of preparation:**

Polyether polyols

**Declaration of the ingredients according to CLP (EC) No 1272/2008:****||** Contains no dangerous substances exceeding the limits of the EU-Regulation**SECTION 4: First aid measures****4.1. Description of first aid measures****Inhalation:**

Move to fresh air, consult doctor if complaint persists.

**Skin contact:**

Rinse with running water and soap. Apply replenishing cream. Change all contaminated clothing.

**Eye contact:**

Rinse immediately with plenty of running water (for 10 minutes). Seek medical attention if necessary.

**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**

No data available.

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

See section: Description of first aid measures

**SECTION 5: Firefighting measures****5.1. Extinguishing media****Suitable extinguishing media:**

All common extinguishing agents are suitable.

**Extinguishing media which must not be used for safety reasons:**

High pressure waterjet

**5.2. Special hazards arising from the substance or mixture**

In case of fire toxic gases can be released.

**5.3. Advice for firefighters**

Wear self-contained breathing apparatus.

Wear protective equipment.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

Wear protective equipment.

**6.2. Environmental precautions**

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

**6.3. Methods and material for containment and cleaning up**

Remove mechanically.

Dispose of contaminated material as waste according to Section 13.

**6.4. Reference to other sections**

See advice in section 8

**SECTION 7: Handling and storage****7.1. Precautions for safe handling**

Hygiene measures:

Wash hands before work breaks and after finishing work.

Do not eat, drink or smoke while working.

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

Ensure good ventilation/extraction.

Storage at 10 to 20°C is recommended.

**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

Germany

None

**Biological Exposure Indices:**

None

**8.2. Exposure controls:**

Engineering controls:

Ensure good ventilation/extraction.

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): Polychloroprene (CR;  $\geq$  1 mm thickness) or natural rubber (NR;  $\geq$  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;  $\geq$  1 mm thickness) or natural rubber (NR;  $\geq$  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:

Protective goggles

Protective eye equipment should conform to EN166.

Skin protection:

Wear protective equipment.

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 dark grey
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 (20 °C (68 °F))	0,94 - 1,14 g/cm <sup>3</sup>
Bulk density	No data available / Not applicable
Solubility	No data available / Not applicable
Solubility (qualitative)	No data available / Not applicable
Partition coefficient: n-octanol/water	No data available / Not applicable
Auto-ignition temperature	No data available / Not applicable
Decomposition temperature	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

### 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****General toxicological information:**

To the best of our knowledge no harmful effects are to be expected if the product is handled and used properly.

**11.1. Information on toxicological effects****Acute oral toxicity:**

No data available.

**Acute dermal toxicity:**

No data available.

**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):**

No data available.

**Toxicity (Daphnia):**

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**

This mixture does not contain any substances that are assessed to be a PBT or vPvB.

**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.

08 04 10 Waste adhesives and sealants other than those mentioned in 08 04 09.

## 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	1,0 %
(2010/75/EU)	

**15.2. Chemical safety assessment**

A chemical safety assessment has not been carried out.

**National regulations/information (Germany):**

WGK: WGK = 2, significantly water endangering mixture. Classification according to the mixture rules in German AwSV regulation annex 1, number 5.2 from 18. April 2017.

Storage class according to TRGS 510: 10

**SECTION 16: Other information****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.

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**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 20

TEROSON PU 9161 AF DC50ML EGFD

SDS No. : 569843  
V003.0

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printing date: 07.04.2021

Replaces version from: 16.08.2018

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

#### 1.1. Product identifier

TEROSON PU 9161 AF DC50ML EGFD

#### 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 AG & Co. KGaA

Henkelstr. 67

40589 Düsseldorf

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ua-productsafety.de@henkel.com

#### 1.4. Emergency telephone number

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

### SECTION 2: Hazards identification

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

##### Classification (CLP):

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

Triphenyl phosphite

**Signal word:****Danger****Hazard statement:**

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

**Precautionary statement:**

P260 Do not breathe dust/fume/spray.

**Prevention**

P280 Wear protective gloves/eye protection.

**Precautionary statement:**

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

**Response**

P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER or doctor.

