**PANTERA Product GmbH**
**28197 Bremen / GERMANY**



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

### 1.1 Product identifier

**UV-Primer Top III**

**UFI: OHP9-PV3T-000H-PCJP**

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

#### 1.2.1 Relevant uses

Primer

#### 1.2.2 Uses advised against

None known.

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

**Company**

PANTERA Product GmbH
Simon-Bolivar-Straße 29
28197 Bremen / GERMANY
Phone +49 (0)421 520 80 780
Fax +49 (0)421 520 80 789
Homepage www.panteraproduct.de
E-mail info@panteraproduct.de

**Address enquiries to**

**Technical information** info@panteraproduct.de

**Safety Data Sheet** sdb@chemiebuero.de

### 1.4 Emergency telephone number

**Advisory body** GIZ-Nord; +49 (0)551 19 240

**Company**

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture [REGULATION (GB) CLP]

Flam. Liq. 2: H225 Highly flammable liquid and vapour.
Skin Irrit. 2: H315 Causes skin irritation.
Eye Irrit. 2: H319 Causes serious eye irritation.
Skin Sens. 1: H317 May cause an allergic skin reaction.
Resp. Sens. 1: H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
STOT SE 3: H335 May cause respiratory irritation.
STOT SE 3: H336 May cause drowsiness or dizziness.
Carc. 2: H351 Suspected of causing cancer.

### 2.2 Label elements

The product is required to be labelled in accordance with regulation CLP.

**Hazard pictograms**

**Signal word** DANGER

**Contains:** Butanone

Reaction mass of 4,4'-methylenediphenyl diisocyanate and o-(p-isocyanatobenzyl)phenyl isocyanate / methylene diphenyl diisocyanate

Diphenylmethanediisocyanate, isomeres and homologues

Polyisocyanat auf Basis von Hexamethylendiisocyanat und Toluylendiisocyanat

4,4'-Methylenediphenyl diisocyanate

HDI oligomers, isocyanurate

4-Methyl-m-phenylendiisocyanat

Hexamethylene-diisocyanate

**Hazard statements**
H225 Highly flammable liquid and vapour.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335 May cause respiratory irritation.
H336 May cause drowsiness or dizziness.
H351 Suspected of causing cancer.

**Precautionary statements**
P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P201 Obtain special instructions before use.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260 Do not breathe vapours.
P280 Wear protective gloves / protective clothing / eye protection / face protection.
P284 In case of inadequate ventilation wear respiratory protection.
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.
P308+P313 IF exposed or concerned: Get medical advice / attention.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/national regulation.

**Special labelling**
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

**Human health dangers**
Persons already sensitised 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. 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.

**Environmental hazards**
Does not contain any PBT or vPvB substances.
Contains no ingredients with endocrine-disrupting properties.

**Other hazards**
Further hazards were not determined with the current level of knowledge.

## SECTION 3: Composition / Information on ingredients

### 3.1 Substances

**not applicable**

### 3.2 Mixtures

**The product is a mixture.**

| Range [%] | Substance |
|---|---|
| 40 - <60 | Butanone |
| | CAS: 78-93-3, EINECS/ELINCS: 201-159-0, EU-INDEX: 606-002-00-3, Reg-No.: 01-2119457290-43-XXXX |
| | GHS/CLP: Flam. Liq. 2: H225 - Eye Irrit. 2: H319 - STOT SE 3: H336 - EUH066 |
| 5 - <15 | n-Butyl acetate |
| | CAS: 123-86-4, EINECS/ELINCS: 204-658-1, EU-INDEX: 607-025-00-1, Reg-No.: 01-2119485493-29-XXXX |
| | GHS/CLP: Flam. Liq. 3: H226 - STOT SE 3: H336 - EUH066 |
| <10 | Polyisocyanat auf Basis von Hexamethylendiisocyanat und Toluylendiisocyanat |
| | CAS: 26426-91-5 |
| | GHS/CLP: Eye Irrit. 2: H319 - Skin Sens. 1: H317 |
| 5 - <10 | Diphenylmethanediisocyanate, isomeres and homologues |
| | CAS: 9016-87-9, EINECS/ELINCS: 618-498-9 |
| | GHS/CLP: Skin Irrit. 2: H315 - Skin Sens. 1: H317 - Eye Irrit. 2: H319 - Acute Tox. 4: H332 - Resp. Sens. 1: H334 - STOT SE 3: H335 - Carc. 2: H351 - STOT RE 2: H373 - EUH204 |
| | SCL [%]: >= 5: STOT SE 3: H335, >= 5: Eye Irrit. 2: H319, >= 5: Skin Irrit. 2: H315, >= 0,1: Resp. Sens. 1: H334 |
| 5 - <10 | Reaction mass of 4,4'-methylenediphenyl diisocyanate and o-(p-isocyanatobenzyl)phenyl isocyanate / methylene diphenyl diisocyanate |
| | EINECS/ELINCS: 905-806-4 |
| | GHS/CLP: Skin Irrit. 2: H315 - Skin Sens. 1: H317 - Eye Irrit. 2: H319 - Acute Tox. 4: H332 - Resp. Sens. 1: H334 - STOT SE 3: H335 - Carc. 2: H351 - STOT RE 2: H373 |
| | SCL [%]: 0,1: Resp. Sens. 1: H334, 5: STOT SE 3: H335, 5: Skin Irrit. 2: H315, 5: Eye Irrit. 2: H319 |
| 1 - <5 | 4,4'-Methylenediphenyl diisocyanate |
| | CAS: 101-68-8, EINECS/ELINCS: 202-966-0, EU-INDEX: 615-005-00-9, Reg-No.: 01-2119457014-47-XXXX |
| | GHS/CLP: Skin Irrit. 2: H315 - Skin Sens. 1: H317 - Eye Irrit. 2: H319 - Acute Tox. 4: H332 - Resp. Sens. 1: H334 - STOT SE 3: H335 - Carc. 2: H351 - STOT RE 2: H373 - EUH204 |
| | SCL [%]: >= 5: STOT SE 3: H335, >= 5: Eye Irrit. 2: H319, >= 5: Skin Irrit. 2: H315, >= 0,1: Resp. Sens. 1: H334 |
| <3 | [3-(2,3-Epoxypropoxy)propyl]trimethoxysilane |
| | CAS: 2530-83-8, EINECS/ELINCS: 219-784-2, Reg-No.: 01-2119513212-58-XXXX |
| | GHS/CLP: Eye Dam. 1: H318 |
| <2,5 | HDI oligomers, isocyanurate |
| | CAS: 28182-81-2, EINECS/ELINCS: 931-274-8, Reg-No.: 01-2119485796-17-XXXX |
| | GHS/CLP: Skin Sens. 1: H317 - Acute Tox. 4: H332 - STOT SE 3: H335 |
| <2 | 2-Methoxy-1-methylethyl acetate |
| | CAS: 108-65-6, EINECS/ELINCS: 203-603-9, EU-INDEX: 607-195-00-7, Reg-No.: 01-2119475791-29-XXXX |
| | GHS/CLP: Flam. Liq. 3: H226 - STOT SE 3: H336 |
| <0,1 | Hexamethylene-diisocyanate |
| | CAS: 822-06-0, EINECS/ELINCS: 212-485-8, EU-INDEX: 615-011-00-1, Reg-No.: 01-2119457571-37-XXXX |
| | GHS/CLP: Acute Tox. 4: H302 - Acute Tox. 1: H330 - Skin Irrit. 2: H315 - Eye Irrit. 2: H319 - Resp. Sens. 1: H334 - STOT SE 3: H335 - Skin Sens. 1: H317 |
| | SCL [%]: >=0,5: Resp. Sens. 1: H334, >=0,5: Skin Sens. 1: H317 |
| <0,1 | 4-Methyl-m-phenylendiisocyanat |
| | CAS: 584-84-9, EINECS/ELINCS: 209-544-5, EU-INDEX: 615-006-00-4 |
| | GHS/CLP: Acute Tox. 2: H330 - Carc. 2: H351 - Skin Sens. 1: H317 - Resp. Sens. 1: H334 - Eye Irrit. 2: H319 - Skin Irrit. 2: H315 - STOT SE 3: H335 - Aquatic Chronic 3: H412 |
| | SCL [%]: >=0,1: Resp. Sens. 1: H334 |

