Safety data sheet according to Regulation (EC) No 1907/2006, Annex II
Revision date / version: 01.11.2021 / 0015
Replacing version dated / version: 26.07.2021 / 0014
Valid from: 01.11.2021
PDF print date: 01.11.2021
COSMO® PU-125.130
COSMO® PU-125.120

(COSMOPUR 1811.30)
(COSMOPUR 1811.55)

# Safety data sheet according to Regulation (EC) No 1907/2006, Annex II

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

### 1.1 Product identifier

**COSMO® PU-125.130**
**COSMO® PU-125.120**

**(COSMOPUR 1811.30)**
**(COSMOPUR 1811.55)**

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

**Relevant identified uses of the substance or mixture:**
Adhesive
**Uses advised against:**
No information available at present.

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

Weiss Chemie + Technik GmbH & Co. KG
Hansastrasse 2
35708 Haiger
Tel: +49 (0) 2773 / 815-0
msds@weiss-chemie.de
www.weiss-chemie.de

Qualified person's e-mail address: info@chemical-check.de, k.schnurbusch@chemical-check.de Please DO NOT use for requesting Safety Data Sheets.

### 1.4 Emergency telephone number

**Emergency information services / official advisory body:**
---
**Telephone number of the company in case of emergencies:**
+49 (0) 700 / 24 112 112 (WIC)
+1 872 5888271 (WIC)

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**Classification according to Regulation (EC) 1272/2008 (CLP)**

| Hazard class | Hazard category | Hazard statement |
|---|---|---|
| Flam. Liq. | 2 | H225-Highly flammable liquid and vapour. |
| Eye Irrit. | 2 | H319-Causes serious eye irritation. |
| STOT SE | 3 | H335-May cause respiratory irritation. |
| Skin Irrit. | 2 | H315-Causes skin irritation. |
| Resp. Sens. | 1 | H334-May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| Skin Sens. | 1 | H317-May cause an allergic skin reaction. |
| Carc. | 2 | H351-Suspected of causing cancer. |
| Aquatic Chronic | 3 | H412-Harmful to aquatic life with long lasting effects. |
| STOT RE | 2 | H373-May cause damage to organs through prolonged or repeated exposure by inhalation (respiratory system). |

### 2.2 Label elements

**Labeling according to Regulation (EC) 1272/2008 (CLP)**

Danger

H225-Highly flammable liquid and vapour. H319-Causes serious eye irritation. H335-May cause respiratory irritation. H315-Causes skin irritation. H334-May cause allergy or asthma symptoms or breathing difficulties if inhaled. H317-May cause an allergic skin reaction. H351-Suspected of causing cancer. H412-Harmful to aquatic life with long lasting effects. H373-May cause damage to organs through prolonged or repeated exposure by inhalation (respiratory system).

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 or spray. P280-Wear protective gloves / protective clothing / eye protection / face protection. P284-Wear respiratory protection.

P303+P361+P353-IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. P304+P340-IF INHALED: Remove person to fresh air and keep comfortable for breathing. 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.
P403+P233-Store in a well-ventilated place. Keep container tightly closed.

EUH204-Contains isocyanates. May produce an allergic reaction.

As from 24 August 2023 adequate training is required before industrial or professional use.
Diphenylmethanediisocyanate, isomeres and homologues
4,4'-methylenediphenyl diisocyanate
o-(p-isocyanatobenzyl)phenyl isocyanate
2,2'-methylenediphenyl diisocyanate

### 2.3 Other hazards

The mixture does not contain any vPvB substance (vPvB = very persistent, very bioaccumulative) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).
The mixture does not contain any PBT substance (PBT = persistent, bioaccumulative, toxic) or is not included under XIII of the regulation (EC) 1907/2006 (< 0,1 %).
The mixture does not contain any substance with endocrine disrupting properties (< 0,1 %).

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

n.a.

### 3.2 Mixtures

| Diphenylmethanediisocyanate, isomeres and homologues | |
|---|---|
| Registration number (REACH) | --- |
| Index | --- |
| EINECS, ELINCS, NLP, REACH-IT List-No. | --- |
| CAS | 9016-87-9 |
| content % | 25-<50 |
| Classification according to Regulation (EC) 1272/2008 (CLP), M-factors | Acute Tox. 4, H332<br>Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>Resp. Sens. 1, H334<br>Skin Sens. 1, H317<br>Carc. 2, H351<br>STOT SE 3, H335<br>STOT RE 2, H373 (respiratory system) (as inhalation) |
| Specific Concentration Limits and ATE | Skin Irrit. 2, H315: >=5 %<br>Eye Irrit. 2, H319: >=5 %<br>Resp. Sens. 1, H334: >=0,1 %<br>STOT SE 3, H335: >=5 % |

| Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-hydro-.omega.-hydroxy- | |
|---|---|
| Registration number (REACH) | --- |
| Index | --- |
| EINECS, ELINCS, NLP, REACH-IT List-No. | 500-039-8 |
| CAS | 25322-69-4 |
| content % | 10-<25 |
| Classification according to Regulation (EC) 1272/2008 (CLP), M-factors | Acute Tox. 4, H302 |
| Specific Concentration Limits and ATE | ATE (oral): 500,24 mg/kg<br>ATE (oral): 500,24 mg/kg |

| Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane | |
|---|---|
| Registration number (REACH) | 01-2119475514-35-XXXX |
| Index | --- |
| EINECS, ELINCS, NLP, REACH-IT List-No. | 921-024-6 |
| CAS | --- |
| content % | 5-<10 |
| Classification according to Regulation (EC) 1272/2008 (CLP), M-factors | Flam. Liq. 2, H225<br>Skin Irrit. 2, H315<br>STOT SE 3, H336<br>Asp. Tox. 1, H304<br>Aquatic Chronic 2, H411 |

| 4,4'-methylenediphenyl diisocyanate | |
|---|---|
| Registration number (REACH) | 01-2119457014-47-XXXX |
| Index | 615-005-00-9 |
| EINECS, ELINCS, NLP, REACH-IT List-No. | 202-966-0 |
| CAS | 101-68-8 |
| content % | 1-<5 |
| Classification according to Regulation (EC) 1272/2008 (CLP), M-factors | Acute Tox. 4, H332<br>Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>Resp. Sens. 1, H334<br>Skin Sens. 1, H317<br>Carc. 2, H351<br>STOT SE 3, H335<br>STOT RE 2, H373 (respiratory system) (as inhalation) |
| Specific Concentration Limits and ATE | Skin Irrit. 2, H315: >=5 %<br>Eye Irrit. 2, H319: >=5 %<br>Resp. Sens. 1, H334: >=0,1 %<br>STOT SE 3, H335: >=5 % |

| o-(p-isocyanatobenzyl)phenyl isocyanate | |
|---|---|
| Registration number (REACH) | 01-2119480143-45-XXXX |
| Index | 615-005-00-9 |
| EINECS, ELINCS, NLP, REACH-IT List-No. | 227-534-9 |
| CAS | 5873-54-1 |
| content % | 1-<5 |
| Classification according to Regulation (EC) 1272/2008 (CLP), M-factors | Acute Tox. 4, H332<br>Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>Resp. Sens. 1, H334<br>Skin Sens. 1, H317<br>Carc. 2, H351<br>STOT SE 3, H335<br>STOT RE 2, H373 (respiratory system) (as inhalation) |
| Specific Concentration Limits and ATE | Skin Irrit. 2, H315: >=5 %<br>Eye Irrit. 2, H319: >=5 %<br>Resp. Sens. 1, H334: >=0,1 %<br>STOT SE 3, H335: >=5 %<br>ATE (as inhalation, Aerosol): 1,5 mg/l/4h |

| 2,2'-methylenediphenyl diisocyanate | |
|---|---|
| **Registration number (REACH)** | 01-2119927323-43-XXXX |
| **Index** | 615-005-00-9 |
| **EINECS, ELINCS, NLP, REACH-IT List-No.** | 219-799-4 |
| **CAS** | 2536-05-2 |
| **content %** | 0,01-<0,1 |
| **Classification according to Regulation (EC) 1272/2008 (CLP), M-factors** | Acute Tox. 4, H332<br>Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>Resp. Sens. 1, H334<br>Skin Sens. 1, H317<br>Carc. 2, H351<br>STOT SE 3, H335<br>STOT RE 2, H373 (respiratory system) (as inhalation) |
| **Specific Concentration Limits and ATE** | Skin Irrit. 2, H315: >=5 %<br>Eye Irrit. 2, H319: >=5 %<br>Resp. Sens. 1, H334: >=0,1 %<br>STOT SE 3, H335: >=5 %<br>ATE (as inhalation, Aerosol): 1,5 mg/l |

Impurities, test data and additional information may have been taken into account in classifying and labelling the product.
For the text of the H-phrases and classification codes (GHS/CLP), see Section 16.
The substances named in this section are given with their actual, appropriate classification!
For substances that are listed in appendix VI, table 3.1 of the regulation (EC) no. 1272/2008 (CLP regulation) this means that all notes that may be given here for the named classification have been taken into account.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures
First-aiders should ensure they are protected!
Never pour anything into the mouth of an unconscious person!

#### Inhalation
Remove person from danger area.
Supply person with fresh air and consult doctor according to symptoms.
If the person is unconscious, place in a stable side position and consult a doctor.
Respiratory arrest - Artificial respiration apparatus necessary.

