

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

Rolf Kuhn GmbH

Revision date: 06.03.2019

### ROKU® PUR Kleber 1-K-1013

11731-028

# ROLFKUHN GMBH

PASSIVER TECHNISCHER BRANDSCHUTZ

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

### 1.1. Product identifier

ROKU® PUR Kleber 1-K-1013

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

#### Use of the substance/mixture

Adhesive

Assembly material

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

Company name: Rolf Kuhn GmbH  
Street: Jägersgrund 10  
Place: D-57339 Erndtebrück  
Telephone: +49 2753 5945-0  
Contact person: Anwendungstechnik  
e-mail: anwendungstechnik@rolfkuhngmbh.com (Contact for technical information)  
Internet: www.kuhn-brandschutz.com  
Telefax: +49 2753 5945-21

### 1.4. Emergency telephone

#### number:

+49 (0) 6132 / 84463 (GBK GmbH)

Responsible for the safety data sheet: GBK GmbH, Ingelheim,  
sds@gbk-ingelheim.de

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### Regulation (EC) No. 1272/2008

Hazard categories:

Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Irrit. 2

Respiratory or skin sensitisation: Resp. Sens. 1

Respiratory or skin sensitisation: Skin Sens. 1

Carcinogenicity: Carc. 2

Specific target organ toxicity - single exposure: STOT SE 3

Specific target organ toxicity - repeated exposure: STOT RE 2

Hazard Statements:

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

May cause respiratory irritation.

Causes serious eye irritation.

Causes skin irritation.

May cause an allergic skin reaction.

Suspected of causing cancer.

May cause damage to organs through prolonged or repeated exposure.

### 2.2. Label elements

#### Regulation (EC) No. 1272/2008

#### Hazard components for labelling

Diphenylmethanediisocyanate, isomers and homologues

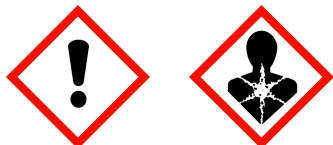
4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate

o-(p-isocyanatobenzyl)phenyl isocyanate; diphenylmethane-2,4'-diisocyanate

2,2'-methylenediphenyl diisocyanate; diphenylmethane-2,2'-diisocyanate

Signal word: Danger

Pictograms:



#### Hazard statements

H334

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



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H335	May cause respiratory irritation.
H319	Causes serious eye irritation.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H351	Suspected of causing cancer.
H373	May cause damage to organs through prolonged or repeated exposure.

**Precautionary statements**

P201	Obtain special instructions before use.
P260	Do not breathe vapour/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P284	Wear respiratory protection.
P302+P352	IF ON SKIN: Wash with plenty of water.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313	IF exposed or concerned: Get medical advice/attention.

**Special labelling of certain mixtures**

EUH204	Contains isocyanates. May produce an allergic reaction.
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**Additional advice on labelling**

The product is labeled in accordance with Regulation (EC) no. 1272/2008 (GHS).

**2.3. Other hazards**

According to Regulation (EC) No 1907/2006 (REACH) none of the substances, contained in this product are a PBT / vPvB substance.

**SECTION 3: Composition/information on ingredients****3.2. Mixtures****Chemical characterization**

Adhesive, polyurethane, solvent-free

**Hazardous components**

CAS No	Chemical name	Quantity		
	EC No	Index No	REACH No	
	GHS Classification			
9016-87-9	Diphenylmethanediisocyanate, isomers and homologues	20 - 30 %		
	618-498-9			
	Carc. 2, Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, Resp. Sens. 1, Skin Sens. 1, STOT SE 3, STOT RE 2; H351 H332 H315 H319 H334 H317 H335 H373			
101-68-8	4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate	10 - 25 %		
	202-966-0	615-005-00-9	01-2119457014-47	
	Carc. 2, Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, Resp. Sens. 1, Skin Sens. 1, STOT SE 3, STOT RE 2; H351 H332 H315 H319 H334 H317 H335 H373			
25322-69-4	Poly-propane-1,2-diol	10 - < 25 %		
	500-039-8			
	Acute Tox. 4; H302			
5873-54-1	o-(p-isocyanatobenzyl)phenyl isocyanate; diphenylmethane-2,4'-diisocyanate	5 - 15 %		
	227-534-9	615-005-00-9	01-2119480143-45	
	Carc. 2, Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, Resp. Sens. 1, Skin Sens. 1, STOT SE 3, STOT RE 2; H351 H332 H315 H319 H334 H317 H335 H373			
2536-05-2	2,2'-methylenediphenyl diisocyanate; diphenylmethane-2,2'-diisocyanate	0,1 - 2,5 %		
	219-799-4	615-005-00-9	01-2119927323-43	
	Carc. 2, Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, Resp. Sens. 1, Skin Sens. 1, STOT SE 3, STOT RE 2; H351 H332 H315 H319 H334 H317 H335 H373			

Full text of H and EUH statements: see section 16.