**Comment on component parts** Substances of Very High Concern - SVHC: substances are not contained or are below 0.1%.
For full text of H-statements: see SECTION 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

**General information**
Remove contaminated soaked clothing immediately and dispose of safely.

**Inhalation**
Remove the victim into fresh air and keep him calm.
In the event of symptoms seek medical treatment.

**Skin contact**
In case of contact with skin wash off immediately with soap and water.
Consult a doctor if skin irritation persists.

**Eye contact**
Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.

**Ingestion**
Do not induce vomiting.
Rinse out mouth and give plenty of water to drink.
Consult a doctor immediately.

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

Allergic reactions
Irritant effects
Drowsiness
Vertigo
Nausea, vomiting.

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

Treat symptomatically.
Forward this sheet to your doctor.

## SECTION 5: Fire-fighting measures

### 5.1 Extinguishing media

**Suitable extinguishing media**
Carbon dioxide.
Dry powder.
Sand.

**Extinguishing media that must not be used**
Full water jet

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

In the event of fire the following can be released:
Nitrogen oxides (NOx).
Hydrogen cyanide (HCN).
Isocyanate

### 5.3 Advice for firefighters

Use self-contained breathing apparatus.
Wear full protective suit.

Collect contaminated firefighting water separately, must not be discharged into the drains.
Fire residues and contaminated firefighting water must be disposed of in accordance within the local regulations.

## SECTION 6: Accidental release measures

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

Keep away from all sources of ignition.
Ensure adequate ventilation.
Use breathing apparatus if exposed to vapours.
Use personal protective equipment (protective gloves, safety glasses, protective clothing).
High risk of slipping due to leakage/spillage of product.

### 6.2 Environmental precautions

Prevent spread over a wide area (e.g. by containment or oil barriers).
Do not discharge into the drains/surface waters/groundwater.

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

Pick up with absorbent material (e.g. sand, sawdust, universal absorbent, diatomaceous earth).
Dispose of absorbed material in accordance within the regulations.

### 6.4 Reference to other sections

See SECTION 8+13

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Use only in well-ventilated areas.
Provide suitable vacuuming at the processing machines.

Keep away from open flames, hot surfaces and sources of ignition.

Take off contaminated clothing and wash before reuse.
Contaminated work clothing should not be allowed out of the workplace.
Wash hands before breaks and after work.
Do not eat, drink or smoke when using this product.
Use barrier skin cream.
Keep away from food and drink.

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

Keep only in original container.
Prevent penetration into the ground.

Keep away from water.
Do not store together with oxidizing agents.
Do not store together with food and animal food/diet.

Keep container tightly closed.
Keep container in a well-ventilated place.
Protect from atmospheric moisture and water.
Keep in a cool place.
Protect from heat/overheating and from sun.