#### Skin contact
Wipe off residual product carefully with a soft, dry cloth.
Remove polluted, soaked clothing immediately, wash thoroughly with plenty of water and soap, in case of irritation of the skin (flare), consult a doctor.
Dab away with polyethylene glycol 400

#### Eye contact
Remove contact lenses.
Wash thoroughly for several minutes using copious water - call doctor immediately, have Data Sheet available.

#### Ingestion
Rinse the mouth thoroughly with water.
Do not induce vomiting - give copious water to drink. Consult doctor immediately.

### 4.2 Most important symptoms and effects, both acute and delayed
If applicable delayed symptoms and effects can be found in section 11 and the absorption route in section 4.1.
The following may occur:
Dermatitis (skin inflammation)
Drying of the skin.
Allergic contact eczema
Discoloration of the skin
Irritant to mucosa of the nose and throat
Coughing
Headaches
Effect on the central nervous system
Asthmatic symptoms
In case of sensitivity, concentrations below the limit value may already result in asthmatic symptoms.
Respiratory distress
In certain cases, the symptoms of poisoning may only appear after an extended period / after several hours.

### 4.3 Indication of any immediate medical attention and special treatment needed
In case of irritation of the lungs, perform first-aid with controlled-dosage aerosol dexamethasone.
Pulmonary oedema prophylaxis
Medical supervision necessary due to possibility of delayed reaction.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media
#### Suitable extinguishing media
CO2
Extinction powder
Water jet spray
Foam

#### Unsuitable extinguishing media
High volume water jet

### 5.2 Special hazards arising from the substance or mixture
In case of fire the following can develop:
Oxides of carbon
Oxides of nitrogen
Isocyanates
Hydrocyanic acid (hydrogen cyanide)
Toxic gases
Danger of bursting (explosion) when heated
Explosive vapour/air or gas/air mixtures.

### 5.3 Advice for firefighters
For personal protective equipment see Section 8.
In case of fire and/or explosion do not breathe fumes.
Protective respirator with independent air supply.
According to size of fire
Full protection, if necessary.
Cool container at risk with water.
Dispose of contaminated extinction water according to official regulations.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures
#### 6.1.1 For non-emergency personnel
In case of spillage or accidental release, wear personal protective equipment as specified in section 8 to prevent contamination.
Ensure sufficient ventilation, remove sources of ignition.
Avoid dust formation with solid or powder products.
Leave the danger zone if possible, use existing emergency plans if necessary.
Remove possible causes of ignition - do not smoke.
Ensure sufficient supply of air.
Avoid inhalation, and contact with eyes or skin.
If applicable, caution - risk of slipping.

#### 6.1.2 For emergency responders
See section 8 for suitable protective equipment and material specifications.

### 6.2 Environmental precautions
If leakage occurs, dam up.
Resolve leaks if this possible without risk.
Prevent surface and ground-water infiltration, as well as ground penetration.
Prevent from entering drainage system.
If accidental entry into drainage system occurs, inform responsible authorities.

### 6.3 Methods and material for containment and cleaning up
Soak up with absorbent material (e.g. universal binding agent, sand, diatomaceous earth, sawdust) and dispose of according to Section 13.
Allow to stand for a few days in an unclosed container until reaction no longer occurs.
Keep moist.
Do not close packing drum.
CO2 formation in closed tanks causes pressure to rise.

### 6.4 Reference to other sections
For personal protective equipment see Section 8 and for disposal instructions see Section 13.

## SECTION 7: Handling and storage

In addition to information given in this section, relevant information can also be found in section 8 and 6.1.

### 7.1 Precautions for safe handling
#### 7.1.1 General recommendations
Ensure good ventilation.
Avoid inhalation of the vapours.
If applicable, suction measures at the workstation or on the processing machine necessary.
Keep away from sources of ignition - Do not smoke.
Avoid contact with eyes or skin.
No contact with products of this type in case of allergies, asthma und chronic respiratory tract disorders.
Eating, drinking, smoking, as well as food-storage, is prohibited in work-room.
Observe directions on label and instructions for use.
Use working methods according to operating instructions.

#### 7.1.2 Notes on general hygiene measures at the workplace
General hygiene measures for the handling of chemicals are applicable.
Wash hands before breaks and at end of work.
Keep away from food, drink and animal feedingstuffs.
Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

### 7.2 Conditions for safe storage, including any incompatibilities
Keep out of access to unauthorised individuals.
Not to be stored in gangways or stair wells.
Store product closed and only in original packing.
Observe special storage conditions.
Do not store with flammable or self-igniting materials.
Keep protected from direct sunlight and temperatures over 50°C.
Only store at temperatures from 15°C to 25°C.
Store in a dry place.

### 7.3 Specific end use(s)
Adhesive

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters
Workplace exposure limit (WEL) of the total hydrocarbon solvent content of the mixture (RCP method according to EH40):
1000 mg/m3

| GB **Chemical Name** | Diphenylmethanediisocyanate, isomeres and homologues | |
|---|---|---|
| WEL-TWA: 0,02 mg/m3 (Isocyanates, all (as -NCO)) | WEL-STEL: 0,07 mg/m3 (Isocyanates, all (as -NCO)) | --- |
| Monitoring procedures: | --- | |
| BMGV: 1 µmol isocyanate-derived diamine/mol creatinine in urine (At the end of the period of exposure) | Other information: Sen (Isocyanates, all (as -NCO)) | |

| GB **Chemical Name** | Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane | |
|---|---|---|
| WEL-TWA: 1000 mg/m3 | WEL-STEL: --- | --- |
| Monitoring procedures: | - Compur - KITA-187 S (551 174) | |
| BMGV: --- | Other information: (OEL acc. to RCP-method, paragraphs 84-87, EH40) | |

| GB **Chemical Name** | 4,4'-methylenediphenyl diisocyanate | |
|---|---|---|
| WEL-TWA: 0,02 mg/m3 (Isocyanates, all (as -NCO)) | WEL-STEL: 0,07 mg/m3 (Isocyanates, all (as -NCO)) | --- |
| Monitoring procedures: | ISO 16702 (Workplace air quality – determination of total isocyanate groups in air using 2-(1-methoxyphenylpiperazine and liquid chromatography) - 2007<br>- MDHS 25/4 (Organic isocyanates in air – Laboratory method using sampling either onto 2-(1-methoxyphenylpiperazine coated glass fibre filters followed by solvent desorption or into impingers and analysis using high performance liquid chromatography) - 2015 -<br>- EU project BC/CEN/ENTR/000/2002-16 card 7-4 (2004)<br>- NIOSH 5521 (ISOCYANATES, MONOMERIC) - 1994<br>- NIOSH 5522 (ISOCYANATES) - 1998<br>- NIOSH 5525 (ISOCYANATES, TOTAL (MAP)) - 2003<br>- OSHA 18 (Diisocyanates 2,4-TDI and MDI) - 1980<br>- OSHA 47 (Methylene Bisphenyl Isocyanate (MDI)) - 1984 | |
| BMGV: 1 µmol isocyanate-derived diamine/mol creatinine in urine (At the end of the period of exposure) | Other information: Sen (Isocyanates, all (as -NCO)) | |

| GB **Chemical Name** | o-(p-isocyanatobenzyl)phenyl isocyanate | |
|---|---|---|
| WEL-TWA: 0,02 mg/m3 (Isocyanates, all (as -NCO)) | WEL-STEL: 0,07 mg/m3 (Isocyanates, all (as -NCO)) | --- |
| Monitoring procedures: | --- | |
| BMGV: 1 µmol isocyanate-derived diamine/mol creatinine in urine (At the end of the period of exposure) | Other information: Sen (Isocyanates, all (as -NCO)) | |

| GB **Chemical Name** | 2,2'-methylenediphenyl diisocyanate | |
|---|---|---|
| WEL-TWA: 0,02 mg/m3 (Isocyanates, all (as -NCO)) | WEL-STEL: 0,07 mg/m3 (Isocyanates, all (as -NCO)) | --- |
| Monitoring procedures: | --- | |

| | |
|---|---|
| BMGV: 1 µmol isocyanate-derived diamine/mol creatinine in urine (At the end of the period of exposure) | Other information: Sen (Isocyanates, all (as -NCO)) |

| GB Chemical Name | Calcium carbonate | |
|---|---|---|
| WEL-TWA: 4 mg/m3 (respirable dust), 10 mg/m3 (total inhalable dust) | WEL-STEL: --- | --- |
| Monitoring procedures: | --- | |
| BMGV: --- | Other information: --- | |

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

| Area of application | Exposure route / Environmental compartment | Effect on health | Descriptor | Value | Unit | Note |
|---|---|---|---|---|---|---|
| Consumer | Human - oral | Long term, systemic effects | DNEL | 699 | mg/kg bw/d | |
| Consumer | Human - dermal | Long term, systemic effects | DNEL | 699 | mg/kg bw/d | |
| Consumer | Human - inhalation | Long term, systemic effects | DNEL | 608 | mg/m3 | |
| Workers / employees | Human - inhalation | Long term, systemic effects | DNEL | 2035 | mg/m3 | |
| Workers / employees | Human - dermal | Long term, systemic effects | DNEL | 733 | mg/kg bw/d | |

