

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by  
Commission Regulation (EU) 2020/878

## Carsystem Uniflex PU grau

Version	Revision Date:	Date of last issue: 23.11.2023
1.2 DE / EN	23.05.2024	Date of first issue: 31.05.2023

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

#### 1.1 Product identifier

Trade name : Carsystem Uniflex PU grau  
Product code : 159.161

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

Use of the Sub-stance/Mixture : Adhesives and/or sealants  
Recommended restrictions on use : Restricted to professional users. Attention - Avoid exposure - obtain special instructions before use.

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

Company : JASA AG  
Müslistrasse 43  
8957 Spreitenbach  
Schweiz  
info@jasa-ag.ch, www.jasa-ag.ch  
Telephone : +41 (0)44 431 60 70  
Telefax : +41 (0)44 432 63 17  
**Responsible Department** : Productmanagement, Tel: +41 (0)44 431 60 70, sds@jasa-ag.ch

#### 1.4 Emergency telephone

Telephone : Tox Info Suisse (STIZ), Tel: 145

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by  
Commission Regulation (EU) 2020/878

## Carsystem Uniflex PU grau

Version	Revision Date:	Date of last issue: 23.11.2023
1.2 DE / EN	23.05.2024	Date of first issue: 31.05.2023

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### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

##### Classification (REGULATION (EC) No 1272/2008)

Respiratory sensitization, Category 1      H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

#### 2.2 Label elements

##### Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :



Signal Word : Danger

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

Precautionary Statements : **Prevention:**  
P261 Avoid breathing mist or vapors.  
P284 Wear respiratory protection.  
**Response:**  
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTER/ doctor.  
**Disposal:**  
P501 Dispose of contents/ container to an approved waste disposal plant.

##### Hazardous ingredients which must be listed on the label:

4,4'-methylenediphenyl diisocyanate

##### Additional Labeling

EUH204 Contains isocyanates. May produce an allergic reaction.

"As from 24 August 2023 adequate training is required before industrial or professional use."

#### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by  
Commission Regulation (EU) 2020/878

## Carsystem Uniflex PU grau

Version  
1.2

DE / EN

Revision Date:  
23.05.2024

Date of last issue: 23.11.2023  
Date of first issue: 31.05.2023

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product.

Persons already sensitized to diisocyanates may develop allergic reactions when using this product.

This product should not be used under conditions of poor ventilation unless a protective mask with an appropriate gas filter (i.e. type A1 according to standard EN 14387) is used.

### SECTION 3: Composition/information on ingredients

#### 3.2 Mixtures

Chemical nature : Mixture  
contains  
Isocyanates

#### Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
1,1'-(methylenedi-4,1-phenylene)bis(3-butylurea)	77703-56-1 416-600-4 01-0000016345-72	Aquatic Chronic 4; H413	>= 1 - < 5
Hydrocarbons, C10-C13, n-alkanes, <2% aromatics	Not Assigned 929-018-5 01-2119475608-26	Asp. Tox. 1; H304 EUH066	>= 1 - < 2,5
4,4'-methylenediphenyl diisocyanate	101-68-8 202-966-0 615-005-00-9 01-2119457014-47	Acute Tox. 4; H332 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Resp. Sens. 1; H334 Skin Sens. 1; H317 Carc. 2; H351 STOT SE 3; H335 (Respiratory system) STOT RE 2; H373  specific concentration limit Eye Irrit. 2; H319 >= 5 % STOT SE 3; H335 >= 5 % Skin Irrit. 2; H315 >= 5 %	>= 0,5 - < 1

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by  
Commission Regulation (EU) 2020/878

## Carsystem Uniflex PU grau

Version 1.2 DE / EN Revision Date: 23.05.2024 Date of last issue: 23.11.2023  
Date of first issue: 31.05.2023

		Resp. Sens. 1; H334 >= 0,1 %
		Acute toxicity estimate
		Acute inhalation toxicity (dust/mist): 1,5 mg/l

For explanation of abbreviations see section 16.