### 7.3 Specific end use(s)

See product use, SECTION 1.2

## SECTION 8: Exposure controls / personal protection

### 8.1 Control parameters

**Ingredients with occupational exposure limits to be monitored (GB)**

| Substance |
|---|
| Diphenylmethanediisocyanate, isomeres and homologues |
| CAS: 9016-87-9, EINECS/ELINCS: 618-498-9 |
| Long-term exposure: 0,02 mg/m³, as NCO, Sen |
| Short-term exposure (15-minute): 0,07 mg/m³ |
| 4,4'-Methylenediphenyl diisocyanate |
| CAS: 101-68-8, EINECS/ELINCS: 202-966-0, EU-INDEX: 615-005-00-9, Reg-No.: 01-2119457014-47-XXXX |
| Long-term exposure: 0,02 mg/m³, as NCO, Sen |
| Short-term exposure (15-minute): 0,07 mg/m³ |
| n-Butyl acetate |
| CAS: 123-86-4, EINECS/ELINCS: 204-658-1, EU-INDEX: 607-025-00-1, Reg-No.: 01-2119485493-29-XXXX |
| Long-term exposure: 150 ppm, 724 mg/m³ |
| Short-term exposure (15-minute): 200 ppm, 966 mg/m³ |
| Hexamethylene-diisocyanate |
| CAS: 822-06-0, EINECS/ELINCS: 212-485-8, EU-INDEX: 615-011-00-1, Reg-No.: 01-2119457571-37-XXXX |
| Long-term exposure: 0,02 mg/m³, as NCO, Sen |
| Short-term exposure (15-minute): 0,07 mg/m³ |
| Butanone |
| CAS: 78-93-3, EINECS/ELINCS: 201-159-0, EU-INDEX: 606-002-00-3, Reg-No.: 01-2119457290-43-XXXX |
| Long-term exposure: 200 ppm, 600 mg/m³, Sk, BmgV |
| Short-term exposure (15-minute): 300 ppm, 899 mg/m³ |
| Reaction mass of 4,4'-methylenediphenyl diisocyanate and o-(p-isocyanatobenzyl)phenyl isocyanate / methylene diphenyl diisocyanate |
| EINECS/ELINCS: 905-806-4 |
| Long-term exposure: 0,02 mg/m³, as NCO, Sen |
| Short-term exposure (15-minute): 0,07 mg/m³ |
| Carbon black |
| CAS: 1333-86-4, EINECS/ELINCS: 215-609-9, Reg-No.: 01-2119384822-32-XXXX |
| Long-term exposure: 3,5 mg/m³ |
| Short-term exposure (15-minute): 7 mg/m³ |
| 2-Methoxy-1-methylethyl acetate |
| CAS: 108-65-6, EINECS/ELINCS: 203-603-9, EU-INDEX: 607-195-00-7, Reg-No.: 01-2119475791-29-XXXX |
| Long-term exposure: 50 ppm, 274 mg/m³, Sk |
| Short-term exposure (15-minute): 100 ppm, 548 mg/m³ |
| 4-Methyl-m-phenylendiisocyanat |
| CAS: 584-84-9, EINECS/ELINCS: 209-544-5, EU-INDEX: 615-006-00-4 |
| Long-term exposure: 0,02 mg/m³, as NCO, Sen |
| Short-term exposure (15-minute): 0,07 mg/m³ |

**Ingredients with occupational exposure limits to be monitored (EU)**

| Substance / EC LIMIT VALUES |
|---|
| n-Butyl acetate |
| CAS: 123-86-4, EINECS/ELINCS: 204-658-1, EU-INDEX: 607-025-00-1, Reg-No.: 01-2119485493-29-XXXX |

| |
|---|
| Eight hours: 50 ppm, 241 mg/m³ |
| Short-term (15-minute): 150 ppm, 723 mg/m³ |
| Butanone |
| CAS: 78-93-3, EINECS/ELINCS: 201-159-0, EU-INDEX: 606-002-00-3, Reg-No.: 01-2119457290-43-XXXX |
| Eight hours: 600 mg/m³ |
| Short-term (15-minute): 300 ppm, 900 mg/m³ |
| 2-Methoxy-1-methylethyl acetate |
| CAS: 108-65-6, EINECS/ELINCS: 203-603-9, EU-INDEX: 607-195-00-7, Reg-No.: 01-2119475791-29-XXXX |
| Eight hours: 50 ppm, 275 mg/m³, H |
| Short-term (15-minute): 100 ppm, 550 mg/m³ |

**DNEL**

| Substance |
|---|
| [3-(2,3-Epoxypropoxy)propyl]trimethoxysilane, CAS: 2530-83-8 |
| Industrial, inhalative, Acute - systemic effects, 147 mg/m³ |
| Industrial, dermal, Long-term - systemic effects, 21 mg/kg |
| Industrial, inhalative, Long-term - systemic effects, 147 mg/m³ |
| Industrial, dermal, Acute - systemic effects, 21 mg/kg |
| Butanone, CAS: 78-93-3 |
| Industrial, inhalative (vapor), Long-term - systemic effects, 600 mg/m³ |
| Industrial, dermal, Long-term - systemic effects, 1161 mg/kg bw/day |
| general population, oral, Long-term - systemic effects, 31 mg/kg bw/day |
| general population, inhalative (vapor), Long-term - systemic effects, 106 mg/m³ |
| general population, dermal, Long-term - systemic effects, 412 mg/kg bw/day |
| n-Butyl acetate, CAS: 123-86-4 |
| Industrial, inhalative (vapor), Acute - systemic effects, 600 mg/m³ |
| Industrial, inhalative (vapor), Long-term - local effects, 300 mg/m³ |
| Industrial, inhalative (vapor), Long-term - systemic effects, 300 mg/m³ |
| Industrial, inhalative (vapor), Acute - local effects, 600 mg/m³ |
| Industrial, dermal, Acute - systemic effects, 11 mg/kg bw/day |
| Industrial, dermal, Long-term - systemic effects, 11 mg/kg bw/day |
| general population, dermal, Acute - systemic effects, 6 mg/kg bw/day |
| general population, inhalative (vapor), Long-term - systemic effects, 35,7 mg/m³ |
| general population, inhalative (vapor), Acute - systemic effects, 300 mg/m³ |
| general population, inhalative (vapor), Long-term - local effects, 35,7 mg/m³ |
| general population, dermal, Long-term - systemic effects, 6 mg/kg bw/day |
| general population, inhalative (vapor), Acute - local effects, 300 mg/m³ |
| general population, oral, Long-term - systemic effects, 2 mg/kg bw/day |
| general population, oral, Acute - systemic effects, 2 mg/kg bw/day |
| Hexamethylene-diisocyanate, CAS: 822-06-0 |
| Industrial, inhalative, Acute - local effects, 0,07 mg/m³ |
| Industrial, inhalative, Long-term - local effects, 0,035 mg/m³ |
| 4,4'-Methylenediphenyl diisocyanate, CAS: 101-68-8 |
| Industrial, inhalative, Long-term - local effects, 0,05 mg/m³ |
| Industrial, inhalative, Acute - local effects, 0,1 mg/m³ |
| general population, inhalative, Acute - local effects, 0,05 mg/m³ |
| general population, inhalative, Long-term - local effects, 0,025 mg/m³ |
| 2-Methoxy-1-methylethyl acetate, CAS: 108-65-6 |

| |
|---|
| Industrial, dermal, Long-term - systemic effects, 796 mg/kg bw/day |
| Industrial, inhalative, Acute - local effects, 550 mg/m³ |
| Industrial, inhalative, Long-term - systemic effects, 275 mg/m³ |
| general population, inhalative, Long-term - local effects, 33 mg/m³ |
| general population, inhalative, Long-term - systemic effects, 33 mg/m³ |
| general population, oral, Long-term - systemic effects, 36 mg/kg bw/day |
| general population, dermal, Long-term - systemic effects, 320 mg/kg bw/day |
| HDI oligomers, isocyanurate, CAS: 28182-81-2 |
| Industrial, inhalative, Long-term - local effects, 500 µg/m³ |
| Industrial, inhalative, Acute - local effects, 1 mg/m³ |