**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:**

2-Component polyurethane adhesive

**Base substances of preparation:**

Polyurethane prepolymer

**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		10- 20 %	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
Oxydipropyl dibenzoate 27138-31-4	248-258-5 01-2119529241-49	0,25- < 2,5 %	Aquatic Chronic 3 H412
o-(p-Isocyanatobenzyl)phenyl isocyanate 5873-54-1	227-534-9 01-2119480143-45	1- < 3 %	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
Triphenyl phosphite 101-02-0	202-908-4 01-2119511213-58	0,01- < 0,1 %	Acute Tox. 4 H302 Eye Irrit. 2 H319 Skin Irrit. 2

			H315 STOT RE 2 H373 Skin Sens. 1A H317 Aquatic Acute 1 H400 Aquatic Chronic 1 H410
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**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

EYE: Irritation, conjunctivitis.

SKIN: Redness, inflammation.

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

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

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 self-contained breathing apparatus.  
Wear protective equipment.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

Wear protective equipment.  
Avoid contact with skin and eyes.  
Keep unprotected persons away.

**6.2. Environmental precautions**

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

**6.3. Methods and material for containment and cleaning up**

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

**6.4. Reference to other sections**

See advice in section 8

**SECTION 7: Handling and storage****7.1. Precautions for safe handling**

Hygiene measures:

- Wash hands before work breaks and after finishing work.
- Do not eat, drink or smoke while working.
- Take off contaminated clothing and wash before reuse.

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

Ensure good ventilation/extraction.  
Storage at 10 to 20°C is recommended.

**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  
Germany

Ingredient [Regulated substance]	ppm	mg/m <sup>3</sup>	Value type	Short term exposure limit category / Remarks	Regulatory list
Diphenylmethane diisocyanate, isomers and homologs 9016-87-9			STEL (Short Term Exposure Limit) factor:	1 Substance listed with both Peak factor and STEL factor. The Peak factor is supplied with the AGW values.	TRGS 900
Diphenylmethane diisocyanate, isomers and homologs 9016-87-9			Skin designation:	Can be absorbed through the skin.	TRGS 900
Diphenylmethane diisocyanate, isomers and homologs 9016-87-9			Short Term Exposure Classification:	Category I: substances for which the localized effect has an assigned OEL or for substances with a sensitizing effect in respiratory passages.	TRGS 900
Diphenylmethane diisocyanate, isomers and homologs 9016-87-9		0,05	Exposure limit(s):	=2= If the AGW and BGW values are complied with, there should be no risk of reproductive damage (see Number 2.7).	TRGS 900
4,4'-Methylenediphenyl diisocyanate 101-68-8			Short Term Exposure Classification:	Category I: substances for which the localized effect has an assigned OEL or for substances with a sensitizing effect in respiratory passages.	TRGS 900
4,4'-Methylenediphenyl diisocyanate 101-68-8			Skin designation:	Can be absorbed through the skin.	TRGS 900
4,4'-Methylenediphenyl diisocyanate 101-68-8			STEL (Short Term Exposure Limit) factor:	1 Substance listed with both Peak factor and STEL factor. The Peak factor is supplied with the AGW values.	TRGS 900
4,4'-Methylenediphenyl diisocyanate 101-68-8		0,05	Exposure limit(s):	=2= If the AGW and BGW values are complied with, there should be no risk of reproductive damage (see Number 2.7).	TRGS 900
o-(p-Isocyanatobenzyl)phenyl isocyanate 5873-54-1		0,05	Exposure limit(s):	=2= If the AGW and BGW values are complied with, there should be no risk of reproductive damage (see Number 2.7).	TRGS 900
o-(p-Isocyanatobenzyl)phenyl isocyanate 5873-54-1			STEL (Short Term Exposure Limit) factor:	1 Substance listed with both Peak factor and STEL factor. The Peak factor is supplied with the AGW values.	TRGS 900
o-(p-Isocyanatobenzyl)phenyl isocyanate 5873-54-1			Short Term Exposure Classification:	Category I: substances for which the localized effect has an assigned OEL or for substances with a sensitizing effect in respiratory passages.	TRGS 900
2,2'-Methylenediphenyl diisocyanate 2536-05-2		0,05	Exposure limit(s):	=2= If the AGW and BGW values are complied with, there should be no risk of reproductive damage (see Number 2.7).	TRGS 900
2,2'-Methylenediphenyl diisocyanate 2536-05-2			STEL (Short Term Exposure Limit) factor:	1 Substance listed with both Peak factor and STEL factor. The Peak factor is supplied with the AGW values.	TRGS 900
2,2'-Methylenediphenyl diisocyanate 2536-05-2			Short Term Exposure Classification:	Category I: substances for which the localized effect has an assigned OEL or for substances with a sensitizing effect in respiratory passages.	TRGS 900