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### Further Information

Contact with moisture (water) liberates methanol.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### After inhalation

Take affected person away from danger area. Move to fresh air in case of accidental inhalation of vapours. Refer for medical treatment. In case of the person being unconscious put him/her in a stable side position. If patient is not breathing, apply artificial respiration.

#### After contact with skin

Remove contaminated soaked clothing immediately and dispose of safely. Wash off immediately with soap and plenty of water. Consult a doctor if skin irritation persists. Dab with polyethylene glycol 400.

#### After contact with eyes

Remove contact lens. Rinse thoroughly with plenty of water, also under the eyelids. Summon a doctor immediately. The information contained in the SDS have ready for disposal.

#### After ingestion

Rinse out mouth and give plenty of water to drink. Do not induce vomiting. Summon a doctor immediately. Never give anything by mouth to an unconscious person.

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

See also chapter: 4.1, 11. Symptoms of poisoning may not occur for many hours, therefore keep under medical supervision for at least 48 hours. Possible symptoms: irritation of skin and the eyes. Prolonged skin contact may cause skin irritation and/or dermatitis. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Shortness of breath.

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

In the event of pulmonary irritation treat initially with dexamethasone metered-dose aerosol. Continue to monitor for pneumonia and pulmonary oedema. Symptoms of poisoning may not occur for many hours, therefore keep under medical supervision for at least 48 hours.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

#### Suitable extinguishing media

Foam, carbon dioxide (CO<sub>2</sub>), dry chemical, water-spray.

#### Unsuitable extinguishing media

Full water jet.

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

In the event of fire the following can be released: carbon monoxide and carbon dioxide, nitrous oxides (NO<sub>x</sub>), Isocyanates, Hydrocyanic acid (Hydrogen cyanide), toxic gases/vapours. Heating will cause pressure rise with risk of bursting.

### 5.3. Advice for firefighters

Use breathing apparatus with independent air supply.

#### Additional information

In case of fire and/or explosion do not breathe fumes. Apply cooling water to the side of containers that are exposed to flames. Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

## SECTION 6: Accidental release measures

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

Remove persons to safety. Ensure adequate ventilation, especially in confined areas. Avoid contact with skin, eyes and clothing. High risk of slipping due to leakage/spillage of product.

### 6.2. Environmental precautions

Do not discharge into the drains/surface waters/ground water. Inform competent authority about release into the sewage, ground or into waters.



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

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder). Dispose of contaminated material as waste according to section 13. "Cover with humid, absorbent material (e.g. sand, sawdust, chemical binder). After approx. 1 hour, collect in disposal drum; do not close (CO2 development)." Keep damp in the open air in a safe place for 7 to 14 days.

**6.4. Reference to other sections**

Information for personal protective equipment look up section 8.

**SECTION 7: Handling and storage**

**7.1. Precautions for safe handling**

**Advice on safe handling**

Unauthorized persons are prohibited to enter. Ensure adequate ventilation, especially in confined areas. Avoid contact with skin, eyes and clothing. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. When using do not eat, drink or smoke. Information on label instructions.

**Further information on handling**

Take the usual precautions when handling with chemicals. Wash hands before breaks and at the end of workday. Keep away from food, drink and animal feeding stuffs. Remove contaminated soaked clothing immediately, don't leave to dry.

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

**Requirements for storage rooms and vessels**

Keep container tightly closed.  
Use only in well-ventilated areas.

**Hints on joint storage**

Do not store together with oxidizing agents. Do not store with acids or alkalies.

**Further information on storage conditions**

Protect from heat and direct solar radiation. Store in a dry place.  
Recommended storage temperature: 15 - 25°C.  
n enclosed original container and at storage temperature of 25°C maximum product keeps stabile for approx. 9 months.