**4,4'-methylenediphenyl diisocyanate**

| Area of application | Exposure route / Environmental compartment | Effect on health | Descriptor | Value | Unit | Note |
|---|---|---|---|---|---|---|
| | Environment - freshwater | | PNEC | 3,7 | µg/l | |
| | Environment - marine | | PNEC | 0,37 | µg/l | |
| | Environment - sewage treatment plant | | PNEC | 1 | mg/l | |
| | Environment - soil | | PNEC | 2,33 | mg/kg dw | |
| | Environment - sporadic (intermittent) release | | PNEC | 37 | µg/l | |
| | Environment - sediment, freshwater | | PNEC | 11,7 | mg/kg dry weight | |
| | Environment - sediment, marine | | PNEC | 1,17 | mg/kg dry weight | |
| Consumer | Human - oral | Short term, systemic effects | DNEL | 20 | mg/kg bw/day | |
| Consumer | Human - dermal | Short term, local effects | DNEL | 17,2 | mg/cm2 | |
| Consumer | Human - dermal | Short term, systemic effects | DNEL | 25 | mg/kg bw/day | |
| Consumer | Human - inhalation | Short term, local effects | DNEL | 0,05 | mg/m3 | |
| Consumer | Human - inhalation | Short term, systemic effects | DNEL | 0,05 | mg/m3 | |
| Consumer | Human - inhalation | Long term, local effects | DNEL | 0,025 | mg/m3 | |
| Consumer | Human - inhalation | Long term, systemic effects | DNEL | 0,025 | mg/m3 | |
| Workers / employees | Human - dermal | Short term, local effects | DNEL | 28,7 | mg/cm2 | |
| Workers / employees | Human - dermal | Short term, systemic effects | DNEL | 50 | mg/kg bw/day | |
| Workers / employees | Human - inhalation | Short term, local effects | DNEL | 0,1 | mg/m3 | |
| Workers / employees | Human - inhalation | Short term, systemic effects | DNEL | 0,1 | mg/m3 | |
| Workers / employees | Human - inhalation | Long term, local effects | DNEL | 0,05 | mg/m3 | |
| Workers / employees | Human - inhalation | Long term, systemic effects | DNEL | 0,05 | mg/m3 | |

**o-(p-isocyanatobenzyl)phenyl isocyanate**

| Area of application | Exposure route / Environmental compartment | Effect on health | Descriptor | Value | Unit | Note |
|---|---|---|---|---|---|---|
| | Environment - freshwater | | PNEC | 1 | mg/l | |
| | Environment - marine | | PNEC | 0,1 | mg/l | |
| | Environment - sewage treatment plant | | PNEC | 1 | mg/l | |
| | Environment - soil | | PNEC | 1 | mg/kg dw | |
| | Environment - sporadic (intermittent) release | | PNEC | 10 | mg/l | |
| Consumer | Human - oral | Short term, systemic effects | DNEL | 20 | mg/kg bw/day | |
| Consumer | Human - dermal | Short term, local effects | DNEL | 17,2 | mg/cm2 | |
| Consumer | Human - dermal | Short term, systemic effects | DNEL | 25 | mg/kg bw/d | |
| Consumer | Human - inhalation | Short term, local effects | DNEL | 0,05 | mg/m3 | |
| Consumer | Human - inhalation | Short term, systemic effects | DNEL | 0,05 | mg/m3 | |
| Consumer | Human - inhalation | Long term, local effects | DNEL | 0,025 | mg/m3 | |
| Consumer | Human - inhalation | Long term, systemic effects | DNEL | 0,025 | mg/m3 | |
| Workers / employees | Human - dermal | Short term, local effects | DNEL | 28,7 | mg/cm2 | |
| Workers / employees | Human - dermal | Short term, systemic effects | DNEL | 50 | mg/kg bw/d | |
| Workers / employees | Human - inhalation | Short term, local effects | DNEL | 0,1 | mg/m3 | |
| Workers / employees | Human - inhalation | Short term, systemic effects | DNEL | 0,1 | mg/m3 | |
| Workers / employees | Human - inhalation | Long term, systemic effects | DNEL | 0,05 | mg/m3 | |
| Workers / employees | Human - inhalation | Long term, local effects | DNEL | 0,05 | mg/m3 | |

**2,2'-methylenediphenyl diisocyanate**

| Area of application | Exposure route / Environmental compartment | Effect on health | Descriptor | Value | Unit | Note |
|---|---|---|---|---|---|---|
| | Environment - freshwater | | PNEC | 1 | mg/l | |
| | Environment - marine | | PNEC | 0,1 | mg/l | |
| | Environment - sewage treatment plant | | PNEC | 1 | mg/l | |
| | Environment - soil | | PNEC | 1 | mg/kg dw | |
| | Environment - water, sporadic (intermittent) release | | PNEC | 10 | mg/l | |
| Consumer | Human - oral | Short term, systemic effects | DNEL | 20 | mg/kg bw/d | |
| Consumer | Human - dermal | Short term, local effects | DNEL | 17,2 | mg/cm2 | |
| Consumer | Human - dermal | Short term, systemic effects | DNEL | 25 | mg/kg bw/d | |
| Consumer | Human - inhalation | Short term, systemic effects | DNEL | 0,05 | mg/m3 | |
| Consumer | Human - inhalation | Short term, local effects | DNEL | 0,05 | mg/m3 | |
| Consumer | Human - inhalation | Long term, systemic effects | DNEL | 0,025 | mg/m3 | |
| Consumer | Human - inhalation | Long term, local effects | DNEL | 0,025 | mg/m3 | |
| Workers / employees | Human - dermal | Short term, local effects | DNEL | 28,7 | mg/cm2 | |
| Workers / employees | Human - dermal | Short term, systemic effects | DNEL | 50 | mg/kg bw/d | |
| Workers / employees | Human - inhalation | Short term, local effects | DNEL | 0,1 | mg/m3 | |
| Workers / employees | Human - inhalation | Short term, systemic effects | DNEL | 0,1 | mg/m3 | |
| Workers / employees | Human - inhalation | Long term, systemic effects | DNEL | 0,05 | mg/m3 | |
| Workers / employees | Human - inhalation | Long term, local effects | DNEL | 0,05 | mg/m3 | |

GB WEL-TWA = Workplace Exposure Limit - Long-term exposure limit (8-hour TWA (= time weighted average) reference period) EH40. AGW = "Arbeitsplatzgrenzwert" (workplace limit value, Germany). (8) = Inhalable fraction (Directive 2017/164/EU, Directive 2004/37/CE). (9) = Respirable fraction (Directive 2017/164/EU, Directive 2004/37/CE). (11) = Inhalable fraction (Directive 2004/37/CE). (12) = Inhalable fraction. Respirable fraction in those Member States that implement, on the date of the entry into force of this Directive, a biomonitoring system with a biological limit value not exceeding 0,002 mg Cd/g creatinine in urine (Directive 2004/37/CE). | WEL-STEL = Workplace Exposure Limit - Short-term exposure limit (15-minute reference period).
(8) = Inhalable fraction (2017/164/EU, 2017/2398/EU). (9) = Respirable fraction (2017/164/EU, 2017/2398/EU). (10) = Short-term exposure limit value in relation to a reference period of 1 minute (2017/164/EU). | BMGV = Biological monitoring guidance value EH40. BGW = "Biologischer Grenzwert" (biological limit value, Germany) | Other information: Sen = Capable of causing occupational asthma. Sk = Can be absorbed through skin. Carc = Capable of causing cancer and/or heritable genetic damage.
** = The exposure limit for this substance is repealed through the TRGS 900 (Germany) of January 2006 with the goal of revision.
(13) = The substance can cause sensitisation of the skin and of the respiratory tract (Directive 2004/37/CE),
(14) = The substance can cause sensitisation of the skin (Directive 2004/37/CE).

## 8.2 Exposure controls

### 8.2.1 Appropriate engineering controls

Ensure good ventilation. This can be achieved by local suction or general air extraction.
If this is insufficient to maintain the concentration under the WEL or AGW values, suitable breathing protection should be worn.
Applies only if maximum permissible exposure values are listed here.
Suitable assessment methods for reviewing the effectiveness of protection measures adopted include metrological and non-metrological investigative techniques.
These are specified by e.g. EN 14042.
EN 14042 "Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents".

### 8.2.2 Individual protection measures, such as personal protective equipment

General hygiene measures for the handling of chemicals are applicable.
Wash hands before breaks and at end of work.
Keep away from food, drink and animal feedingstuffs.
Remove contaminated clothing and protective equipment before entering areas in which food is consumed.

Eye/face protection:
Tight fitting protective goggles with side protection (EN 166).

Skin protection - Hand protection:
Chemical resistant protective gloves (EN ISO 374).
Recommended
Protective nitrile gloves (EN ISO 374).
Minimum layer thickness in mm:
>= 0,35
Permeation time (penetration time) in minutes:
>= 480
The breakthrough times determined in accordance with EN 16523-1 were not obtained under practical conditions.
The recommended maximum wearing time is 50% of breakthrough time.
Protective hand cream recommended.

Skin protection - Other:
Protective working garments (e.g. safety shoes EN ISO 20345, long-sleeved protective working garments).

Respiratory protection:
Normally not necessary.
If OES or MEL is exceeded.
Filter A2 P2 (EN 14387), code colour brown, white
Observe wearing time limitations for respiratory protection equipment.