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

Name on list	Environmental Compartment	Exposure period	Value				Remarks
			mg/l	ppm	mg/kg	others	
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				
Oxydipropyl dibenzoate 27138-31-4	aqua (freshwater)		0,0037 mg/l				
Oxydipropyl dibenzoate 27138-31-4	aqua (marine water)		0,00037 mg/l				
Oxydipropyl dibenzoate 27138-31-4	aqua (intermittent releases)		0,037 mg/l				
Oxydipropyl dibenzoate 27138-31-4	sediment (freshwater)				1,49 mg/kg		
Oxydipropyl dibenzoate 27138-31-4	sediment (marine water)				0,149 mg/kg		
Oxydipropyl dibenzoate 27138-31-4	Soil				1 mg/kg		
Oxydipropyl dibenzoate 27138-31-4	sewage treatment plant (STP)		10 mg/l				
Oxydipropyl dibenzoate 27138-31-4	oral				333 mg/kg		
Oxydipropyl dibenzoate 27138-31-4	Air						
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/m <sup>3</sup>	
4,4'- methylenediphenyl diisocyanate 101-68-8	Workers	inhalation	Acute/short term exposure - local effects		0,1 mg/m <sup>3</sup>	
4,4'- methylenediphenyl diisocyanate 101-68-8	General population	inhalation	Long term exposure - local effects		0,025 mg/m <sup>3</sup>	
4,4'- methylenediphenyl diisocyanate 101-68-8	General population	inhalation	Acute/short term exposure - local effects		0,05 mg/m <sup>3</sup>	
Oxydipropyl dibenzoate 27138-31-4	Workers	dermal	Acute/short term exposure - systemic effects		170 mg/kg	
Oxydipropyl dibenzoate 27138-31-4	Workers	Inhalation	Acute/short term exposure - systemic effects		35,08 mg/m <sup>3</sup>	
Oxydipropyl dibenzoate 27138-31-4	Workers	Inhalation	Long term exposure - systemic effects		8,8 mg/m <sup>3</sup>	
Oxydipropyl dibenzoate 27138-31-4	Workers	dermal	Long term exposure - systemic effects		10 mg/kg	
Oxydipropyl dibenzoate 27138-31-4	General population	dermal	Acute/short term exposure - systemic effects		80 mg/kg	
Oxydipropyl dibenzoate 27138-31-4	General population	Inhalation	Acute/short term exposure - systemic effects		8,7 mg/m <sup>3</sup>	
Oxydipropyl dibenzoate 27138-31-4	General population	oral	Acute/short term exposure - systemic effects		80 mg/kg	
Oxydipropyl dibenzoate 27138-31-4	General population	dermal	Long term exposure - systemic effects		0,22 mg/kg	
Oxydipropyl dibenzoate 27138-31-4	General population	Inhalation	Long term exposure - systemic effects		8,69 mg/m <sup>3</sup>	
Oxydipropyl dibenzoate 27138-31-4	General population	oral	Long term exposure - systemic effects		5 mg/kg	
o-(p-Isocyanatobenzyl)phenyl isocyanate 5873-54-1	Workers	inhalation	Acute/short term exposure - local effects		0,1 mg/m <sup>3</sup>	
o-(p-Isocyanatobenzyl)phenyl isocyanate 5873-54-1	Workers	inhalation	Long term exposure - local effects		0,05 mg/m <sup>3</sup>	
o-(p-Isocyanatobenzyl)phenyl isocyanate 5873-54-1	General population	inhalation	Acute/short term exposure - local effects		0,05 mg/m <sup>3</sup>	
o-(p-Isocyanatobenzyl)phenyl isocyanate 5873-54-1	General population	inhalation	Long term exposure - local effects		0,025 mg/m <sup>3</sup>	
2,2'-Methylenediphenyl diisocyanate 2536-05-2	Workers	Inhalation	Acute/short term exposure - local effects		0,1 mg/m <sup>3</sup>	
2,2'-Methylenediphenyl diisocyanate 2536-05-2	Workers	Inhalation	Long term exposure - local effects		0,05 mg/m <sup>3</sup>	
2,2'-Methylenediphenyl diisocyanate 2536-05-2	General population	Inhalation	Acute/short term exposure - local effects		0,05 mg/m <sup>3</sup>	
2,2'-Methylenediphenyl diisocyanate 2536-05-2	General population	Inhalation	Long term exposure - local effects		0,025 mg/m <sup>3</sup>	



**Biological Exposure Indices:**

Ingredient [Regulated substance]	Parameters	Biological specimen	Sampling time	Conc.	Basis of biol. exposure index	Remark	Additional Information
4,4'-Methylenediphenyl diisocyanate 101-68-8	4,4-Diaminodiphenylmethane	Creatinine in urine	Sampling time: End of shift.	10 µg/g	DE BAT	BAT values reflect the total physical load of workplace substances absorbed through inhalation, dermally, etc. With occupational exposure to MDI, parameter 4,4'-Diaminodiphenylmethane (MDA) in the urine covers all components of a complex MDI mixture, since both monomers and oligomers of the MDI are degraded independent of the exposure path of the monomeric MDI. In contrast, the MAK value for MDI takes into account only the monomer MDI portion.	