**PNEC**

| Substance |
|---|
| [3-(2,3-Epoxypropoxy)propyl]trimethoxysilane, CAS: 2530-83-8 |
| seawater, 0,1 mg/l |
| sediment, 0,79 mg/kg |
| soil, 0,13 mg/kg |
| freshwater, 1 mg/l |
| Butanone, CAS: 78-93-3 |
| soil, 22,5 mg/kg |
| freshwater, 55,8 mg/L |
| seawater, 55,8 mg/L |
| sewage treatment plants (STP), 709 mg/L |
| sediment (seawater), 284,74 mg/kg |
| oral (food), 1000 mg/kg |
| sediment (freshwater), 284,74 mg/kg |
| n-Butyl acetate, CAS: 123-86-4 |
| soil, 0,09 mg/kg/ dw |
| freshwater, 0,18 mg/L (AF= 100) |
| seawater, 0,018 mg/L (AF= 1000) |
| sewage treatment plants (STP), 35,6 mg/L (AF= 10) |
| sediment (freshwater), 0,981 mg/kg/ dw |
| sediment (seawater), 0,098 mg/kg/ dw |
| Hexamethylene-diisocyanate, CAS: 822-06-0 |
| soil, 0,523 mg/kg soil dw |
| sediment (seawater), 0,067 mg/kg sediment dw |
| sediment (freshwater), 0,674 mg/kg sediment dw |
| seawater, 0,005 mg/L |
| sewage treatment plants (STP), 8,42 mg/l |
| freshwater, 0,049 mg/L |
| 4,4'-Methylenediphenyl diisocyanate, CAS: 101-68-8 |
| freshwater, 1 mg/L |
| seawater, 0,1 mg/L |
| soil, 1 mg/kg soil dw |
| sewage treatment plants (STP), 1 mg/L |
| 2-Methoxy-1-methylethyl acetate, CAS: 108-65-6 |
| sediment (seawater), 0,329 mg/kg sediment dw |
| soil, 0,29 mg/kg soil dw |
| sediment (freshwater), 3,29 mg/kg sediment dw |

| |
|---|
| seawater, 0,064 mg/L |
| freshwater, 0,635 mg/L |
| sewage treatment plants (STP), 100 mg/L |
| HDI oligomers, isocyanurate, CAS: 28182-81-2 |
| seawater, 12,7 µg/L |
| freshwater, 127 µg/L |
| soil, 53,183 g/kg |
| sediment (seawater), 26670 mg/kg sediment dw |
| sediment (freshwater), 266701 mg/kg sediment dw |
| sewage treatment plants (STP), 88 mg/L |

## 8.2 Exposure controls

| | |
|---|---|
| **Additional advice on system design** | Ensure adequate ventilation on workstation.<br>Measurement methods for taking workplace measurements must meet the performance requirements of DIN EN 482. For example, recommendations are given in the IFA's list of hazardous substances. |
| **Eye protection** | safety glasses (EN 166:2001) |
| **Hand protection** | The details concerned are recommendations. Please contact the glove supplier for further information.<br>0,7 mm Butyl rubber, >480 min (EN 374-1/-2/-3). |
| **Skin protection** | Protective clothing (EN 340) |
| **Other** | Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity handled. The resistance of this equipment to chemicals should be ascertained with the respective supplier.<br>Do not breathe vapour/spray.<br>Avoid contact with eyes and skin. |
| **Respiratory protection** | In the event of occupational exposure limits being exceeded or of inadequate ventilation: wear appropriate respiratory protection.<br>Short term: filter apparatus, combination filter A-P2. (DIN EN 14387) |
| **Thermal hazards** | No information available. |
| **Delimitation and monitoring of the environmental exposition** | Protect the environment by applying appropriate control measures to prevent or limit emissions. |

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

| | |
|---|---|
| **Physical state** | liquid |
| **Color** | black |
| **Odor** | characteristic |
| **Odour threshold** | not determined |
| **pH-value** | not applicable |
| **pH-value [1%]** | not applicable |
| **Boiling point [°C]** | 79 |
| **Flash point [°C]** | -8 |
| **Flammability (solid, gas) [°C]** | not applicable |
| **Lower explosion limit** | 1,8 Vol.% |
| **Upper explosion limit** | 11,5 Vol.% |
| **Oxidising properties** | no |
| **Vapour pressure/gas pressure [kPa]** | 10,5 |
| **Density [g/cm³]** | not determined |
| **Relative density** | 0,95 |
| **Bulk density [kg/m³]** | not applicable |
| **Solubility in water** | insoluble<br>reacts with water |
| **Solubility other solvents** | No information available. |
| **Partition coefficient [n-octanol/water]** | not determined |
| **Kinematic viscosity** | 52,6 mm²/s |
| **Relative vapour density** | not determined |
| **Evaporation speed** | not determined |
| **Melting point [°C]** | not determined |
| **Auto-ignition temperature** | >200 |
| **Decomposition temperature [°C]** | not determined |
| **Particle characteristics** | No information available. |

### 9.2 Other information

No information available.

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No dangerous reactions known if used as directed.

### 10.2 Chemical stability

Stable under normal ambient conditions (ambient temperature).

### 10.3 Possibility of hazardous reactions

No hazardous reactions known.

### 10.4 Conditions to avoid

Strong heating.
Water

### 10.5 Incompatible materials

Water
Strong oxidizing agent.

### 10.6 Hazardous decomposition products

In the event of fire: See SECTION 5.