Thermal hazards:
Not applicable

Additional information on hand protection - No tests have been performed.
In the case of mixtures, the selection has been made according to the knowledge available and the information about the contents.
Selection of materials derived from glove manufacturer's indications.
Final selection of glove material must be made taking the breakthrough times, permeation rates and degradation into account.
Selection of a suitable glove depends not only on the material but also on other quality characteristics and varies from manufacturer to manufacturer.
In the case of mixtures, the resistance of glove materials cannot be predicted and must therefore be tested before use.
The exact breakthrough time of the glove material can be requested from the protective glove manufacturer and must be observed.

### 8.2.3 Environmental exposure controls
No information available at present.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

| | |
|---|---|
| Physical state: | Paste, Liquid |
| Colour: | Beige |
| Odour: | Characteristic |
| Melting point/freezing point: | There is no information available on this parameter. |
| Boiling point or initial boiling point and boiling range: | 60 - 120 °C (Decomposition ) |
| Flammability: | Flammable |
| Lower explosion limit: | There is no information available on this parameter. |
| Upper explosion limit: | There is no information available on this parameter. |
| Flash point: | -14 °C (Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane) |
| Auto-ignition temperature: | There is no information available on this parameter. |
| Decomposition temperature: | There is no information available on this parameter. |
| pH: | Mixture reacts with water. |
| Kinematic viscosity: | 5500 mPas (Dynamic viscosity ) |
| Solubility: | Insoluble |
| Partition coefficient n-octanol/water (log value): | Does not apply to mixtures. |
| Vapour pressure: | There is no information available on this parameter. |
| Density and/or relative density: | 1,47 g/ml |
| Relative vapour density: | There is no information available on this parameter. |
| Particle characteristics: | Does not apply to liquids. |

### 9.2 Other information

| | |
|---|---|
| Explosives: | Product is not explosive. |
| Oxidising liquids: | No |

## SECTION 10: Stability and reactivity

### 10.1 Reactivity
reacts with water

### 10.2 Chemical stability
Stable with proper storage and handling.

### 10.3 Possibility of hazardous reactions
Exothermic reaction possible with:
Alcohols
Amines
Bases
Acids
Water
Developement of:
Carbon dioxide
CO2 formation in closed tanks causes pressure to rise.
Pressure increase will result in danger of bursting.

### 10.4 Conditions to avoid
See also section 7.
Open flame, ignition sources
Protect from humidity.
Polymerisation due to high heat is possible.
T ~ 260°C

### 10.5 Incompatible materials
See also section 7.
Acids
Bases
Amines
Alcohols
Water

### 10.6 Hazardous decomposition products
See also section 5.2
No decomposition when used as directed.

## SECTION 11: Toxicological information

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008
Possibly more information on health effects, see Section 2.1 (classification).

**COSMO® PU-125.130**
**COSMO® PU-125.120**

**(COSMOPUR 1811.30)**
**(COSMOPUR 1811.55)**

| Toxicity / effect | Endpoint | Value | Unit | Organism | Test method | Notes |
|---|---|---|---|---|---|---|
| Acute toxicity, by oral route: | ATE | >2000 | mg/kg | | | calculated value |
| Acute toxicity, by dermal route: | | | | | | n.d.a. |
| Acute toxicity, by inhalation: | ATE | >20 | mg/l/4h | | | calculated value, Vapours |
| Skin corrosion/irritation: | | | | | | n.d.a. |
| Serious eye damage/irritation: | | | | | | n.d.a. |
| Respiratory or skin sensitisation: | | | | | | n.d.a. |
| Germ cell mutagenicity: | | | | | | n.d.a. |
| Carcinogenicity: | | | | | | n.d.a. |
| Reproductive toxicity: | | | | | | n.d.a. |
| Specific target organ toxicity - single exposure (STOT-SE): | | | | | | n.d.a. |
| Specific target organ toxicity - repeated exposure (STOT-RE): | | | | | | n.d.a. |
| Aspiration hazard: | | | | | | n.d.a. |
| Symptoms: | | | | | | n.d.a. |

**Diphenylmethanediisocyanate, isomeres and homologues**

| Toxicity / effect | Endpoint | Value | Unit | Organism | Test method | Notes |
|---|---|---|---|---|---|---|
| Acute toxicity, by oral route: | LD50 | >5000 | mg/kg | Rat | OECD 401 (Acute Oral Toxicity) | |
| Acute toxicity, by dermal route: | LD50 | >5000 | mg/kg | Rabbit | OECD 402 (Acute Dermal Toxicity) | |
| Acute toxicity, by inhalation: | LC50 | 0,31-0,49 | mg/l/4h | Rat | OECD 403 (Acute Inhalation Toxicity) | Aerosol, Does not conform with EU classification. |
| Skin corrosion/irritation: | | | | Rabbit | OECD 404 (Acute Dermal Irritation/Corrosion) | Skin Irrit. 2 |
| Serious eye damage/irritation: | | | | Rabbit | OECD 405 (Acute Eye Irritation/Corrosion) | Eye Irrit. 2 |
| Respiratory or skin sensitisation: | | | | Mouse | OECD 429 (Skin Sensitisation - Local Lymph Node Assay) | Yes (skin contact), Analogous conclusion |
| Respiratory or skin sensitisation: | | | | Guinea pig | OECD 406 (Skin Sensitisation) | Yes (skin contact) |
| Respiratory or skin sensitisation: | | | | Rat | | Yes (inhalation) |
| Germ cell mutagenicity: | | | | Rat | OECD 474 (Mammalian Erythrocyte Micronucleus Test) | Negative, Analogous conclusion |
| Germ cell mutagenicity: | | | | Salmonella typhimurium | OECD 471 (Bacterial Reverse Mutation Test) | Negative |
| Reproductive toxicity: | NOAEL | 4 | mg/m3 | Rat | OECD 414 (Prenatal Developmental Toxicity Study) | Aerosol, Negative |
| Carcinogenicity: | | | | Rat | OECD 453 (Combined Chronic Toxicity/Carcinogenicity Studies) | Aerosol, Limited evidence of a carcinogenic effect. |
| Specific target organ toxicity - single exposure (STOT-SE), inhalative: | | | | | | Target organ(s): respiratory system, May cause respiratory irritation. |
| Specific target organ toxicity - repeated exposure (STOT-RE), inhalat.: | | | | | | Target organ(s): respiratory system |
| Symptoms: | | | | | | breathing difficulties |
| Specific target organ toxicity - repeated exposure (STOT-RE), inhalat.: | LOAEL | 1 | mg/m3 | Rat | OECD 453 (Combined Chronic Toxicity/Carcinogenicity Studies) | Aerosol, Analogous conclusion |
| Specific target organ toxicity - repeated exposure (STOT-RE), inhalat.: | NOAEL | 0,2 | mg/m3 | Rat | OECD 453 (Combined Chronic Toxicity/Carcinogenicity Studies) | Aerosol, Analogous conclusion |

**Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-hydro-.omega.-hydroxy-**

| Toxicity / effect | Endpoint | Value | Unit | Organism | Test method | Notes |
|---|---|---|---|---|---|---|
| Acute toxicity, by oral route: | LD50 | >500 - <2000 | mg/kg | Rat | | |
| Acute toxicity, by dermal route: | LD50 | >3000 | mg/kg | Rabbit | OECD 402 (Acute Dermal Toxicity) | Analogous conclusion |
| Skin corrosion/irritation: | | | | Rabbit | OECD 404 (Acute Dermal Irritation/Corrosion) | Not irritant |
| Serious eye damage/irritation: | | | | Rabbit | OECD 405 (Acute Eye Irritation/Corrosion) | Not irritant |
| Respiratory or skin sensitisation: | | | | Mouse | OECD 429 (Skin Sensitisation - Local Lymph Node Assay) | Not sensitizising |
| Germ cell mutagenicity: | | | | Salmonella typhimurium | OECD 471 (Bacterial Reverse Mutation Test) | Negative |

| | | | | | | |
|---|---|---|---|---|---|---|
| Germ cell mutagenicity: | | | | | OECD 476 (In Vitro Mammalian Cell Gene Mutation Test) | NegativeChinese hamster |
| Reproductive toxicity (Developmental toxicity): | NOAEL | 1000 | mg/kg | Rat | OECD 421 (Reproduction/Developmental Toxicity Screening Test) | Female, Negative, Analogous conclusion |
| Reproductive toxicity (Effects on fertility): | NOAEL | 1000 | mg/kg | Rat | OECD 421 (Reproduction/Developmental Toxicity Screening Test) | Analogous conclusion |
| Specific target organ toxicity - repeated exposure (STOT-RE): | NOAEL | >= 1000 | mg/kg | Rat | OECD 407 (Repeated Dose 28-Day Oral Toxicity Study in Rodents) | Analogous conclusion oral exposure |
| Symptoms: | | | | | | annoyance, cramps, trembling |

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

| Toxicity / effect | Endpoint | Value | Unit | Organism | Test method | Notes |
|---|---|---|---|---|---|---|
| Acute toxicity, by oral route: | LD50 | >5840 | mg/kg | Rat | | |
| Acute toxicity, by dermal route: | LD50 | >2920 | mg/kg | Rat | | |
| Acute toxicity, by inhalation: | LC50 | 25,2 | mg/l/4h | Rat | | Vapours |
| Skin corrosion/irritation: | | | | Rabbit | OECD 404 (Acute Dermal Irritation/Corrosion) | Skin Irrit. 2 |
| Serious eye damage/irritation: | | | | | | Slightly irritant |
| Respiratory or skin sensitisation: | | | | Guinea pig | OECD 406 (Skin Sensitisation) | No (skin contact) |
| Specific target organ toxicity - single exposure (STOT-SE): | | | | | | May cause drowsiness or dizziness. |
| Aspiration hazard: | | | | | | Yes |
| Symptoms: | | | | | | may cause headaches and vertigo. |