**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:

Ensure good ventilation/suction at the workplace.

**Hand protection:**

Chemical-resistant protective gloves (EN 374).

Suitable materials for short-term contact or splashes (recommended: at least protection index 2, corresponding to > 30 minutes permeation time as per EN 374):

nitrile rubber (NBR;  $\geq 0.4$  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;  $\geq 0.4$  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 beige
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 (20 °C (68 °F))	0,95 - 1,15 g/cm <sup>3</sup>
Bulk density	No data available / Not applicable
Solubility	No data available / Not applicable
Solubility (qualitative)	No data available / Not applicable
Partition coefficient: n-octanol/water	No data available / Not applicable
Auto-ignition temperature	No data available / Not applicable
Decomposition temperature	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

**9.2. Other information**

No data available / Not applicable

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Reaction with water, alcohols, amines.

Reacts with water: Pressure built up in closed vessel (CO<sub>2</sub>).

### 10.2. Chemical stability

Stable under recommended storage conditions.

### 10.3. Possibility of hazardous reactions

See section reactivity

### 10.4. Conditions to avoid

Humidity

### 10.5. Incompatible materials

See section reactivity.

### 10.6. Hazardous decomposition products

At higher temperatures isocyanate may be released.

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

## SECTION 11: Toxicological information

### General toxicological information:

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 CAS-No.	Value type	Value	Species	Method
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:
Oxydipropyl dibenzoate 27138-31-4	LD50	3.914 mg/kg	rat	OECD Guideline 401 (Acute Oral Toxicity)
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))
Triphenyl phosphite 101-02-0	LD50	1.590 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 CAS-No.	Value type	Value	Species	Method
Diphenylmethane diisocyanate, isomers and homologues 9016-87-9	LD50	> 9.400 mg/kg	rat	OECD Guideline 402 (Acute Dermal Toxicity)
4,4'-methylenediphenyl diisocyanate 101-68-8	LD50	> 9.400 mg/kg	rabbit	OECD Guideline 402 (Acute Dermal Toxicity)
Oxydipropyl dibenzoate 27138-31-4	LD50	> 2.000 mg/kg	rat	OECD Guideline 402 (Acute Dermal Toxicity)
o-(p-Isocyanatobenzyl)phenyl isocyanate 5873-54-1	LD50	> 9.400 mg/kg	rabbit	OECD Guideline 402 (Acute Dermal Toxicity)
2,2'-Methylenediphenyl diisocyanate 2536-05-2	LD50	> 9.400 mg/kg	rabbit	OECD Guideline 402 (Acute Dermal Toxicity)
Triphenyl phosphite 101-02-0	LD50	> 2.000 - < 5.000 mg/kg	rabbit	OECD Guideline 402 (Acute Dermal Toxicity)

**Acute inhalative toxicity:**

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

Hazardous substances CAS-No.	Value type	Value	Test atmosphere	Exposure time	Species	Method
Oxydipropyl dibenzoate 27138-31-4	LC50	> 200 mg/l	dust/mist	4 h	rat	not specified
Triphenyl phosphite 101-02-0	LC50	> 6,7 mg/l	dust/mist	1 h	rat	equivalent or similar to OECD Guideline 403 (Acute Inhalation Toxicity)

**Skin corrosion/irritation:**

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

Hazardous substances CAS-No.	Result	Exposure time	Species	Method
Diphenylmethane diisocyanate, isomers and homologues 9016-87-9	irritating		rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
4,4'-methylenediphenyl diisocyanate 101-68-8	irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
Oxydipropyl dibenzoate 27138-31-4	not irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
o-(p-Isocyanatobenzyl)phenyl isocyanate 5873-54-1	irritating		rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)

**Serious eye damage/irritation:**

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

Hazardous substances CAS-No.	Result	Exposure time	Species	Method
Diphenylmethane diisocyanate, isomers and homologues 9016-87-9	irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
Oxydipropyl dibenzoate 27138-31-4	not irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)