## SECTION 11: Toxicological information

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

**Acute oral toxicity** Based on available data, the classification criteria are not met.

| Substance |
|---|
| 4-Methyl-m-phenylendiisocyanat, CAS: 584-84-9 |
| LD50, oral, Rat, 5800 mg/kg |
| Diphenylmethanediisocyanate, isomeres and homologues, CAS: 9016-87-9 |
| LD50, oral, Rat, > 10000 mg/kg (OECD 401) |
| [3-(2,3-Epoxypropoxy)propyl]trimethoxysilane, CAS: 2530-83-8 |
| LD50, oral, Rat, 8025 mg/kg (OECD TG 401) |
| NOAEL, oral, Rat, 500 mg/kg/28d (OECD TG 407) |
| Butanone, CAS: 78-93-3 |
| LD50, oral, Rat, 3300 mg/kg (Lit.) |
| n-Butyl acetate, CAS: 123-86-4 |
| LD50, oral, Rat, 10760 mg/kg (OECD 423) |
| Hexamethylene-diisocyanate, CAS: 822-06-0 |
| LD50, oral, Rat, 746 mg/kg bw |
| 4,4'-Methylenediphenyl diisocyanate, CAS: 101-68-8 |
| LD50, oral, Rat, > 2000 mg/kg |
| 2-Methoxy-1-methylethyl acetate, CAS: 108-65-6 |
| LD50, oral, Rat, > 5000 mg/kg |
| HDI oligomers, isocyanurate, CAS: 28182-81-2 |
| LD50, oral, Rat, 2500 mg/kg bw |
| Reaction mass of 4,4'-methylenediphenyl diisocyanate and o-(p-isocyanatobenzyl)phenyl isocyanate / methylene diphenyl diisocyanate |
| LD50, oral, Rat, > 5000 mg/kg |

**Acute dermal toxicity** Based on available data, the classification criteria are not met.

| Substance |
|---|
| 4-Methyl-m-phenylendiisocyanat, CAS: 584-84-9 |
| LD50, dermal, Rabbit, > 9400 mg/kg |
| Diphenylmethanediisocyanate, isomeres and homologues, CAS: 9016-87-9 |
| LD50, dermal, Rabbit, > 9400 mg/kg (OECD 402) |
| [3-(2,3-Epoxypropoxy)propyl]trimethoxysilane, CAS: 2530-83-8 |
| LD50, dermal, Rabbit, 4250 mg/kg (OECD TG 402) |
| Butanone, CAS: 78-93-3 |
| LD50, dermal, Rabbit, > 5000 mg/kg (Lit.) |
| n-Butyl acetate, CAS: 123-86-4 |
| LD50, dermal, Rabbit, >14112 mg/kg (OECD 402) |
| Hexamethylene-diisocyanate, CAS: 822-06-0 |
| LD50, dermal, Rat, > 7000 mg/kg bw |
| 4,4'-Methylenediphenyl diisocyanate, CAS: 101-68-8 |
| LD50, dermal, Rabbit, > 9400 mg/kg (OECD 402) |
| 2-Methoxy-1-methylethyl acetate, CAS: 108-65-6 |
| LD50, dermal, Rat, > 2000 mg/kg |
| HDI oligomers, isocyanurate, CAS: 28182-81-2 |
| LD10, dermal, Rabbit, 2000 mg/kg bw |
| Reaction mass of 4,4'-methylenediphenyl diisocyanate and o-(p-isocyanatobenzyl)phenyl isocyanate / methylene |

| |
|---|
| diphenyl diisocyanate |
| LD50, dermal, Rabbit, > 5000 mg/kg |

**Acute inhalational toxicity** Based on available data, the classification criteria are not met.

| Substance |
|---|
| 4-Methyl-m-phenylendiisocyanat, CAS: 584-84-9 |
| LC50, inhalative, Rat, <= 0,78 mg/l 1h |
| Diphenylmethanediisocyanate, isomeres and homologues, CAS: 9016-87-9 |
| LC50, inhalativ (mist), Rat, 0,31 mg/l/4h (OECD 403) |
| NOAEL, inhalative, Rat, 0,2 mg/m³ (OECD 453) |
| LOAEL, inhalative, Rat, 1 mg/m³ (OECD 453) |
| ATE, inhalativ (mist), 1,5 mg/l |
| [3-(2,3-Epoxypropoxy)propyl]trimethoxysilane, CAS: 2530-83-8 |
| LC50, inhalative, Rat, 5,3 mg/l (OECD TG 403) |
| NOAEL, inhalative, Rat, 0,225 mg/kg/14d (OECD 412) |
| Butanone, CAS: 78-93-3 |
| LC50, inhalative, Rat, > 20 mg/l/4h (Lit.) |
| n-Butyl acetate, CAS: 123-86-4 |
| LC50, inhalative, Rat, 23,4 mg/l (4h) (OECD 403) |
| Hexamethylene-diisocyanate, CAS: 822-06-0 |
| LC50, inhalative, Rat, 0,124 mg/l 4h |
| NOAEL, inhalative, Rat, < 0,055 mg/l |
| 4,4'-Methylenediphenyl diisocyanate, CAS: 101-68-8 |
| LC50, inhalative, Rat, > 2,24 mg/l/1h (OECD 403) |
| LC50, inhalativ (dust), Rat, 0,49 mg/l/4h |
| LC50, inhalative, Rat, 0,368 mg/l/4h (OECD 403) |
| Conversion value, inhalativ (dust), 1,5 mg/l/4h |
| HDI oligomers, isocyanurate, CAS: 28182-81-2 |
| LC50, inhalative, Rat, 390 - 543 mg/m³ |
| Reaction mass of 4,4'-methylenediphenyl diisocyanate and o-(p-isocyanatobenzyl)phenyl isocyanate / methylene diphenyl diisocyanate |
| LC50, inhalativ (mist), Rat, 0,368 mg/l, 4h |
| ATE, inhalativ (mist), 1,5 mg/l |

**Serious eye damage/irritation** Irritant

| Substance |
|---|
| [3-(2,3-Epoxypropoxy)propyl]trimethoxysilane, CAS: 2530-83-8 |
| Eye, Rabbit, OECD 405, corrosive |
| Butanone, CAS: 78-93-3 |
| Rabbit, OECD 405, irritant |
| n-Butyl acetate, CAS: 123-86-4 |
| Eye, Rabbit, OECD 405, non-irritating |
| Hexamethylene-diisocyanate, CAS: 822-06-0 |
| Eye, irritant |
| 4,4'-Methylenediphenyl diisocyanate, CAS: 101-68-8 |
| Rabbit, in vivo, OECD 405, non-irritating |
| 2-Methoxy-1-methylethyl acetate, CAS: 108-65-6 |
| Eye, Rabbit, OECD 405, non-irritating |

| |
|---|
| HDI oligomers, isocyanurate, CAS: 28182-81-2 |
| Eye, Rabbit, OECD 405, non-irritating |
| Reaction mass of 4,4'-methylenediphenyl diisocyanate and o-(p-isocyanatobenzyl)phenyl isocyanate / methylene diphenyl diisocyanate |
| Eye, irritant |