**4,4'-methylenediphenyl diisocyanate**

| Toxicity / effect | Endpoint | Value | Unit | Organism | Test method | Notes |
|---|---|---|---|---|---|---|
| Acute toxicity, by oral route: | LD50 | >2000 | mg/kg | Rat | Regulation (EC) 440/2008 B.1 (ACUTE ORAL TOXICITY) | Analogous conclusion |
| Acute toxicity, by dermal route: | LD50 | >9400 | mg/kg | Rabbit | OECD 402 (Acute Dermal Toxicity) | Analogous conclusion |
| Acute toxicity, by inhalation: | LC50 | 0,368 | mg/l/4h | Rat | OECD 403 (Acute Inhalation Toxicity) | Aerosol, Does not conform with EU classification. |
| Acute toxicity, by inhalation: | LC50 | 1,5 | mg/l/4h | | | Aerosol, Expert judgement. |
| Skin corrosion/irritation: | | | | Rabbit | OECD 404 (Acute Dermal Irritation/Corrosion) | Skin Irrit. 2, Analogous conclusion |
| Respiratory or skin sensitisation: | | | | Guinea pig | | Yes (inhalation) |
| Respiratory or skin sensitisation: | | | | Mouse | OECD 429 (Skin Sensitisation - Local Lymph Node Assay) | Skin Sens. 1 |
| Germ cell mutagenicity: | | | | Salmonella typhimurium | OECD 471 (Bacterial Reverse Mutation Test) | Negative, Analogous conclusion |
| Germ cell mutagenicity: | | | | Rat | OECD 474 (Mammalian Erythrocyte Micronucleus Test) | Negativemale |
| Germ cell mutagenicity: | | | | Rat | OECD 489 (In Vivo Mammalian Alkaline Comet Assay) | Negativemale |
| Carcinogenicity: | | | | Rat | OECD 453 (Combined Chronic Toxicity/Carcinogenicity Studies) | Aerosol, Analogous conclusion, Carc. 2 |
| Reproductive toxicity: | NOAEL | 4-12 | mg/m3 | Rat | OECD 414 (Prenatal Developmental Toxicity Study) | Aerosol, Analogous conclusion |
| Specific target organ toxicity - single exposure (STOT-SE), inhalative: | | | | | | May cause respiratory irritation. |
| Specific target organ toxicity - repeated exposure (STOT-RE), inhalat.: | LOAEL | 1 | mg/m3 | Rat | OECD 453 (Combined Chronic Toxicity/Carcinogenicity Studies) | Aerosol, Analogous conclusion, Target organ(s): respiratory system |
| Specific target organ toxicity - repeated exposure (STOT-RE), inhalat.: | NOAEL | 0,2 | mg/m3 | Rat | OECD 453 (Combined Chronic Toxicity/Carcinogenicity Studies) | Aerosol, Analogous conclusion, Target organ(s): respiratory system |

**o-(p-isocyanatobenzyl)phenyl isocyanate**

| Toxicity / effect | Endpoint | Value | Unit | Organism | Test method | Notes |
|---|---|---|---|---|---|---|
| Acute toxicity, by oral route: | LD50 | >2000 | mg/kg | Rat | Regulation (EC) 440/2008 B.1 (ACUTE ORAL TOXICITY) | Analogous conclusion |
| Acute toxicity, by dermal route: | LD50 | >9400 | mg/kg | Rabbit | OECD 402 (Acute Dermal Toxicity) | Analogous conclusion |
| Acute toxicity, by inhalation: | LC50 | 0,387 | mg/l/4h | Rat | | Aerosol, Does not conform with EU classification. |
| Acute toxicity, by inhalation: | ATE | 1,5 | mg/l/4h | | | Aerosol, Expert judgement. |
| Skin corrosion/irritation: | | | | Rabbit | OECD 404 (Acute Dermal Irritation/Corrosion) | Skin Irrit. 2, Analogous conclusion |
| Serious eye damage/irritation: | | | | Rabbit | OECD 405 (Acute Eye Irritation/Corrosion) | Not irritant, Analogous conclusion, Does not conform with EU classification. |
| Respiratory or skin sensitisation: | | | | Guinea pig | OECD 406 (Skin Sensitisation) | No (skin contact), Analogous conclusion |
| Respiratory or skin sensitisation: | | | | Guinea pig | | Yes (inhalation), Analogous conclusion |
| Respiratory or skin sensitisation: | | | | Mouse | OECD 429 (Skin Sensitisation - Local Lymph Node Assay) | Yes (skin contact), Analogous conclusion |
| Germ cell mutagenicity: | | | | Salmonella typhimurium | OECD 471 (Bacterial Reverse Mutation Test) | Negative, Analogous conclusion |
| Germ cell mutagenicity: | | | | Rat | OECD 474 (Mammalian Erythrocyte Micronucleus Test) | Negative, Analogous conclusion male |
| Carcinogenicity: | | | | Rat | OECD 453 (Combined Chronic Toxicity/Carcinogenicity Studies) | Aerosol, Analogous conclusion, Carc. 2 |
| Reproductive toxicity: | NOAEL | 4-12 | mg/kg | Rat | OECD 414 (Prenatal Developmental Toxicity Study) | Aerosol, Analogous conclusion |
| Symptoms: | | | | | | mucous membrane irritation, breathing difficulties, coughing, asthmatic symptoms |
| Specific target organ toxicity - repeated exposure (STOT-RE), inhalat.: | NOAEL | 0,2 | mg/m3 | Rat | OECD 453 (Combined Chronic Toxicity/Carcinogenicity Studies) | Aerosol, Analogous conclusion, Target organ(s): respiratory system |
| Specific target organ toxicity - repeated exposure (STOT-RE), inhalat.: | LOAEL | 1 | mg/m3 | Rat | OECD 453 (Combined Chronic Toxicity/Carcinogenicity Studies) | Aerosol, Analogous conclusion, Target organ(s): respiratory system |

**2,2'-methylenediphenyl diisocyanate**

| Toxicity / effect | Endpoint | Value | Unit | Organism | Test method | Notes |
|---|---|---|---|---|---|---|
| Acute toxicity, by oral route: | LD50 | >2000 | mg/kg | Rat | Regulation (EC) 440/2008 B.1 (ACUTE ORAL TOXICITY) | Analogous conclusion |
| Acute toxicity, by dermal route: | LD50 | >9400 | mg/kg | Rabbit | OECD 402 (Acute Dermal Toxicity) | Analogous conclusion |
| Acute toxicity, by inhalation: | LC50 | 0,527 | mg/l/4h | Rat | OECD 403 (Acute Inhalation Toxicity) | Aerosol, Does not conform with EU classification. |
| Acute toxicity, by inhalation: | ATE | 1,5 | mg/l | | | Aerosol, Expert judgement |

| | | | | | | |
|---|---|---|---|---|---|---|
| Skin corrosion/irritation: | | | | Rabbit | OECD 404 (Acute Dermal Irritation/Corrosion) | Skin Irrit. 2 |
| Serious eye damage/irritation: | | | | Rabbit | OECD 405 (Acute Eye Irritation/Corrosion) | Slightly irritant |
| Respiratory or skin sensitisation: | | | | Guinea pig | | Yes (inhalation), Analogous conclusion |
| Respiratory or skin sensitisation: | | | | Mouse | OECD 429 (Skin Sensitisation - Local Lymph Node Assay) | Yes (skin contact) |
| Germ cell mutagenicity: | | | | Salmonella typhimurium | OECD 471 (Bacterial Reverse Mutation Test) | Negative |
| Germ cell mutagenicity: | | | | Rat | OECD 474 (Mammalian Erythrocyte Micronucleus Test) | Negative, Analogous conclusion |
| Carcinogenicity: | | | | Rat | OECD 453 (Combined Chronic Toxicity/Carcinogenicity Studies) | Analogous conclusion, Aerosol, Carc. 2 |
| Reproductive toxicity: | NOAEL | 4-12 | mg/m3 | Rat | OECD 414 (Prenatal Developmental Toxicity Study) | No indications of such an effect., Aerosol, Analogous conclusion |
| Symptoms: | | | | | | respiratory distress, coughing, mucous membrane irritation |
| Specific target organ toxicity - repeated exposure (STOT-RE), inhalat.: | NOAEL | 0,2 | mg/m3 | Rat | OECD 453 (Combined Chronic Toxicity/Carcinogenicity Studies) | Aerosol, Target organ(s): respiratory system, Analogous conclusion |
| Specific target organ toxicity - repeated exposure (STOT-RE), inhalat.: | LOAEL | 1 | mg/m3 | Rat | OECD 453 (Combined Chronic Toxicity/Carcinogenicity Studies) | Aerosol, Target organ(s): respiratory system, Analogous conclusion |