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

Adhesive

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

**8.1. Control parameters**

**Exposure limits (EH40)**

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
-	Isocyanates, all (as -NCO) Except methyl isocyanate	-	0.02		TWA (8 h)	WEL
		-	0.07		STEL (15 min)	WEL



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**DNEL/DMEL values**

CAS No	Substance	Exposure route	Effect	Value
101-68-8	4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate			
Worker DNEL, acute		dermal	systemic	50 mg/kg bw/day
Worker DNEL, acute		inhalation	systemic	0,1 mg/m <sup>3</sup>
Worker DNEL, acute		dermal	local	28,7 mg/cm <sup>2</sup>
Worker DNEL, acute		inhalation	local	0,1 mg/m <sup>3</sup>
Worker DNEL, long-term		inhalation	systemic	0,05 mg/m <sup>3</sup>
Worker DNEL, long-term		inhalation	local	0,05 mg/m <sup>3</sup>
Consumer DNEL, acute		dermal	systemic	25 mg/kg bw/day
Consumer DNEL, acute		inhalation	systemic	0,05 mg/m <sup>3</sup>
Consumer DNEL, acute		oral	systemic	20 mg/kg bw/day
Consumer DNEL, acute		dermal	local	17,2 mg/cm <sup>2</sup>
Consumer DNEL, acute		inhalation	local	0,05 mg/m <sup>3</sup>
Consumer DNEL, long-term		inhalation	systemic	0,025 mg/m <sup>3</sup>
Consumer DNEL, long-term		inhalation	local	0,025 mg/m <sup>3</sup>
5873-54-1	o-(p-isocyanatobenzyl)phenyl isocyanate; diphenylmethane-2,4'-diisocyanate			
Worker DNEL, acute		dermal	systemic	50 mg/kg bw/day
Worker DNEL, acute		inhalation	systemic	0,1 mg/m <sup>3</sup>
Worker DNEL, acute		dermal	local	28,7 mg/cm <sup>2</sup>
Worker DNEL, acute		inhalation	local	0,1 mg/m <sup>3</sup>
Worker DNEL, long-term		dermal	systemic	0 mg/kg bw/day
Worker DNEL, long-term		inhalation	systemic	0,05 mg/m <sup>3</sup>
Worker DNEL, long-term		dermal	local	0 mg/cm <sup>2</sup>
Consumer DNEL, acute		dermal	systemic	25 mg/kg bw/day
Consumer DNEL, acute		inhalation	systemic	0,05 mg/m <sup>3</sup>
Consumer DNEL, acute		oral	systemic	20 mg/kg bw/day
Consumer DNEL, acute		dermal	local	17,2 mg/cm <sup>2</sup>
Consumer DNEL, long-term		dermal	local	0 mg/cm <sup>2</sup>
Consumer DNEL, long-term		dermal	systemic	0 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	0,025 mg/m <sup>3</sup>
Consumer DNEL, long-term		oral	systemic	0 mg/kg bw/day
Consumer DNEL, long-term		inhalation	local	0,025 mg/m <sup>3</sup>
Worker DNEL, long-term		inhalation	local	0,05 mg/m <sup>3</sup>
2536-05-2	2,2'-methylenediphenyl diisocyanate; diphenylmethane-2,2'-diisocyanate			
Worker DNEL, acute		dermal	systemic	50 mg/kg bw/day
Worker DNEL, acute		inhalation	systemic	0,1 mg/m <sup>3</sup>
Worker DNEL, acute		dermal	local	28,7 mg/cm <sup>2</sup>
Worker DNEL, acute		inhalation	local	0,1 mg/m <sup>3</sup>
Worker DNEL, long-term		dermal	systemic	0 mg/kg bw/day
Worker DNEL, long-term		inhalation	systemic	0,05 mg/m <sup>3</sup>
Worker DNEL, long-term		dermal	local	0 mg/cm <sup>2</sup>
Worker DNEL, long-term		inhalation	local	0,05 mg/m <sup>3</sup>
Consumer DNEL, acute		dermal	systemic	25 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	0,05 mg/m <sup>3</sup>



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Consumer DNEL, acute	oral	systemic	20 mg/kg bw/day
Consumer DNEL, acute	dermal	local	17,2 mg/cm <sup>2</sup>
Consumer DNEL, acute	inhalation	local	0,05 mg/m <sup>3</sup>