### SECTION 4: First aid measures

#### 4.1 Description of first-aid measures

- General advice : In the case of accident or if you feel unwell, seek medical advice immediately.  
Move out of dangerous area.  
Take off contaminated clothing and shoes immediately.  
Do not leave the victim unattended.  
Symptoms of poisoning may appear several hours later.  
Show this material safety data sheet to the doctor in attendance.
- Protection of first-aiders : First Aid responders should pay attention to self-protection and use the recommended protective clothing
- If inhaled : Move to fresh air.  
Keep patient warm and at rest.  
If breathing is irregular or stopped, administer artificial respiration.  
Call a physician immediately.
- In case of skin contact : Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.  
Wash contaminated clothing before re-use.  
Call a physician if irritation develops or persists.
- In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.  
Keep eye wide open while rinsing.  
If easy to do, remove contact lens, if worn.  
If symptoms persist, call a physician.
- If swallowed : Rinse mouth with water.  
Do NOT induce vomiting.  
Call a physician immediately.

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

- Risks : May cause allergy or asthma symptoms or breathing difficulties if inhaled.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by  
Commission Regulation (EU) 2020/878

## Carsystem Uniflex PU grau

Version	Revision Date:	Date of last issue: 23.11.2023
1.2 DE / EN	23.05.2024	Date of first issue: 31.05.2023

---

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

Treatment : Treat symptomatically.

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## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

Suitable extinguishing media : Carbon dioxide (CO<sub>2</sub>)  
Dry powder  
Alcohol-resistant foam  
Water spray in large fire situations  
Water spray jet

Unsuitable extinguishing media : High volume water jet

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

Specific hazards during fire fighting : Build-up of dangerous/toxic fumes possible in cases of fire/high temperature.  
Cool closed containers exposed to fire with water spray.

Hazardous combustion products : Hazardous decomposition products due to incomplete combustion  
Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke).  
Isocyanates

### 5.3 Advice for firefighters

Special protective equipment for fire-fighters : In the event of fire, wear self-contained breathing apparatus.  
Use personal protective equipment. Complete suit protecting against chemicals

Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains.  
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.  
Standard procedure for chemical fires.  
In the event of fire and/or explosion do not breathe fumes.

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## SECTION 6: Accidental release measures

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

Personal precautions : Wear personal protective equipment.  
Evacuate personnel to safe areas.

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# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by  
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## Carsystem Uniflex PU grau

Version	Revision Date:	Date of last issue: 23.11.2023
1.2 DE / EN	23.05.2024	Date of first issue: 31.05.2023

---

Ensure adequate ventilation, especially in confined areas.  
Avoid contact with skin, eyes and clothing.

### 6.2 Environmental precautions

Environmental precautions : Do not flush into surface water or sanitary sewer system.  
Local authorities should be advised if significant spillages cannot be contained.

### 6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).  
Sweep up and shovel into suitable containers for disposal.

### 6.4 Reference to other sections

For personal protection see section 8., For disposal considerations see section 13.

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## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Local/Total ventilation : Ensure adequate ventilation.

Advice on safe handling : Provide adequate information, instruction and training for operators.  
All processes must be supervised by specialists or authorized personnel.  
Keep container closed when not in use.  
Provide sufficient air exchange and/or exhaust in work rooms.  
Avoid exceeding the given occupational exposure limits (see section 8).  
Do not breathe vapors or spray mist.  
For personal protection see section 8.

Advice on protection against fire and explosion : No special protective measures against fire required.

Hygiene measures : Persons already sensitized to diisocyanates may develop allergic reactions when using this product. Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product.

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

Requirements for storage areas and containers : Store in original container. Keep container tightly closed.

Further information on storage conditions : Keep locked up or in an area accessible only to qualified or authorized persons.