**Respiratory or skin sensitization:**

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

Hazardous substances CAS-No.	Result	Test type	Species	Method
Diphenylmethane diisocyanate, isomers and homologues 9016-87-9	sensitising	Skin sensitisation	guinea pig	OECD Guideline 406 (Skin Sensitisation)
4,4'-methylenediphenyl diisocyanate 101-68-8	sensitising	Buehler test	guinea pig	OECD Guideline 406 (Skin Sensitisation)
Oxydipropyl dibenzoate 27138-31-4	not sensitising	Guinea pig maximisation 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
Triphenyl phosphite 101-02-0	sensitising	Mouse local lymphnode assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)
Triphenyl phosphite 101-02-0	sensitising	Guinea pig maximisation test	guinea pig	EPA OPPTS 870.2600 (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
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)
Oxydipropyl dibenzoate 27138-31-4	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
Oxydipropyl dibenzoate 27138-31-4	negative	in vitro mammalian chromosome aberration test	with and without		OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test)
Oxydipropyl dibenzoate 27138-31-4	negative	mammalian cell gene mutation assay	with and without		OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
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)

**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)

**Reproductive toxicity:**

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

Hazardous substances CAS-No.	Result / Value	Test type	Route of application	Species	Method
Oxydipropyl dibenzoate 27138-31-4	NOAEL P > 10000 ppm NOAEL F1 10000 ppm NOAEL F2 10000 ppm	Two generation study	oral: feed	rat	OECD Guideline 416 (Two- Generation Reproduction Toxicity Study)

**STOT-single exposure:**

No data available.

**STOT-repeated exposure::**

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

Hazardous substances CAS-No.	Result / Value	Route of application	Exposure time / Frequency of treatment	Species	Method
Diphenylmethane diisocyanate, isomers and homologues 9016-87-9	NOAEL 0,0002 mg/l	inhalation: aerosol	2 y 6 h per d, 5 d per week	rat	OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)
4,4'- methylenediphenyl diisocyanate 101-68-8	NOAEL 0,0002 mg/l	inhalation: aerosol	main: 2 y; satellite:1 y 6 h/d; 5 d/w	rat	OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)
Oxydipropyl dibenzoate 27138-31-4	NOAEL 1.000 mg/kg	oral: feed	13 w daily	rat	OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
o-(p-Isocyanatobenzyl)phenyl isocyanate 5873-54-1	NOAEL 0,2 mg/m <sup>3</sup>	inhalation: aerosol	2 y 6 h/d, 5 d/w	rat	OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)
2,2'-Methylenediphenyl diisocyanate 2536-05-2	NOAEL 0,2 mg/m <sup>3</sup>	inhalation: aerosol	2 y 6 h/d, 5 d/w	rat	OECD Guideline 453 (Combined Chronic Toxicity / Carcinogenicity Studies)
Triphenyl phosphite 101-02-0	NOAEL 15 mg/kg	oral: gavage	16 weeks daily	rat	equivalent or similar to OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reprod./Develop. Tox. Screening Test)

**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
Diphenylmethane diisocyanate, isomers and homologues 9016-87-9	LC50	> 1.000 mg/l	96 h	Brachydanio rerio (new name: Danio rerio)	OECD Guideline 203 (Fish, Acute Toxicity Test)
4,4'-methylenediphenyl diisocyanate 101-68-8	LC50	> 1.000 mg/l	96 h	Danio rerio	OECD Guideline 203 (Fish, Acute Toxicity Test)
Oxydipropyl dibenzoate 27138-31-4	LC50	3,7 mg/l	96 h	Pimephales promelas	OECD Guideline 203 (Fish, Acute Toxicity Test)
o-(p-Isocyanatobenzyl)phenyl isocyanate 5873-54-1	LC50	> 1.000 mg/l	96 h	Danio rerio	OECD Guideline 203 (Fish, Acute Toxicity Test)
2,2'-Methylenediphenyl diisocyanate 2536-05-2	LC50	> 1.000 mg/l	96 h	Danio rerio	OECD Guideline 203 (Fish, Acute Toxicity Test)
Triphenyl phosphite 101-02-0	LC50	> 16 mg/l	96 h	Brachydanio rerio (new name: Danio rerio)	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 CAS-No.	Value type	Value	Exposure time	Species	Method
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)
Oxydipropyl dibenzoate 27138-31-4	EL50	19,3 mg/l	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
Triphenyl phosphite 101-02-0	EC50	> 1 - 5 mg/l	48 h	Daphnia sp.	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 CAS-No.	Value type	Value	Exposure time	Species	Method
Diphenylmethane diisocyanate, isomers and homologues 9016-87-9	NOEC	10 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)
4,4'-methylenediphenyl diisocyanate 101-68-8	NOEC	10 mg/l	21 d	Daphnia magna	OECD 211 (Daphnia magna, Reproduction Test)