#### PNEC values

CAS No	Substance	Value
Environmental compartment		
101-68-8	4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate	
Freshwater		1 mg/l
Marine water		0,1 mg/l
Soil		1 mg/kg
Micro-organisms in sewage treatment plants (STP)		1 mg/l
Freshwater (intermittent releases)		10 mg/l
5873-54-1	o-(p-isocyanatobenzyl)phenyl isocyanate; diphenylmethane-2,4'-diisocyanate	
Freshwater		> 1 mg/l
Marine water		> 0,1 mg/l
Micro-organisms in sewage treatment plants (STP)		> 1 mg/l
Soil		> 1 mg/kg
2536-05-2	2,2'-methylenediphenyl diisocyanate; diphenylmethane-2,2'-diisocyanate	
Freshwater		1 mg/l
Marine water		0,1 mg/l
Soil		1 mg/kg
Micro-organisms in sewage treatment plants (STP)		1 mg/l

## 8.2. Exposure controls

### Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas.

### Protective and hygiene measures

Wash hands before breaks and immediately after handling the product. When using do not eat, drink or smoke. Avoid contact with skin, eyes and clothing.

### Eye/face protection

Eye wash bottle with pure water (EN 15154).  
Tightly fitting goggles (EN 166).

### Hand protection

Protective gloves (EN 374) Gloves made of nitrile. (recommended: minimum protection index 2, corresponding to a permeation rate > 30 minutes according to EN 374)

This recommendation refers exclusively to the chemical compatibility and the lab test conforming to EN 374 carried out under lab conditions. Requirements can vary as a function of the use. Therefore it is necessary to adhere additionally to the recommendations given by the manufacturer of protective gloves.

### Skin protection

Light protective clothing  
Long sleeved clothing (DIN EN ISO 6530)

### Respiratory protection

Not required under normal use.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state: Liquid  
Colour: Brown  
Odour: Characteristic



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pH-Value: Not applicable

#### Changes in the physical state

Melting point: Not determined

Initial boiling point and boiling range: Not determined

Sublimation point: Not determined

Flash point: Not determined

Sustaining combustion: No data available

#### Flammability

Solid: Not determined

#### Explosive properties

The product is not explosive.

Lower explosion limits: Not determined

Upper explosion limits: Not determined

Ignition temperature: Not applicable

#### Auto-ignition temperature

Solid: Not determined

Decomposition temperature: Not determined

#### Oxidizing properties

None

Vapour pressure: Not determined

Density (at 20 °C): approx. 1,12 g/cm<sup>3</sup>

Water solubility: insoluble

#### Solubility in other solvents

Not determined

Partition coefficient: Not determined

Viscosity / dynamic:  
(at 20 °C) Not determined

Viscosity / kinematic: Not determined

Flow time: Not determined

#### 9.2. Other information

No data available.

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

Reacts with water.

#### 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

Exothermic reaction with: Alcohols, amines, Bases, Acids, water.

Container can be pressurized by carbon dioxide due to reaction with humid air and/or water. Risk of bursting..

#### 10.4. Conditions to avoid

Protect from heat and direct solar radiation.

Protect from moisture.

Polymerisation > 260°C.

#### 10.5. Incompatible materials

Alcohols, amines, Bases, Acids, water.

#### 10.6. Hazardous decomposition products

No decomposition if used as directed.



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**SECTION 11: Toxicological information****11.1. Information on toxicological effects****Acute toxicity**

Based on available data, the classification criteria are not met.

**ATEmix calculated**

ATE (inhalation vapour) 19,50 mg/l; ATE (inhalation aerosol) 0,994 mg/l

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
9016-87-9	Diphenylmethanediisocyanate, isomers and homologues				
	oral	LD50 > 2000 mg/kg mg/kg	Rat		
	inhalation vapour	ATE 11 mg/l			
	inhalation aerosol	ATE 1,5 mg/l			
101-68-8	4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate				
	oral	LD50 > 2000 mg/kg	Rat	OECD 401	
	dermal	LD50 > 9400 mg/kg	Rabbit	OECD 402	
	inhalation vapour	ATE 11 mg/l			
	inhalation (4 h) aerosol	LC50 0,368 mg/l	Rat	OECD 403	
25322-69-4	Poly-propane-1,2-diol				
	oral	ATE 500 mg/kg			
5873-54-1	o-(p-isocyanatobenzyl)phenyl isocyanate; diphenylmethane-2,4'-diisocyanate				
	oral	LD50 > 2000 mg/kg	Rat	OECD 401	
	dermal	LD50 > 9400 mg/kg	Rabbit	OECD 404	
	inhalation vapour	ATE 11 mg/l			
	inhalation (4 h) aerosol	LC50 0,31 mg/l	Rat	OECD 403	
2536-05-2	2,2'-methylenediphenyl diisocyanate; diphenylmethane-2,2'-diisocyanate				
	oral	LD50 > 15000 mg/kg	Rat		
	inhalation vapour	ATE 11 mg/l			
	inhalation (4 h) aerosol	LC50 0,370 mg/l	Rat		

**Irritation and corrosivity**

Causes serious eye irritation.