**Calcium carbonate**

| Toxicity / effect | Endpoint | Value | Unit | Organism | Test method | Notes |
|---|---|---|---|---|---|---|
| Acute toxicity, by oral route: | LD50 | >2000 | mg/kg | Rat | OECD 420 (Acute Oral toxicity - Fixe Dose Procedure) | |
| Acute toxicity, by oral route: | LD50 | > 5000 | mg/kg | Rat | | |
| Acute toxicity, by dermal route: | LD50 | >2000 | mg/kg | Rat | OECD 402 (Acute Dermal Toxicity) | |
| Acute toxicity, by inhalation: | LC50 | >3 | mg/l/4h | Rat | OECD 403 (Acute Inhalation Toxicity) | |
| Skin corrosion/irritation: | | | | Rabbit | OECD 404 (Acute Dermal Irritation/Corrosion) | Not irritant |
| Serious eye damage/irritation: | | | | Rabbit | OECD 405 (Acute Eye Irritation/Corrosion) | Not irritant, Mechanical irritation possible. |
| Respiratory or skin sensitisation: | | | | | | No (skin contact) |
| Germ cell mutagenicity: | | | | | in vitro | Negative |
| Carcinogenicity: | | | | | | Negative, administered as Ca-lactate |
| Reproductive toxicity: | | | | | | Negative, administered as Ca-carbonate |

### 11.2. Information on other hazards

**COSMO® PU-125.130**
**COSMO® PU-125.120**

**(COSMOPUR 1811.30)**
**(COSMOPUR 1811.55)**

| Toxicity / effect | Endpoint | Value | Unit | Organism | Test method | Notes |
|---|---|---|---|---|---|---|
| Endocrine disrupting properties: | | | | | | Does not apply to mixtures. |
| Other information: | | | | | | No other relevant information available on adverse effects on health. |

## SECTION 12: Ecological information

Possibly more information on environmental effects, see Section 2.1 (classification).

**COSMO® PU-125.130**
**COSMO® PU-125.120**

**(COSMOPUR 1811.30)**
**(COSMOPUR 1811.55)**

| Toxicity / effect | Endpoint | Time | Value | Unit | Organism | Test method | Notes |
|---|---|---|---|---|---|---|---|
| 12.1. Toxicity to fish: | | | | | | | n.d.a. |
| 12.1. Toxicity to daphnia: | | | | | | | n.d.a. |
| 12.1. Toxicity to algae: | | | | | | | n.d.a. |
| 12.2. Persistence and degradability: | | | | | | | With water at the interface, transforms slowly with formation of CO2 into a firm, insoluble reaction product with a high melting point (polycarbamide). According to experience available to date, polycarbamide is inert and non-degradable. |
| 12.3. Bioaccumulative potential: | | | | | | | n.d.a. |
| 12.4. Mobility in soil: | | | | | | | n.d.a. |
| 12.5. Results of PBT and vPvB assessment | | | | | | | n.d.a. |
| 12.6. Endocrine disrupting properties: | | | | | | | Does not apply to mixtures. |
| 12.7. Other adverse effects: | | | | | | | No information available on other adverse effects on the environment. |

**Diphenylmethanediisocyanate, isomeres and homologues**

| Toxicity / effect | Endpoint | Time | Value | Unit | Organism | Test method | Notes |
|---|---|---|---|---|---|---|---|
| Other organisms: | NOEC/NOEL | 14d | >1000 | mg/kg | Avena sativa | OECD 208 (Terrestrial Plants, Growth Test) | |
| 12.1. Toxicity to fish: | LC0 | 96h | >1000 | mg/l | Brachydanio rerio | OECD 203 (Fish, Acute Toxicity Test) | |
| 12.1. Toxicity to daphnia: | NOEC/NOEL | 21d | >=10 | mg/l | Daphnia magna | OECD 211 (Daphnia magna Reproduction Test) | |
| 12.1. Toxicity to daphnia: | EC50 | 24h | >1000 | mg/l | Daphnia magna | OECD 202 (Daphnia sp. Acute Immobilisation Test) | |
| 12.1. Toxicity to algae: | ErC50 | 72h | >1640 | mg/l | Scenedesmus subspicatus | OECD 201 (Alga, Growth Inhibition Test) | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 12.2. Persistence and degradability: | | 28d | 0 | % | activated sludge | OECD 302 C (Inherent Biodegradability - Modified MITI Test (II)) | Not biodegradable, According to experience available to date, polycarbamide is inert and non-degradable., With water at the interface, transforms slowly with formation of CO2 into a firm, insoluble reaction product with a high melting point (polycarbamide). |
| 12.3. Bioaccumulative potential: | BCF | 42d | <14 | | Cyprinus carpio | OECD 305 (Bioconcentration - Flow-Through Fish Test) | Not to be expected |
| 12.5. Results of PBT and vPvB assessment | | | | | | | No vPvB substance, No PBT substance |
| Toxicity to bacteria: | EC50 | 3h | >100 | mg/l | activated sludge | OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation)) | |
| Other organisms: | NOEC/NOEL | 14d | >1000 | mg/kg | Lactuca sativa | OECD 208 (Terrestrial Plants, Growth Test) | |
| Toxicity to annelids: | NOEC/NOEL | 14d | >1000 | mg/kg | Lumbricus terrestris | OECD 207 (Earthworm, Acute Toxicity Tests) | |

**Poly[oxy(methyl-1,2-ethanediyl)], .alpha.-hydro-.omega.-hydroxy-**

| Toxicity / effect | Endpoint | Time | Value | Unit | Organism | Test method | Notes |
|---|---|---|---|---|---|---|---|
| 12.5. Results of PBT and vPvB assessment | | | | | | | No PBT substance, No vPvB substance |
| 12.1. Toxicity to fish: | LC50 | 96h | >100 | mg/l | Poecilia reticulata | OECD 203 (Fish, Acute Toxicity Test) | |
| 12.1. Toxicity to daphnia: | EC50 | 48h | >100 | mg/l | Daphnia magna | OECD 202 (Daphnia sp. Acute Immobilisation Test) | |
| 12.1. Toxicity to daphnia: | NOEC/NOEL | 21d | >=10 | mg/l | Daphnia magna | OECD 211 (Daphnia magna Reproduction Test) | Analogous conclusion |
| 12.1. Toxicity to algae: | EC0 | 72h | >= 100 | mg/l | Desmodesmus subspicatus | OECD 201 (Alga, Growth Inhibition Test) | |
| 12.2. Persistence and degradability: | | 28d | >60 | % | | OECD 301 F (Ready Biodegradability - Manometric Respirometry Test) | Readily biodegradable |
| Toxicity to bacteria: | EC50 | 3h | >1000 | mg/l | activated sludge | OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation)) | Analogous conclusion |

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

| Toxicity / effect | Endpoint | Time | Value | Unit | Organism | Test method | Notes |
|---|---|---|---|---|---|---|---|
| 12.7. Other adverse effects: | | | | | | | Product floats on the water surface. |
| 12.1. Toxicity to fish: | LC50 | 96h | 11,4 | mg/l | Oncorhynchus mykiss | OECD 203 (Fish, Acute Toxicity Test) | Goldforelle (Oncorhynchus aguabonita) |
| 12.1. Toxicity to fish: | NOEC/NOEL | 28d | 2,045 | mg/l | Oncorhynchus mykiss | QSAR | |
| 12.1. Toxicity to daphnia: | NOEC/NOEL | 21d | 1 | mg/l | Daphnia magna | OECD 211 (Daphnia magna Reproduction Test) | |
| 12.1. Toxicity to daphnia: | EC50 | 48h | 3 | mg/l | Daphnia magna | OECD 202 (Daphnia sp. Acute Immobilisation Test) | |
| 12.1. Toxicity to algae: | EC50 | 72h | 30 | mg/l | Pseudokirchneriella subcapitata | | |
| 12.2. Persistence and degradability: | | 28d | 100 | % | | OECD 301 F (Ready Biodegradability - Manometric Respirometry Test) | Readily biodegradable |

**4,4'-methylenediphenyl diisocyanate**

| Toxicity / effect | Endpoint | Time | Value | Unit | Organism | Test method | Notes |
|---|---|---|---|---|---|---|---|
| Other information: | | | | | | | According to experience available to date, polycarbamide is inert and non-degradable., With water at the interface, transforms slowly with formation of CO2 into a firm, insoluble reaction product with a high melting point (polycarbamide). |
| 12.4. Mobility in soil: | H (Henry) | | 0,0229 | Pa*m3/mol | | | |
| 12.1. Toxicity to fish: | LC50 | 96h | >1000 | mg/l | Brachydanio rerio | OECD 203 (Fish, Acute Toxicity Test) | Analogous conclusion |
| 12.2. Persistence and degradability: | | 28d | 0 | % | | OECD 302 C (Inherent Biodegradability - Modified MITI Test (II)) | Not biodegradable, With water at the interface, transforms slowly with formation of CO2 into a firm, insoluble reaction product with a high melting point (polycarbamide)., According to experience available to date, polycarbamide is inert and non-degradable., Analogous conclusion |
| 12.1. Toxicity to daphnia: | EC50 | 24h | >1000 | mg/l | Daphnia magna | OECD 202 (Daphnia sp. Acute Immobilisation Test) | Analogous conclusion |
| 12.1. Toxicity to daphnia: | NOEC/NOEL | 21d | >10 | mg/l | Daphnia magna | OECD 202 (Daphnia sp. Acute Immobilisation Test) | Analogous conclusion |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 12.3. Bioaccumulative potential: | Log Pow | | 5,22 | | | | A notable biological accumulation potential has to be expected (LogPow > 3). |
| 12.1. Toxicity to algae: | ErC50 | 72h | >1640 | mg/l | Desmodesmus subspicatus | OECD 201 (Alga, Growth Inhibition Test) | Analogous conclusion |
| 12.3. Bioaccumulative potential: | BCF | 28d | 200 | | Cyprinus caprio | IUCLID Chem. Data Sheet (ESIS) | Not to be expected |
| 12.5. Results of PBT and vPvB assessment | | | | | | | No PBT substance, No vPvB substance |
| Other information: | AOX | | | | | | Does not contain any organically bound halogens which can contribute to the AOX value in waste water. |
| Toxicity to bacteria: | EC50 | 3h | >100 | mg/l | activated sludge | OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation)) | Analogous conclusion |
| Other organisms: | NOEC/NOEL | 14d | >1000 | mg/kg | Lactuca sativa | OECD 208 (Terrestrial Plants, Growth Test) | Analogous conclusion |
| Other organisms: | NOEC/NOEL | 14d | >1000 | mg/kg | Avena sativa | OECD 208 (Terrestrial Plants, Growth Test) | Analogous conclusion |
| Toxicity to annelids: | NOEC/NOEL | 14d | >1000 | mg/kg | Lumbricus terrestris | OECD 207 (Earthworm, Acute Toxicity Tests) | Analogous conclusion |
| Toxicity to annelids: | EC50 | 14d | >1000 | mg/kg | Eisenia foetida | OECD 207 (Earthworm, Acute Toxicity Tests) | Analogous conclusion |