Advice on common storage : Keep away from food and drink.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by  
Commission Regulation (EU) 2020/878

## Carsystem Uniflex PU grau

Version 1.2 DE / EN Revision Date: 23.05.2024 Date of last issue: 23.11.2023  
Date of first issue: 31.05.2023

Storage class (TRGS 510) : 10

### 7.3 Specific end use(s)

Specific use(s) : No data available

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Titanium dioxide	13463-67-7	AGW (Inhalable fraction)	10 mg/m <sup>3</sup> (Titanium dioxide)	DE TRGS 900
		Peak-limit category: 2;(II)		
		Further information: When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child		
		AGW (Alveolate fraction)	1,25 mg/m <sup>3</sup> (Titanium dioxide)	DE TRGS 900
		Peak-limit category: 2;(II)		
		Further information: When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child		
		BM (Alveolar dust fraction)	0,5 mg/m <sup>3</sup>	DE TRGS 527
		MAK (measured as the alveolate fraction)	0,3 mg/m <sup>3</sup>	DE DFG MAK
		Further information: Substances that cause cancer in humans or animals or that are considered to be carcinogenic for humans and for which a MAK value can be derived., Damage to the embryo or foetus is unlikely when the MAK value or the BAT value is observed		
4,4'-methylenediphenyl diisocyanate	101-68-8	AGW (Vapour and aerosols)	0,05 mg/m <sup>3</sup>	TRGS 430
		Peak-limit category: 1;=2=(I)		
		Further information: In well-founded cases also a momentary value can be established, that never can be exceeded. This substance will be indicated by = = in combination with an exceeding value., airway sensitizing substance		
		AGW (Vapour and aerosols, inhalable fraction)	0,05 mg/m <sup>3</sup>	DE TRGS 900
		Peak-limit category: 1;=2=(I)		
		Further information: In well-founded cases also a momentary value can be established, that never can be exceeded. This substance will be indicated by = = in combination with an exceeding value., Skin absorption, When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child, Substance sensitizing through the skin and respiratory system		
		MAK (inhalable)	0,05 mg/m <sup>3</sup>	DE DFG MAK

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by  
Commission Regulation (EU) 2020/878

## Carsystem Uniflex PU grau

Version  
1.2

DE / EN

Revision Date:  
23.05.2024

Date of last issue: 23.11.2023  
Date of first issue: 31.05.2023

	fraction)		
	Further information: Danger of sensitization of the airways and the skin, Danger of absorption through the skin, Substances that cause cancer in humans or animals or that are considered to be carcinogenic for humans and for which a MAK value can be derived., Damage to the embryo or foetus is unlikely when the MAK value or the BAT value is observed		
	Mow	0,1 mg/m <sup>3</sup>	DE DFG MAK
	Further information: Danger of sensitization of the airways and the skin, Danger of absorption through the skin, Substances that cause cancer in humans or animals or that are considered to be carcinogenic for humans and for which a MAK value can be derived., Damage to the embryo or foetus is unlikely when the MAK value or the BAT value is observed		

### Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Routes of exposure	Potential health effects	Value
1,1'-(methylenedi-4,1-phenylene)bis(3-butylurea)	Workers	Inhalation	Long-term systemic effects	49,37 mg/m <sup>3</sup>
	Workers	Skin contact	Long-term systemic effects	140 mg/kg
	Consumers	Inhalation	Long-term systemic effects	7,4 mg/m <sup>3</sup>
	Consumers	Skin contact	Long-term systemic effects	50 mg/kg
4,4'-methylenediphenyl diisocyanate	Consumers	Oral	Long-term systemic effects	5 mg/kg
	Workers	Inhalation	Long-term local effects	0,05 mg/m <sup>3</sup>
	Workers	Inhalation	Acute local effects	0,1 mg/m <sup>3</sup>
	Consumers	Inhalation	Long-term local effects	0,025 mg/m <sup>3</sup>
	Consumers	Inhalation	Acute local effects	0,05 mg/m <sup>3</sup>

### Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
1,1'-(methylenedi-4,1-phenylene)bis(3-butylurea)	Fresh water	0,1 mg/l
	Sea water	0,01 mg/l
	Sewage treatment plant (STP)	10 mg/l
	Fresh water sediment	76,36 mg/kg
	Sea sediment	7,636 mg/kg
	Soil	15,15 mg/kg
4,4'-methylenediphenyl diisocyanate	Fresh water	1 mg/l
	Sea water	0,1 mg/l
	Sewage treatment plant (STP)	1 mg/l
	Soil	1 mg/kg dry weight (d.w.)
	Intermittent use/release	10 mg/l



# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by  
Commission Regulation (EU) 2020/878

## Carsystem Uniflex PU grau

Version	Revision Date:	Date of last issue: 23.11.2023
1.2 DE / EN	23.05.2024	Date of first issue: 31.05.2023

---

### 8.2 Exposure controls

#### Personal protective equipment

Eye/face protection : Safety glasses with side-shields conforming to EN166

#### Hand protection

Material : Nitrile rubber  
Break through time : > 480 min  
Glove thickness :  $\geq 0,3$  mm  
Directive : DIN EN 374  
Protective index : Class 6

Material : butyl-rubber  
Break through time : > 480 min  
Glove thickness :  $\geq 0,4$  mm  
Directive : DIN EN 374  
Protective index : Class 6

Remarks : Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. The data about break through time/strength of material are standard values! The exact break through time/strength of material has to be obtained from the producer of the protective glove. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other.

Skin and body protection : Please wear suitable protective clothing, e.g. made of cotton or heat-resistant synthetic fibres.  
Long sleeved clothing

Respiratory protection : In order to avoid inhalation of spray-mist and sanding dust, all spraying and sanding must be done wearing adequate respirator.  
Apply technical measures to comply with the occupational exposure limits.  
This product should not be used under conditions of poor ventilation unless a protective mask with an appropriate gas filter (i.e. type A1 according to standard EN 14387) is used.

Filter type : Combined particulates and organic vapor type (A-P)

Protective measures : Ensure that eye flushing systems and safety showers are located close to the working place.

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## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Physical state : paste

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by  
Commission Regulation (EU) 2020/878

## Carsystem Uniflex PU grau

Version	Revision Date:	Date of last issue: 23.11.2023
1.2	23.05.2024	Date of first issue: 31.05.2023

---

Color	:	gray
Odor	:	characteristic
Melting point/range	:	Not applicable
Boiling point/boiling range	:	Not applicable
Upper explosion limit / Upper flammability limit	:	Not applicable
Lower explosion limit / Lower flammability limit	:	Not applicable
Flash point	:	Not applicable
pH	:	not determined substance/mixture is non-soluble (in water)
Viscosity	:	
Viscosity, dynamic	:	110.000 - 165.000 mPa.s (20 °C)
Viscosity, kinematic	:	not determined
Solubility(ies)	:	
Water solubility	:	insoluble
Partition coefficient: n-octanol/water	:	Not applicable
Vapor pressure	:	No data available
Density	:	1,36 - 1,4 g/cm <sup>3</sup> (20 °C)

### 9.2 Other information

No data available

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by  
Commission Regulation (EU) 2020/878

## Carsystem Uniflex PU grau

Version	Revision Date:	Date of last issue: 23.11.2023
1.2 DE / EN	23.05.2024	Date of first issue: 31.05.2023

---

### SECTION 10: Stability and reactivity

#### 10.1 Reactivity

No decomposition if used as directed.

#### 10.2 Chemical stability

No decomposition if stored and applied as directed.

#### 10.3 Possibility of hazardous reactions

Hazardous reactions : No dangerous reaction known under conditions of normal use.

#### 10.4 Conditions to avoid

Conditions to avoid : None known.

#### 10.5 Incompatible materials

Materials to avoid : None known.

#### 10.6 Hazardous decomposition products

Build-up of dangerous/toxic fumes possible in cases of fire/high temperature.

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### SECTION 11: Toxicological information

#### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

##### Acute toxicity

Not classified due to lack of data.