Causes skin irritation.

**Sensitising effects**

Contains isocyanates. May produce an allergic reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled. (Diphenylmethanediisocyanate, isomers and homologues; 4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate; o-(p-isocyanatobenzyl)phenyl isocyanate; diphenylmethane-2,4'-diisocyanate; 2,2'-methylenediphenyl diisocyanate; diphenylmethane-2,2'-diisocyanate)

May cause an allergic skin reaction. (Diphenylmethanediisocyanate, isomers and homologues; 4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate; o-(p-isocyanatobenzyl)phenyl isocyanate; diphenylmethane-2,4'-diisocyanate; 2,2'-methylenediphenyl diisocyanate; diphenylmethane-2,2'-diisocyanate)

No sensitizing effect known.

**Carcinogenic/mutagenic/toxic effects for reproduction**



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Suspected of causing cancer. (Diphenylmethanediisocyanate, isomers and homologues; 4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate; o-(p-isocyanatobenzyl)phenyl isocyanate; diphenylmethane-2,4'-diisocyanate; 2,2'-methylenediphenyl diisocyanate; diphenylmethane-2,2'-diisocyanate)

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Reproductive toxicity: Based on available data, the classification criteria are not met.

#### STOT-single exposure

May cause respiratory irritation. (Diphenylmethanediisocyanate, isomers and homologues;

4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate; o-(p-isocyanatobenzyl)phenyl isocyanate; diphenylmethane-2,4'-diisocyanate)

#### STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure. (Diphenylmethanediisocyanate, isomers and homologues; 4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate; o-(p-isocyanatobenzyl)phenyl isocyanate; diphenylmethane-2,4'-diisocyanate)

#### Aspiration hazard

Based on available data, the classification criteria are not met.

#### Further information

If appropriately handled and if in accordance with the general hygienic rules, no damages to health have become known.

## SECTION 12: Ecological information

### 12.1. Toxicity

The product: No data available

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
9016-87-9	Diphenylmethanediisocyanate, isomers and homologues					
	Acute fish toxicity	LC50 > 1000 mg/l	96 h	Zebra fish		
101-68-8	4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate					
	Acute fish toxicity	LC50 > 1000 mg/l	96 h	Brachydanio rerio	OECD 203	
	Acute algae toxicity	ErC50 > 1640 mg/l	72 h	Scenedesmus subspicatus	OECD 201	
	Acute crustacea toxicity	EC50 > 1000 mg/l	48 h	Daphnia magna	OECD 202	
5873-54-1	o-(p-isocyanatobenzyl)phenyl isocyanate; diphenylmethane-2,4'-diisocyanate					
	Acute fish toxicity	LC50 > 1000 mg/l	96 h	Brachydanio rerio	OECD 203	
	Acute algae toxicity	ErC50 > 1640 mg/l	72 h	Scenedesmus subspicatus	OECD 201	
	Acute crustacea toxicity	EC50 > 1000 mg/l	48 h	Daphnia magna	OECD 202	
	Acute bacteria toxicity	(> 100 mg/l)	3 h	Activated sludge	OECD 209	
2536-05-2	2,2'-methylenediphenyl diisocyanate; diphenylmethane-2,2'-diisocyanate					
	Acute fish toxicity	LC50 > 1000 mg/l	96 h	Brachidanio rerio	OECD 203	
	Acute algae toxicity	ErC50 1,5 mg/l	72 h		OECD 201	
	Acute crustacea toxicity	EC50 > 1000 mg/l	48 h	Daphnia magna	Conclusion by analogy	
	Algea toxicity	NOEC 1640 mg/l	3 d	Desmodesmus subspicatus	OECD 201	

### 12.2. Persistence and degradability

The product: No data available



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CAS No	Chemical name
	Method
	Value
	d
	Source
	Evaluation
2536-05-2	2,2'-methylenediphenyl diisocyanate; diphenylmethane-2,2'-diisocyanate
	OECD 302
	0%
	28
	In aqueous systems, formation of insoluble and chemically inert (inactive) polyureas. Not biodegradable.