**o-(p-isocyanatobenzyl)phenyl isocyanate**

| Toxicity / effect | Endpoint | Time | Value | Unit | Organism | Test method | Notes |
|---|---|---|---|---|---|---|---|
| 12.1. Toxicity to fish: | LC50 | 96h | >1000 | mg/l | Brachydanio rerio | OECD 203 (Fish, Acute Toxicity Test) | Analogous conclusion |
| 12.1. Toxicity to daphnia: | EC50 | 24h | >1000 | mg/l | Daphnia magna | OECD 202 (Daphnia sp. Acute Immobilisation Test) | Analogous conclusion |
| 12.1. Toxicity to daphnia: | NOEC/NOEL | 21d | >10 | mg/l | Daphnia magna | OECD 202 (Daphnia sp. Acute Immobilisation Test) | Analogous conclusion |
| 12.1. Toxicity to algae: | ErC50 | 72h | >1640 | mg/l | Scenedesmus subspicatus | OECD 201 (Alga, Growth Inhibition Test) | Analogous conclusion |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 12.2. Persistence and degradability: | | 28d | 0 | % | | OECD 302 C (Inherent Biodegradability - Modified MITI Test (II)) | Not biodegradable, Analogous conclusion, According to experience available to date, polycarbamide is inert and non-degradable., With water at the interface, transforms slowly with formation of CO2 into a firm, insoluble reaction product with a high melting point (polycarbamide). |
| 12.3. Bioaccumulative potential: | BCF | 28d | 200 | | Cyprinus caprio | OECD 305 (Bioconcentration - Flow-Through Fish Test) | Not to be expected, Analogous conclusion |
| 12.4. Mobility in soil: | H (Henry) | | 0,0229 | Pa*m3/mol | | | |
| 12.5. Results of PBT and vPvB assessment | | | | | | | No PBT substance, No vPvB substance |
| Toxicity to bacteria: | EC50 | 3h | >100 | mg/l | activated sludge | OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation)) | Analogous conclusion |
| Other organisms: | NOEC/NOEL | 14d | >1000 | mg/kg | Avena sativa | OECD 208 (Terrestrial Plants, Growth Test) | Analogous conclusion |
| Other organisms: | NOEC/NOEL | 14d | >1000 | mg/kg | Lactuca sativa | OECD 208 (Terrestrial Plants, Growth Test) | Analogous conclusion |
| Toxicity to annelids: | NOEC/NOEL | 14d | >1000 | mg/kg | Eisenia foetida | OECD 207 (Earthworm, Acute Toxicity Tests) | Analogous conclusion |

**2,2'-methylenediphenyl diisocyanate**

| Toxicity / effect | Endpoint | Time | Value | Unit | Organism | Test method | Notes |
|---|---|---|---|---|---|---|---|
| 12.5. Results of PBT and vPvB assessment | | | | | | | No PBT substance, No vPvB substance |
| 12.4. Mobility in soil: | H (Henry) | | 0,0229 | Pa*m3/mol | | | |
| 12.1. Toxicity to fish: | LC50 | 96h | >1000 | mg/l | Brachydanio rerio | OECD 203 (Fish, Acute Toxicity Test) | Analogous conclusion |
| 12.1. Toxicity to daphnia: | NOEC/NOEL | 21d | >10 | mg/l | Daphnia magna | OECD 202 (Daphnia sp. Acute Immobilisation Test) | Analogous conclusion |
| 12.1. Toxicity to daphnia: | EC50 | 24h | >1000 | mg/l | Daphnia magna | OECD 202 (Daphnia sp. Acute Immobilisation Test) | Analogous conclusion |
| 12.1. Toxicity to algae: | EC50 | 72h | >1640 | mg/l | Scenedesmus subspicatus | OECD 201 (Alga, Growth Inhibition Test) | Analogous conclusion |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 12.2. Persistence and degradability: | | 28d | 0 | % | activated sludge | OECD 302 C (Inherent Biodegradability - Modified MITI Test (II)) | With water at the interface, transforms slowly with formation of CO2 into a firm, insoluble reaction product with a high melting point (polycarbamide)., According to experience available to date, polycarbamide is inert and non-degradable .., Analogous conclusion |
| 12.3. Bioaccumulative potential: | Log Pow | | 5,22 | | | | A notable biological accumulation potential has to be expected (LogPow > 3). |
| 12.3. Bioaccumulative potential: | BCF | 28d | 200 | | Cyprinus caprio | OECD 305 (Bioconcentration - Flow-Through Fish Test) | Not to be expected, Analogous conclusion |
| Toxicity to bacteria: | EC50 | 3h | >100 | mg/l | activated sludge | OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation)) | Analogous conclusion |
| Other organisms: | NOEC/NOEL | 14d | >1000 | mg/kg | Avena sativa | OECD 208 (Terrestrial Plants, Growth Test) | Analogous conclusion |
| Other organisms: | NOEC/NOEL | 14d | >1000 | mg/kg | Lactuca sativa | OECD 208 (Terrestrial Plants, Growth Test) | Analogous conclusion |
| Toxicity to annelids: | NOEC/NOEL | 14d | >1000 | mg/kg | Eisenia foetida | OECD 207 (Earthworm, Acute Toxicity Tests) | Analogous conclusion |

**Calcium carbonate**

| Toxicity / effect | Endpoint | Time | Value | Unit | Organism | Test method | Notes |
|---|---|---|---|---|---|---|---|
| Toxicity to bacteria: | EC50 | 3h | >1000 | mg/l | activated sludge | OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation)) | |
| Toxicity to annelids: | | | | | Eisenia foetida | OECD 207 (Earthworm, Acute Toxicity Tests) | Negative |
| 12.1. Toxicity to daphnia: | EC50 | 48h | >100 | mg/l | Daphnia magna | OECD 202 (Daphnia sp. Acute Immobilisation Test) | |
| 12.1. Toxicity to fish: | LC50 | 96h | >100 | mg/l | Oncorhynchus mykiss | OECD 203 (Fish, Acute Toxicity Test) | |
| 12.1. Toxicity to fish: | LC50 | 96h | >1000 | mg/l | Oncorhynchus mykiss | | |
| 12.1. Toxicity to daphnia: | EC50 | 48h | >1000 | mg/l | Daphnia magna | | |
| 12.1. Toxicity to algae: | EC50 | 72h | >200 | mg/l | Desmodesmus subspicatus | | |
| 12.1. Toxicity to algae: | EC50 | 72h | >14 | mg/l | Desmodesmus subspicatus | OECD 201 (Alga, Growth Inhibition Test) | |
| 12.2. Persistence and degradability: | | | | | | | Inorganic products cannot be eliminated from water through biological purification methods. |
| 12.3. Bioaccumulative potential: | | | | | | | Not relevant for inorganic substances . |
| 12.4. Mobility in soil: | | | | | | | Not relevant for inorganic substances . |
| 12.5. Results of PBT and vPvB assessment | | | | | | | Not relevant for inorganic substances . |

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

**For the substance / mixture / residual amounts**

EC disposal code no.:
The waste codes are recommendations based on the scheduled use of this product.
Owing to the user's specific conditions for use and disposal, other waste codes may be allocated under certain circumstances. (2014/955/EU)
08 04 09 waste adhesives and sealants containing organic solvents or other hazardous substances
08 05 01 waste isocyanates
Recommendation:
Sewage disposal shall be discouraged.
Pay attention to local and national official regulations.
E.g. suitable incineration plant.
Hardened product:
E.g. dispose at suitable refuse site.