##### Components:

##### **1,1'-(methylenedi-4,1-phenylene)bis(3-butylurea):**

Acute oral toxicity : LD50 Oral (Rat): > 2.000 mg/kg  
Method: OECD Test Guideline 401

Acute dermal toxicity : LD50 Dermal (Rat): > 2.000 mg/kg  
Method: OECD Test Guideline 402

##### **Hydrocarbons, C10-C13, n-alkanes, <2% aromatics:**

Acute oral toxicity : LD50 Oral (Rat): > 15.000 mg/kg  
Method: OECD Test Guideline 423

Acute inhalation toxicity : LC50 (Rat): > 6.100 mg/l  
Exposure time: 4 h  
Test atmosphere: vapor  
Method: OECD Test Guideline 403  
Assessment: The substance or mixture has no acute inhalation toxicity

Acute dermal toxicity : LD50 Dermal (Rabbit): >= 3.160 mg/kg  
Method: OECD Test Guideline 402

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by  
Commission Regulation (EU) 2020/878

## Carsystem Uniflex PU grau

Version	Revision Date:	Date of last issue: 23.11.2023
1.2 DE / EN	23.05.2024	Date of first issue: 31.05.2023

---

### 4,4'-methylenediphenyl diisocyanate:

Acute oral toxicity : LD50 Oral (Rat): > 2.000 mg/kg

Acute inhalation toxicity : Acute toxicity estimate: 1,5 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Method: Expert judgment

LC50 (Rat): 0,368 mg/l  
Exposure time: 4 h  
Test atmosphere: dust/mist  
Method: OECD Test Guideline 403

Acute dermal toxicity : LD50 Dermal (Rabbit): > 9.400 mg/kg  
Method: OECD Test Guideline 402

### Skin corrosion/irritation

Not classified due to lack of data.

### Components:

#### Hydrocarbons, C10-C13, n-alkanes, <2% aromatics:

Result : Repeated exposure may cause skin dryness or cracking.

### Serious eye damage/eye irritation

Not classified due to lack of data.

### Respiratory or skin sensitization

#### Skin sensitization

Not classified due to lack of data.

#### Respiratory sensitization

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

### Germ cell mutagenicity

Not classified due to lack of data.

### Carcinogenicity

Not classified due to lack of data.

### Reproductive toxicity

Not classified due to lack of data.

### STOT-single exposure

Not classified due to lack of data.

### STOT-repeated exposure

Not classified due to lack of data.

### Aspiration toxicity

Not classified due to lack of data.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by  
Commission Regulation (EU) 2020/878

## Carsystem Uniflex PU grau

Version 1.2 DE / EN Revision Date: 23.05.2024 Date of last issue: 23.11.2023  
Date of first issue: 31.05.2023

---

### Components:

#### **Hydrocarbons, C10-C13, n-alkanes, <2% aromatics:**

May be fatal if swallowed and enters airways.

### 11.2 Information on other hazards

#### **Endocrine disrupting properties**

##### Product:

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

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## SECTION 12: Ecological information

### 12.1 Toxicity

#### Components:

##### **1,1'-(methylenedi-4,1-phenylene)bis(3-butylurea):**

Toxicity to fish : LC50 (Danio rerio (zebra fish)): > 250 mg/l  
Exposure time: 96 h  
Method: Regulation (EC) No. 440/2008, Annex, C.1

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 100 mg/l  
Exposure time: 48 h  
Method: Regulation (EC) No. 440/2008, Annex, C.2

Toxicity to algae/aquatic plants : EC50 (Desmodesmus subspicatus (green algae)): > 100 mg/l  
Exposure time: 72 h  
Method: OECD Test Guideline 201

##### **Hydrocarbons, C10-C13, n-alkanes, <2% aromatics:**

Toxicity to fish : LL50 (Oncorhynchus mykiss (rainbow trout)): > 10 - < 30 mg/l  
Exposure time: 96 h  
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EL50 (Daphnia magna (Water flea)): ca. 100 mg/l  
Exposure time: 48 h

Toxicity to algae/aquatic plants : EL50 (Pseudokirchneriella subcapitata (algae)): > 1.000 mg/l  
Exposure time: 72 h  
Method: OECD Test Guideline 201

Toxicity to fish (Chronic toxicity) : NOELR: 0,139 mg/l  
Exposure time: 28 d  
Species: Oncorhynchus mykiss (rainbow trout)

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by  
Commission Regulation (EU) 2020/878

## Carsystem Uniflex PU grau

Version	Revision Date:	Date of last issue: 23.11.2023
1.2 DE / EN	23.05.2024	Date of first issue: 31.05.2023

---

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOELR: 0,361 mg/l  
Exposure time: 21 d  
Species: Daphnia magna (Water flea)

### Ecotoxicology Assessment

Chronic aquatic toxicity : This product has no known ecotoxicological effects.