**Skin corrosion/irritation** Irritant

| Substance |
|---|
| [3-(2,3-Epoxypropoxy)propyl]trimethoxysilane, CAS: 2530-83-8 |
| dermal, Rabbit, OECD 404, non-irritating |
| n-Butyl acetate, CAS: 123-86-4 |
| dermal, Rabbit, OECD 404, non-irritating |
| Hexamethylene-diisocyanate, CAS: 822-06-0 |
| dermal, irritant |
| 4,4'-Methylenediphenyl diisocyanate, CAS: 101-68-8 |
| Rabbit, in vivo, OECD 404, irritant |
| 2-Methoxy-1-methylethyl acetate, CAS: 108-65-6 |
| dermal, Rabbit, OECD 404, non-irritating |
| HDI oligomers, isocyanurate, CAS: 28182-81-2 |
| dermal, Rabbit, OECD 404, non-irritating |
| Reaction mass of 4,4'-methylenediphenyl diisocyanate and o-(p-isocyanatobenzyl)phenyl isocyanate / methylene diphenyl diisocyanate |
| dermal, irritant |

**Respiratory or skin sensitisation** May cause an allergic skin reaction.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.

| Substance |
|---|
| [3-(2,3-Epoxypropoxy)propyl]trimethoxysilane, CAS: 2530-83-8 |
| dermal, Guinea pig, OECD 406, negativ |
| n-Butyl acetate, CAS: 123-86-4 |
| dermal, Guinea pig, Study, non-sensitizing |
| Hexamethylene-diisocyanate, CAS: 822-06-0 |
| inhalative, sensitising |
| dermal, sensitising |
| 4,4'-Methylenediphenyl diisocyanate, CAS: 101-68-8 |
| inhalative, Rat, in vivo, OECD-GD 39, sensitising |
| dermal, mouse, in vivo (LLNA), OECD 429, sensitising |
| 2-Methoxy-1-methylethyl acetate, CAS: 108-65-6 |
| dermal, Guinea pig, OECD 406, non-sensitizing |
| HDI oligomers, isocyanurate, CAS: 28182-81-2 |
| dermal, Guinea pig, OECD 406, sensitising |
| Reaction mass of 4,4'-methylenediphenyl diisocyanate and o-(p-isocyanatobenzyl)phenyl isocyanate / methylene diphenyl diisocyanate |
| inhalative, Human, sensitising |
| dermal, sensitising |

**Specific target organ toxicity — single exposure** May cause respiratory irritation.
Vapours may cause drowsiness and dizziness.

| Substance |
|---|
| n-Butyl acetate, CAS: 123-86-4 |

| |
|---|
| No information available. |
| Hexamethylene-diisocyanate, CAS: 822-06-0 |
| inhalative, irritant |
| 2-Methoxy-1-methylethyl acetate, CAS: 108-65-6 |
| positive |
| Reaction mass of 4,4'-methylenediphenyl diisocyanate and o-(p-isocyanatobenzyl)phenyl isocyanate / methylene diphenyl diisocyanate |
| inhalative, irritant |

**Specific target organ toxicity — repeated exposure** May cause damage to organs through prolonged or repeated exposure.

| |
|---|
| Substance |
| [3-(2,3-Epoxypropoxy)propyl]trimethoxysilane, CAS: 2530-83-8 |
| NOAEL, oral, Rat, 1000 mg/kg bw/day, OECD 408, negativ |
| Butanone, CAS: 78-93-3 |
| NOAEC, inhalation (vapour ), Rat, 5041 ppm, OECD 413 |
| n-Butyl acetate, CAS: 123-86-4 |
| NOAEL, oral, Rat, 196 mg/kg bw/day, Study, negativ |
| NOAEC, inhalative, Rat, 2400 mg/m³, Study, negativ |
| Hexamethylene-diisocyanate, CAS: 822-06-0 |
| NOAEC, oral, Rat, 35 µg/m³ (chronic), The effects observed are not sufficient for classification. |
| 4,4'-Methylenediphenyl diisocyanate, CAS: 101-68-8 |
| LOAEC, inhalative, Rat, 1 mg/m³, adverse effect observed |
| 2-Methoxy-1-methylethyl acetate, CAS: 108-65-6 |
| NOAEL, oral, Rat, 1000 mg/kg, OECD 422, negativ |
| HDI oligomers, isocyanurate, CAS: 28182-81-2 |
| NOAEC, inhalative, Rat, 3,3 mg/m³, OECD 413, adverse effect observed |
| Reaction mass of 4,4'-methylenediphenyl diisocyanate and o-(p-isocyanatobenzyl)phenyl isocyanate / methylene diphenyl diisocyanate |
| LOAEL, inhalative, Rat, 0,004 mg/l, adverse effect observed |

**Mutagenicity** Does not contain a relevant substance that meets the classification criteria.

| |
|---|
| Substance |
| [3-(2,3-Epoxypropoxy)propyl]trimethoxysilane, CAS: 2530-83-8 |
| OECD 471, negativ |
| n-Butyl acetate, CAS: 123-86-4 |
| Ames-test, negativ |
| Hexamethylene-diisocyanate, CAS: 822-06-0 |
| in vivo, no adverse effect observed |
| in vitro, no adverse effect observed |
| 4,4'-Methylenediphenyl diisocyanate, CAS: 101-68-8 |
| inhalative, Rat, in vivo, OECD 474, negativ |
| 2-Methoxy-1-methylethyl acetate, CAS: 108-65-6 |
| OECD 417, negativ |

**Reproduction toxicity** Does not contain a relevant substance that meets the classification criteria.

| |
|---|
| Substance |
| [3-(2,3-Epoxypropoxy)propyl]trimethoxysilane, CAS: 2530-83-8 |
| NOAEL, oral, Rat, 1000 mg/kg bw/day, OECD 415, negativ |

| |
|---|
| n-Butyl acetate, CAS: 123-86-4 |
| NOAEC, inhalative, Rat, 9640 mg/m³, OECD 416, negativ |
| Hexamethylene-diisocyanate, CAS: 822-06-0 |
| NOAEC, inhalative, Rat, 2,03 mg/m³ (subchronic), no adverse effect observed |
| 4,4'-Methylenediphenyl diisocyanate, CAS: 101-68-8 |
| NOAEC, inhalative, Rat, 4 mg/m³ (Effect on developmental toxicity), no adverse effect observed |
| NOAEC, inhalative, Rat, 200 µg/m³ (Effect on fertility), no adverse effect observed |
| 2-Methoxy-1-methylethyl acetate, CAS: 108-65-6 |
| NOAEL, oral, Rat, 1000 mg/kg bw/day, OECD 422, negativ |
| Reaction mass of 4,4'-methylenediphenyl diisocyanate and o-(p-isocyanatobenzyl)phenyl isocyanate / methylene diphenyl diisocyanate |
| NOAEL, inhalative, Rat, 0,004 mg/l |