**For contaminated packing material**

Pay attention to local and national official regulations.
Empty container completely.
Uncontaminated packaging can be recycled.
Dispose of packaging that cannot be cleaned in the same manner as the substance.
15 01 10 packaging containing residues of or contaminated by hazardous substances

## SECTION 14: Transport information

**General statements**

14.1. UN number or ID number: 1133

**Transport by road/by rail (ADR/RID)**

14.2. UN proper shipping name:
UN 1133 ADHESIVES
14.3. Transport hazard class(es): 3
14.4. Packing group: III
Classification code: F1
LQ: 5 L
14.5. Environmental hazards: Not applicable
Tunnel restriction code: E

**Transport by sea (IMDG-code)**

14.2. UN proper shipping name:
ADHESIVES
14.3. Transport hazard class(es): 3
14.4. Packing group: III
EmS: F-E, S-D
Marine Pollutant: n.a
14.5. Environmental hazards: Not applicable

**Transport by air (IATA)**

14.2. UN proper shipping name:
Adhesives
14.3. Transport hazard class(es): 3
14.4. Packing group: III
14.5. Environmental hazards: Not applicable

### 14.6. Special precautions for user

Unless specified otherwise, general measures for safe transport must be followed.

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

Non-dangerous material according to Transport Regulations.

## SECTION 15: Regulatory information

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

Observe restrictions:
Comply with national regulations/laws governing the protection of young people at work (national implementation of the Directive 94/33/EC)!
Regulation (EC) No 1907/2006, Annex XVII
Diphenylmethanediisocyanate, isomeres and homologues
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane
4,4'-methylenediphenyl diisocyanate
o-(p-isocyanatobenzyl)phenyl isocyanate
2,2'-methylenediphenyl diisocyanate
Comply with national regulations/laws governing maternity protection (national implementation of the Directive 92/85/EEC)!
Comply with trade association/occupational health regulations.

Directive 2012/18/EU ("Seveso III"), Annex I, Part 1 - The following categories apply to this product (others may also need to be considered according to storage, handling etc.):

| Hazard categories | Notes to Annex I | Qualifying quantity (tonnes) of dangerous substances as referred to in Article 3(10) for the application of - Lower-tier requirements | Qualifying quantity (tonnes) of dangerous substances as referred to in Article 3(10) for the application of - Upper-tier requirements |
|---|---|---|---|
| P5c | | 5000 | 50000 |

The Notes to Annex 1 of Directive 2012/18/EU, in particular those named in the tables here and notes 1-6, must be taken into account when assigning categories and qualifying quantities.

Directive 2010/75/EU (VOC): 5,81 %

### 15.2 Chemical safety assessment

A chemical safety assessment is not provided for mixtures.

## SECTION 16: Other information

Revised sections: 1-16
These details refer to the product as it is delivered.
Employee instruction/training in handling hazardous materials is required.

**Classification and processes used to derive the classification of the mixture in accordance with the ordinance (EG) 1272/2008 (CLP):**

| Classification in accordance with regulation (EC) No. 1272/2008 (CLP) | Evaluation method used |
|---|---|
| Flam. Liq. 2, H225 | Classification based on test data. |
| Eye Irrit. 2, H319 | Classification according to calculation procedure. |
| STOT SE 3, H335 | Classification according to calculation procedure. |
| Skin Irrit. 2, H315 | Classification according to calculation procedure. |
| Resp. Sens. 1, H334 | Classification according to calculation procedure. |
| Skin Sens. 1, H317 | Classification according to calculation procedure. |
| Carc. 2, H351 | Classification according to calculation procedure. |
| Aquatic Chronic 3, H412 | Classification according to calculation procedure. |
| STOT RE 2, H373 | Classification according to calculation procedure. |

The following phrases represent the posted Hazard Class and Risk Category Code (GHS/CLP) of the product and the constituents (specified in Section 2 and 3).
H225 Highly flammable liquid and vapour.
H373 May cause damage to organs through prolonged or repeated exposure by inhalation.
H302 Harmful if swallowed.
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.
H336 May cause drowsiness or dizziness.
H351 Suspected of causing cancer.
H411 Toxic to aquatic life with long lasting effects.

Flam. Liq. — Flammable liquid
Eye Irrit. — Eye irritation
STOT SE — Specific target organ toxicity - single exposure - respiratory tract irritation
Skin Irrit. — Skin irritation
Resp. Sens. — Respiratory sensitization
Skin Sens. — Skin sensitization
Carc. — Carcinogenicity
Aquatic Chronic — Hazardous to the aquatic environment - chronic
STOT RE — Specific target organ toxicity - repeated exposure
Acute Tox. — Acute toxicity - inhalation
Acute Tox. — Acute toxicity - oral
STOT SE — Specific target organ toxicity - single exposure - narcotic effects
Asp. Tox. — Aspiration hazard

**Key literature references and sources for data:**

Regulation (EC) No 1907/2006 (REACH) and Regulation (EC) No 1272/2008 (CLP) as amended.
Guidelines for the preparation of safety data sheets as amended (ECHA).
Guidelines on labelling and packaging according to the Regulation (EG) Nr. 1272/2008 (CLP) as amended (ECHA).
Safety data sheets for the constituent substances.
ECHA Homepage - Information about chemicals.
GESTIS Substance Database (Germany).
German Environment Agency "Rigoletto" information site on substances that are hazardous to water (Germany).
EU Occupation Exposure Limits Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164, (EU) 2019/1831, each as amended.
National Lists of Occupational Exposure Limits for each country as amended.
Regulations on the transport of hazardous goods by road, rail, sea and air (ADR, RID, IMDG, IATA) as amended.

## Any abbreviations and acronyms used in this document:

acc., acc. to according, according to
ADR Accord européen relatif au transport international des marchandises Dangereuses par Route (= European Agreement concerning the International Carriage of Dangerous Goods by Road)
AOX Adsorbable organic halogen compounds
approx. approximately
Art., Art. no. Article number
ASTM ASTM International (American Society for Testing and Materials)
ATE Acute Toxicity Estimate
BAM Bundesanstalt für Materialforschung und -prüfung (Federal Institute for Materials Research and Testing, Germany)
BAuA Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (= Federal Institute for Occupational Health and Safety, Germany)
BCF Bioconcentration factor
BSEF The International Bromine Council
bw body weight
CAS Chemical Abstracts Service
CLP Classification, Labelling and Packaging (REGULATION (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures)
CMR carcinogenic, mutagenic, reproductive toxic
DMEL Derived Minimum Effect Level
DNEL Derived No Effect Level
DOC Dissolved organic carbon
dw dry weight
e.g. for example (abbreviation of Latin 'exempli gratia'), for instance
EbCx, EyCx, EbLx (x = 10, 50) Effect Concentration/Level of x % on reduction of the biomass (algae, plants)
EC European Community
ECHA European Chemicals Agency
ECx, ELx (x = 0, 3, 5, 10, 20, 50, 80, 100) Effect Concentration/Level for x % effect
EEC European Economic Community
EINECS European Inventory of Existing Commercial Chemical Substances
ELINCS European List of Notified Chemical Substances
EN European Norms
EPA United States Environmental Protection Agency (United States of America)
ErCx, EμCx, ErLx (x = 10, 50) Effect Concentration/Level of x % on inhibition of the growth rate (algae, plants)
etc. et cetera
EU European Union
EVAL Ethylene-vinyl alcohol copolymer
Fax. Fax number
gen. general
GHS Globally Harmonized System of Classification and Labelling of Chemicals
GWP Global warming potential
Koc Adsorption coefficient of organic carbon in the soil
Kow octanol-water partition coefficient
IARC International Agency for Research on Cancer
IATA International Air Transport Association
IBC (Code) International Bulk Chemical (Code)
IMDG-code International Maritime Code for Dangerous Goods
incl. including, inclusive
IUCLID International Uniform Chemical Information Database
IUPAC International Union for Pure Applied Chemistry
LC50 Lethal Concentration to 50 % of a test population
LD50 Lethal Dose to 50% of a test population (Median Lethal Dose)
Log Koc Logarithm of adsorption coefficient of organic carbon in the soil
Log Kow, Log Pow Logarithm of octanol-water partition coefficient
LQ Limited Quantities
MARPOL International Convention for the Prevention of Marine Pollution from Ships
n.a. not applicable
n.av. not available
n.c. not checked
n.d.a. no data available
NIOSH National Institute for Occupational Safety and Health (USA)
NLP No-longer-Polymer
NOEC, NOEL No Observed Effect Concentration/Level
OECD Organisation for Economic Co-operation and Development
org. organic
OSHA Occupational Safety and Health Administration (USA)
PBT persistent, bioaccumulative and toxic
PE Polyethylene
PNEC Predicted No Effect Concentration
ppm parts per million
PVC Polyvinylchloride
REACH Registration, Evaluation, Authorisation and Restriction of Chemicals (REGULATION (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals)
REACH-IT List-No. 9xx-xxx-x No. is automatically assigned, e.g. to pre-registrations without a CAS No. or other numerical identifier. List Numbers do not have any legal significance, rather they are purely technical identifiers for processing a submission via REACH-IT.
RID Règlement concernant le transport International ferroviaire de marchandises Dangereuses (= Regulation concerning the International Carriage of Dangerous Goods by Rail)
SVHC Substances of Very High Concern
Tel. Telephone
TOC Total organic carbon
UN RTDG United Nations Recommendations on the Transport of Dangerous Goods
VOC Volatile organic compounds
vPvB very persistent and very bioaccumulative
wwt wet weight

The statements made here should describe the product with regard to the necessary safety precautions - they are
not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge.
No responsibility.
These statements were made by:
**Chemical Check GmbH, Chemical Check Platz 1-7, D-32839 Steinheim, Tel.: +49 5233 94 17 0, Fax: +49 5233 94 17 90**