#### Toxicity (Algae):



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

Hazardous substances CAS-No.	Value type	Value	Exposure time	Species	Method
Diphenylmethane diisocyanate, isomers and homologues 9016-87-9	EC50	> 1.640 mg/l	72 h	Desmodesmus subspicatus	OECD Guideline 201 (Alga, Growth Inhibition Test)
4,4'-methylenediphenyl diisocyanate 101-68-8	EC50	> 1.640 mg/l	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
4,4'-methylenediphenyl diisocyanate 101-68-8	NOELR	1.640 mg/l	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
Oxydipropyl dibenzoate 27138-31-4	EL50	4,9 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)
Oxydipropyl dibenzoate 27138-31-4	EL10	0,89 mg/l	72 h	Pseudokirchneriella subcapitata	OECD Guideline 201 (Alga, Growth Inhibition Test)

#### Toxicity to microorganisms

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
Diphenylmethane diisocyanate, isomers and homologues 9016-87-9	EC50	> 100 mg/l	3 h	activated sludge	OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)
4,4'-methylenediphenyl diisocyanate 101-68-8	EC50	> 100 mg/l	3 h	activated sludge	OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)
Oxydipropyl dibenzoate 27138-31-4	EC50	> 100 mg/l	3 h	activated sludge of a predominantly domestic sewage	OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test)
Triphenyl phosphite 101-02-0	EC 50	> 100 mg/l	3 h		OECD Guideline 209 (Activated Sludge, 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)
Oxydipropyl dibenzoate 27138-31-4	readily biodegradable	aerobic	85 %	28 d	OECD Guideline 301 B (Ready Biodegradability: CO2 Evolution Test)

#### 12.3. Bioaccumulative potential

Hazardous substances CAS-No.	Bioconcentration factor (BCF)	Exposure time	Temperature	Species	Method
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)
Oxydipropyl dibenzoate 27138-31-4	3,9	20 °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 CAS-No.	PBT / vPvB
4,4'-methylenediphenyl diisocyanate 101-68-8	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
Oxydipropyl dibenzoate 27138-31-4	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
o-(p-Isocyanatobenzyl)phenyl isocyanate 5873-54-1	Not fulfilling Persistent, Bioaccumulative and Toxic (PBT), very Persistent and very Bioaccumulative (vPvB) criteria.
2,2'-Methylenediphenyl diisocyanate 2536-05-2	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

ADR	Not dangerous goods
RID	Not dangerous goods
ADN	Not dangerous goods
IMDG	Not dangerous goods
IATA	Not dangerous goods

### 14.2. UN proper shipping name

ADR	Not dangerous goods
RID	Not dangerous goods
ADN	Not dangerous goods
IMDG	Not dangerous goods
IATA	Not dangerous goods

### 14.3. Transport hazard class(es)

ADR	Not dangerous goods
RID	Not dangerous goods
ADN	Not dangerous goods
IMDG	Not dangerous goods
IATA	Not dangerous goods

### 14.4. Packing group

ADR	Not dangerous goods
RID	Not dangerous goods
ADN	Not dangerous goods
IMDG	Not dangerous goods
IATA	Not dangerous goods

### 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
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

## SECTION 15: Regulatory information

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

VOC content (VOCV 814.018 VOC regulation CH)	0 %
VOC content (2010/75/EU)	0 %

**15.2. Chemical safety assessment**

A chemical safety assessment has not been carried out.

**National regulations/information (Germany):**

WGK: WGK = 1, slightly water endangering mixture. Classification according to the mixture rules in German AwSV regulation annex 1, number 5.2 from 18. April 2017.

BG regulations, rules, infos: BG data sheet: BGI 524 Hazardous substances: polyurethane production and processing / isocyanates (M 044)

Storage class according to TRGS 510: 11

General remarks (DE): None

**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.  
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.  
H400 Very toxic to aquatic life.  
H410 Very toxic to aquatic life with long lasting effects.  
H412 Harmful to aquatic life with long lasting effects.

**Further information:**

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