### 4,4'-methylenediphenyl diisocyanate:

Toxicity to fish : LC50 (Danio rerio (zebra fish)): > 100 mg/l  
Exposure time: 96 h  
Method: OECD Test Guideline 203

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 100 mg/l  
Exposure time: 48 h  
Method: OECD Test Guideline 202

Toxicity to algae/aquatic plants : EC50 (Desmodesmus subspicatus (green algae)): > 1.640 mg/l  
Exposure time: 72 h  
Method: OECD Test Guideline 201

Toxicity to microorganisms : EC50 (Bacteria): > 100 mg/l  
Exposure time: 3 h  
Method: OECD Test Guideline 209

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : NOEC: 10 mg/l  
Exposure time: 21 d  
Species: Daphnia magna (Water flea)

## 12.2 Persistence and degradability

### Components:

#### Hydrocarbons, C10-C13, n-alkanes, <2% aromatics:

Biodegradability : Biodegradation: 89,8 %  
Exposure time: 28 d  
Method: OECD Test Guideline 301F

#### 4,4'-methylenediphenyl diisocyanate:

Biodegradability : Result: Not readily biodegradable.  
Biodegradation: 0 %  
Exposure time: 28 d  
Method: OECD Test Guideline 302C

## 12.3 Bioaccumulative potential

### Components:

#### 1,1'-(methylenedi-4,1-phenylene)bis(3-butylurea):

Partition coefficient: n- : log Pow: 5,5 (20 °C)

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by  
Commission Regulation (EU) 2020/878

## Carsystem Uniflex PU grau

Version	Revision Date:	Date of last issue: 23.11.2023
1.2 DE / EN	23.05.2024	Date of first issue: 31.05.2023

---

octanol/water

### Hydrocarbons, C10-C13, n-alkanes, <2% aromatics:

Bioaccumulation : Bioconcentration factor (BCF): 144,3

### 4,4'-methylenediphenyl diisocyanate:

Bioaccumulation : Bioconcentration factor (BCF): 200  
Method: OECD Test Guideline 305

Partition coefficient: n-  
octanol/water : log Pow: 4,51 (20 °C)

### 12.4 Mobility in soil

No data available

### 12.5 Results of PBT and vPvB assessment

#### Product:

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### 12.6 Endocrine disrupting properties

#### Product:

Assessment : The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

### 12.7 Other adverse effects

#### Product:

Additional ecological information : No data available

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## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Product : Do not dispose of with domestic refuse.  
Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.  
Dispose of in accordance with local regulations.  
Dispose of wastes in an approved waste disposal facility.

Contaminated packaging : Empty containers should be taken to an approved waste han-

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by  
Commission Regulation (EU) 2020/878

## Carsystem Uniflex PU grau

Version	Revision Date:	Date of last issue: 23.11.2023
1.2	23.05.2024	Date of first issue: 31.05.2023

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ding site for recycling or disposal.  
Packaging that is not properly emptied must be disposed of as  
the unused product.  
Dispose of in accordance with local regulations.

Waste Code : The following Waste Codes are only suggestions:  
07 02 08, other still bottoms and reaction residues

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### SECTION 14: Transport information

#### 14.1 UN number or ID number

ADN : Not regulated as a dangerous good  
ADR : Not regulated as a dangerous good  
RID : Not regulated as a dangerous good  
IMDG : Not regulated as a dangerous good  
IATA : Not regulated as a dangerous good

#### 14.2 UN proper shipping name

ADN : Not regulated as a dangerous good  
ADR : Not regulated as a dangerous good  
RID : Not regulated as a dangerous good  
IMDG : Not regulated as a dangerous good  
IATA : Not regulated as a dangerous good