#### 12.3. Bioaccumulative potential

The product: No data available

#### Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
2536-05-2	2,2'-methylenediphenyl diisocyanate; diphenylmethane-2,2'-diisocyanate	5,22

#### 12.4. Mobility in soil

The product: No data available

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

According to Regulation (EC) No 1907/2006 (REACH) none of the substances, contained in this product are a PBT / vPvB substance.

#### 12.6. Other adverse effects

The product: No data available

#### Further information

Do not release undiluted or in higher quantities into the groundwater, sewerage or waters.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

#### Advice on disposal

Waste disposal according to local regulations.

#### Waste disposal number of waste from residues/unused products

080501 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes not otherwise specified in 08; waste isocyanates; hazardous waste

#### Waste disposal number of contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

#### Contaminated packaging

Waste disposal according to local regulations. Packaging that cannot be cleaned should be disposed of like the product.

## SECTION 14: Transport information

### Land transport (ADR/RID)

#### 14.1. UN number:

No dangerous good in sense of this transport regulation.

#### 14.2. UN proper shipping name:

No dangerous good in sense of this transport regulation.

#### 14.3. Transport hazard class(es):

No dangerous good in sense of this transport regulation.

#### 14.4. Packing group:

No dangerous good in sense of this transport regulation.

### Inland waterways transport (ADN)

#### 14.1. UN number:

No dangerous good in sense of this transport regulation.

#### 14.2. UN proper shipping name:

No dangerous good in sense of this transport regulation.

#### 14.3. Transport hazard class(es):

No dangerous good in sense of this transport regulation.

#### 14.4. Packing group:

No dangerous good in sense of this transport regulation.

### Marine transport (IMDG)



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<b>14.1. UN number:</b>	No dangerous good in sense of this transport regulation.
<b>14.2. UN proper shipping name:</b>	No dangerous good in sense of this transport regulation.
<b>14.3. Transport hazard class(es):</b>	No dangerous good in sense of this transport regulation.
<b>14.4. Packing group:</b>	No dangerous good in sense of this transport regulation.

#### Air transport (ICAO-TI/IATA-DGR)

<b>14.1. UN number:</b>	No dangerous good in sense of this transport regulation.
<b>14.2. UN proper shipping name:</b>	No dangerous good in sense of this transport regulation.
<b>14.3. Transport hazard class(es):</b>	No dangerous good in sense of this transport regulation.
<b>14.4. Packing group:</b>	No dangerous good in sense of this transport regulation.

#### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

#### 14.6. Special precautions for user

No dangerous good in sense of this transport regulation.

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

No dangerous good in sense of this transport regulation.

## SECTION 15: Regulatory information

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

#### EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 56: 4,4'-methylenediphenyl diisocyanate; diphenylmethane-4,4'-diisocyanate; o-(p-isocyanatobenzyl)phenyl isocyanate; diphenylmethane-2,4'-diisocyanate; 2,2'-methylenediphenyl diisocyanate; diphenylmethane-2,2'-diisocyanate

2004/42/EC (VOC): 0%

#### National regulatory information

Water contaminating class (D): 1 - slightly water contaminating

### 15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

## SECTION 16: Other information

#### Changes

Update 2019

#### Abbreviations and acronyms

ADR: Accord européen relatif au transport international des marchandises Dangereuses par Route (Agreement concerning the international carriage of Dangerous goods by Road)

IMDG-Code: International Maritime Code for Dangerous Goods

ICAO: International Civil Aviation Organisation (IATA: The International Air Transport Association)

GHS: Globally Harmonized System of Classification, Labelling and Packaging of Chemicals

#### Relevant H and EUH statements (number and full text)

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.
EUH204	Contains isocyanates. May produce an allergic reaction.

#### Further Information

Data of items 4 to 8, as well as 10 to 12, do partly not refer to the use and the regular employing of the product



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(in this sense consult information on use and on product), but to liberation of major amounts in case of accidents and irregularities.

The information describes exclusively the safety requirements for the product(s) and is based on the present level of our knowledge.

The delivery specifications are contained in the corresponding product sheet.

This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations.

(n.a. = not applicable; n.d. = not determined)

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*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*