**Carcinogenicity** This product contains one or more substances of categorie Carc. 2 (CLP).
Suspected of causing cancer.

| Substance |
|---|
| [3-(2,3-Epoxypropoxy)propyl]trimethoxysilane, CAS: 2530-83-8 |
| Study, negativ |
| Hexamethylene-diisocyanate, CAS: 822-06-0 |
| NOAEC, inhalative, Rat, 1,15 mg/m³ (chronic), no adverse effect observed |
| 4,4'-Methylenediphenyl diisocyanate, CAS: 101-68-8 |
| NOAEC, Rat, 1 mg/m³, adverse effect observed |
| 2-Methoxy-1-methylethyl acetate, CAS: 108-65-6 |
| NOAEC, inhalative, Rat, 11058 mg/m³, OECD 453, negativ |

**Aspiration hazard** Does not contain a relevant substance that meets the classification criteria.

**General remarks**

Toxicological data of complete product are not available.

## 11.2 Information on other hazards

**Endocrine disrupting properties** Contains no ingredients with endocrine-disrupting properties.

**Other information** none

## SECTION 12: Ecological information

### 12.1 Toxicity

| Substance |
|---|
| 4-Methyl-m-phenylendiisocyanat, CAS: 584-84-9 |
| LC50, (24h), Brachidanio rerio, > 500 mg/l |
| Diphenylmethanediisocyanate, isomeres and homologues, CAS: 9016-87-9 |
| LC50, (96h), Danio rerio, > 1000 mg/l (OECD 203) |
| EC50, (3h), Bacteria, > 100 mg/l (OECD 209) |
| EC50, (24h), Daphnia magna, > 1000 mg/l (OECD 202) |
| NOEC, (21d), Daphnia magna, > 10 mg/l (OECD 202) |
| ErC50, (72h), Scenedesmus subspicatus, > 1640 mg/l (OECD 201) |
| [3-(2,3-Epoxypropoxy)propyl]trimethoxysilane, CAS: 2530-83-8 |
| LC50, (96h), Cyprinus carpio, 55 mg/l |
| EC50, Algae, 119 mg/l /7d |
| EC50, (48h), Daphnia magna, 324 mg/l |
| LC0, (96h), Cyprinus carpio, 30 mg/l |
| NOEC, Algae, < 50 mg/l /7d |
| NOEC, (3h), Bacteria, > 100 mg/l (OECD TG 209) |
| NOEC, (21d), Daphnia magna, 100 mg/l (OECD 202) |
| Butanone, CAS: 78-93-3 |
| LC50, (48h), Leuciscus idus, > 100 mg/l (Lit.) |
| EC50, (48h), Daphnia magna, > 100 mg/l (Lit.) |
| n-Butyl acetate, CAS: 123-86-4 |
| LC50, (96h), Pimephales promelas, 18 mg/l (OECD 203) |
| EC50, (72h), Desmodesmus subspicatus, 647,7 mg/l |
| EC50, (48h), Daphnia magna, 44 mg/l |
| IC50, Bacteria, 356 mg/l (40 h) |
| NOEC, Desmodesmus subspicatus, 200 mg/l |
| Hexamethylene-diisocyanate, CAS: 822-06-0 |
| EC50, (72h), Desmodesmus subspicatus, > 77,4 mg/l (IUCLID) |
| LC0, (96h), Brachidanio rerio, > 82,8 mg/l (IUCLID) |
| 4,4'-Methylenediphenyl diisocyanate, CAS: 101-68-8 |
| LC50, (96h), Danio rerio, > 1000 mg/l (OECD 203) |
| ErC50, (72h), Scenedesmus subspicatus, > 1640 mg/l (OECD 201) |
| 2-Methoxy-1-methylethyl acetate, CAS: 108-65-6 |
| LC50, (96h), Oncorhynchus mykiss, 134 mg/l (OECD 203) |
| EC50, (48h), Daphnia magna, > 500 mg/l |
| EC50, (72h), Selenastrum capricornutum, > 1000 mg/l (OECD 201) |
| NOEC, Oryzias latipes, 47,5 mg/l (14 d) (OECD 204) |
| NOEC, (21d), Daphnia magna, ≥ 100 mg/l (OECD 202) |
| EC10, Bacteria, > 1000 mg/l (0,5 h) (ISO 8192) |
| HDI oligomers, isocyanurate, CAS: 28182-81-2 |
| EC50, (72h), Algae, 1 g/L |
| EL50, (48h), Crustacea, 127 mg/L |
| LL0, (96h), fish, 100 mg/L |
| Reaction mass of 4,4'-methylenediphenyl diisocyanate and o-(p-isocyanatobenzyl)phenyl isocyanate / methylene diphenyl diisocyanate |
| LC50, (96h), Danio rerio, > 1000 mg/l (OECD 203) |

| |
|---|
| EC50, (3h), Bacteria, > 100 mg/l (OECD 209) |
| EC50, (24h), Daphnia magna, > 1000 mg/l (OECD 202) |
| NOEC, (21d), Daphnia magna, > 10 mg/l (OECD 202) |
| ErC50, (72h), Scenedesmus subspicatus, > 1640 mg/l (OECD 201) |

### 12.2 Persistence and degradability

| | |
|---|---|
| **Behaviour in environment compartments** | not determined |
| **Behaviour in sewage plant** | not determined |
| **Biological degradability** | not determined |

### 12.3 Bioaccumulative potential

No information available.

### 12.4 Mobility in soil

No information available.

### 12.5 Results of PBT and vPvB assessment

Based on all available information not to be classified as PBT or vPvB respectively.

### 12.6 Endocrine disrupting properties

Contains no ingredients with endocrine-disrupting properties.