#### 14.3 Transport hazard class(es)

ADN : Not regulated as a dangerous good  
ADR : Not regulated as a dangerous good  
RID : Not regulated as a dangerous good  
IMDG : Not regulated as a dangerous good  
IATA : Not regulated as a dangerous good

#### 14.4 Packing group

ADN : Not regulated as a dangerous good  
ADR : Not regulated as a dangerous good  
RID : Not regulated as a dangerous good  
IMDG : Not regulated as a dangerous good  
IATA (Cargo) : Not regulated as a dangerous good  
IATA (Passenger) : Not regulated as a dangerous good

#### 14.5 Environmental hazards

Not regulated as a dangerous good



# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by  
Commission Regulation (EU) 2020/878

## Carsystem Uniflex PU grau

Version	Revision Date:	Date of last issue: 23.11.2023
1.2 DE / EN	23.05.2024	Date of first issue: 31.05.2023

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### 14.6 Special precautions for user

Not applicable

### 14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

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## SECTION 15: Regulatory information

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII) : Conditions of restriction for the following entries should be considered:  
Number on list 75, 3

If you intend to use this product as tattoo ink, please contact your vendor.

4,4'-methylenediphenyl diisocyanate (Number on list 74, 56)  
di-"isononyl" phthalate (Number on list 52)

REACH - Candidate List of Substances of Very High Concern for Authorization (Article 59). : Not applicable

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer : Not applicable

Regulation (EU) 2019/1021 on persistent organic pollutants (recast) : Not applicable

REACH - List of substances subject to authorisation (Annex XIV) : Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances. : Not applicable

Water hazard class (Germany) : WGK 1 slightly water endangering  
Classification according to AwSV, Annex 1 (5.2)

### Other regulations:

Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by  
Commission Regulation (EU) 2020/878

## Carsystem Uniflex PU grau

Version	Revision Date:	Date of last issue: 23.11.2023
1.2 DE / EN	23.05.2024	Date of first issue: 31.05.2023

### 15.2 Chemical Safety Assessment

A chemical safety assessment according to (EC) regulation 1907/2006 (REACH) has not been carried out for this product.

### SECTION 16: Other information

#### Full text of H-Statements

H304	: May be fatal if swallowed and enters airways.
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.
H413	: May cause long lasting harmful effects to aquatic life.
EUH066	: Repeated exposure may cause skin dryness or cracking.

#### Full text of other abbreviations

Acute Tox.	: Acute toxicity
Aquatic Chronic	: Long-term (chronic) aquatic hazard
Asp. Tox.	: Aspiration hazard
Carc.	: Carcinogenicity
Eye Irrit.	: Eye irritation
Resp. Sens.	: Respiratory sensitization
Skin Irrit.	: Skin irritation
Skin Sens.	: Skin sensitization
STOT RE	: Specific target organ toxicity - repeated exposure
STOT SE	: Specific target organ toxicity - single exposure
DE DFG MAK	: Germany. MAK BAT Annex IIa
DE TRGS 527	: Germany. TRGS 527 - Activities with nanomaterials
DE TRGS 900	: Germany. TRGS 900 - Occupational exposure limit values.
TRGS 430	: Germany. TRGS 430 - Isocyanates
DE DFG MAK / Mow	: Momentary value
DE DFG MAK / MAK	: MAK value
DE TRGS 527 / BM	: Assessment scale
DE TRGS 900 / AGW	: Time Weighted Average
TRGS 430 / AGW	: Occupational Exposure Limit

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good La-

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006, as amended by  
Commission Regulation (EU) 2020/878

## Carsystem Uniflex PU grau

Version	Revision Date:	Date of last issue: 23.11.2023
1.2 DE / EN	23.05.2024	Date of first issue: 31.05.2023

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boratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - substance of very high concern; TCSI - Taiwan Chemical Substance Inventory; TECl - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

### Further information

Training advice : Provide adequate information, instruction and training for operators.

### Classification of the mixture:

Resp. Sens. 1 H334

### Classification procedure:

Calculation method

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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