### 12.7 Other adverse effects

Ecological data of complete product are not available.
Do not discharge product unmonitored into the environment or into the drainage.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

**Product**

Dispose of as hazardous waste.
Coordinate disposal with the authorities if necessary.

**Waste no. (recommended)** 080501*

**Contaminated packaging**

Uncontaminated packaging may be taken for recycling.
Packaging that cannot be cleaned should be disposed of as for product.

**Waste no. (recommended)** 150110* packaging containing residues of or contaminated by hazardous substances

## SECTION 14: Transport information

### 14.1 UN number or ID number

| | |
|---|---|
| **Transport by land according to ADR/RID** | 1866 |
| **Inland navigation (ADN)** | 1866 |
| **Marine transport in accordance with IMDG** | 1866 |
| **Air transport in accordance with IATA** | 1866 |

### 14.2 UN proper shipping name

| | |
|---|---|
| **Transport by land according to ADR/RID** | Resin solution |
| **- Classification Code** | F1 |
| **- Label** |  |
| **- ADR LQ** | 5 l |
| **- ADR 1.1.3.6 (8.6)** | Transport category (tunnel restriction code) 2 (D/E) |
| **Inland navigation (ADN)** | Resin solution |
| **- Classification Code** | F1 |
| **- Label** |  |
| **Marine transport in accordance with IMDG** | Resin solution |
| **- EMS** | F-E, S-E |
| **- Label** |  |
| **- IMDG LQ** | 5 l |
| **Air transport in accordance with IATA** | Resin solution |
| **- Label** |  |

### 14.3 Transport hazard class(es)

| | |
|---|---|
| **Transport by land according to ADR/RID** | 3 |
| **Inland navigation (ADN)** | 3 |
| **Marine transport in accordance with IMDG** | 3 |
| **Air transport in accordance with IATA** | 3 |

### 14.4 Packing group

| | |
|---|---|
| **Transport by land according to ADR/RID** | II |
| **Inland navigation (ADN)** | II |
| **Marine transport in accordance with IMDG** | II |
| **Air transport in accordance with IATA** | II |

### 14.5 Environmental hazards

| | |
|---|---|
| **Transport by land according to ADR/RID** | no |
| **Inland navigation (ADN)** | no |
| **Marine transport in accordance with IMDG** | no |
| **Air transport in accordance with IATA** | no |

### 14.6 Special precautions for user

Relevant information under SECTION 6 to 8.

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

not applicable

## SECTION 15: Regulatory information

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

| | |
|---|---|
| **EEC-REGULATIONS** | 2008/98/EC 2000/532/EC); 2010/75/EU; 2004/42/EC; (EC) 648/2004; (EC) 1907/2006 (REACH); (EU) 1272/2008; 75/324/EEC ((EC) 2016/2037); (EU) 2020/878; (EU) 2016/131; (EU) 517/2014 |
| **TRANSPORT-REGULATIONS** | ADR (2021); IMDG-Code (2021, 40. Amdt.); IATA-DGR (2021) |
| **NATIONAL REGULATIONS (GB):** | EH40/2005 Workplace exposure limits (Second edition, published December 2011); UK REACH; GB CLP. |
| **- Observe employment restrictions for people** | Observe employment restrictions for young people.<br>Observe employment restrictions for mothers-to-be and nursing mothers. |
| **- VOC (2010/75/CE)** | 76 % |

### 15.2 Chemical safety assessment

not applicable

## SECTION 16: Other information

### 16.1 Hazard statements (SECTION 3)

H302 Harmful if swallowed.
H412 Harmful to aquatic life with long lasting effects.
H330 Fatal if inhaled.
H318 Causes serious eye damage.
H373 May cause damage to organs through prolonged or repeated exposure.
EUH204 Contains isocyanates. May produce an allergic reaction.

H373 May cause damage to organs through prolonged or repeated exposure through inhalation.
H351 Suspected of causing cancer.
H335 May cause respiratory irritation.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H332 Harmful if inhaled.
H317 May cause an allergic skin reaction.
H315 Causes skin irritation.
H226 Flammable liquid and vapour.
EUH066 Repeated exposure may cause skin dryness or cracking.
H336 May cause drowsiness or dizziness.
H319 Causes serious eye irritation.
H225 Highly flammable liquid and vapour.

### 16.2 Abbreviations and acronyms:

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route
RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses
ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure
ATE = acute toxicity estimate
CAS = Chemical Abstracts Service
CLP = Classification, Labelling and Packaging
DMEL = Derived Minimum Effect Level
DNEL = Derived No Effect Level
EC50 = Median effective concentration
ECB = European Chemicals Bureau
EEC = European Economic Community
EINECS = European Inventory of Existing Commercial Chemical Substances
EL50 = Median effective loading
ELINCS = European List of Notified Chemical Substances
EmS = Emergency Schedules
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC-Code = International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
IC50 = Inhibition concentration, 50%
IMDG = International Maritime Code for Dangerous Goods
IUCLID = International Uniform ChemicaL Information Database
IVIS = In vitro irritation score
LC50 = Lethal concentration, 50%
LD50 = Median lethal dose
LC0 = lethal concentration, 0%
LOAEL = lowest-observed-adverse-effect level
LL50 = Median lethal loading
LQ = Limited Quantities
MARPOL = International Convention for the Prevention of Marine Pollution from Ships
NOAEL = No Observed Adverse Effect Level
NOEC = No Observed Effect Concentration
PBT = Persistent, Bioaccumulative and Toxic substance
PNEC = Predicted No-Effect Concentration
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
STP = Sewage Treatment Plant
TLV®/TWA = Threshold limit value – time-weighted average
TLV®STEL = Threshold limit value – short-time exposure limit
VOC = Volatile Organic Compounds
vPvB = very Persistent and very Bioaccumulative

### 16.3 Other information

**Classification procedure**

Flam. Liq. 2: H225 Highly flammable liquid and vapour. (On basis of test data)
Skin Irrit. 2: H315 Causes skin irritation. (Calculation method)
Eye Irrit. 2: H319 Causes serious eye irritation. (Calculation method)
Skin Sens. 1: H317 May cause an allergic skin reaction. (Calculation method)
Resp. Sens. 1: H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled. (Calculation method)
STOT SE 3: H335 May cause respiratory irritation. (Calculation method)
STOT SE 3: H336 May cause drowsiness or dizziness. (Calculation method)
Carc. 2: H351 Suspected of causing cancer. (Calculation method)

**Modified position**

none