

CB) Page 1 of 8 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 01.11.2021 / 0009 Replacing version tatel / version: 02.08.2021 / 0008 Valid from: 01.11.2021 PDF print date: 01.11.2021 COSMO® PU-160.540 COSMO® PU-160.690 COSMO® PU-160.710 COSMO® PU-160.720

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-160.540 COSMO® PU-160.690 COSMO® PU-160.710 COSMO® PU-160.720

1.2 Relevant identified uses of the substance or mixture and uses advised against Relevant identified uses of the substance or mixture: Adhesi 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 a | according to Regulat | ion (EC) 1272/2008 (CLP) |
|------------------|----------------------|--|
| Hazard class | Hazard category | Hazard statement |
| 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. |
| 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)



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. H373-May cause damage to organs through prolonged or repeated exposure by inhalation (respiratory system).

P201-Obtain special instructions before use. P260-Do not breathe vapours or spray. P280-Wear

P201-Obtain special instructions before Use. P200-D0 hot breather vapours or spray. P230-We protective gloves / protective clothing / eye protection / face protection. P284-Wear respiratory protection. P284-P382-IF ON SKIN: Wash with plenty of water / soap. 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.

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 Reaction mass of 4,4'-methylenediphenyl diisocyanate and o-(p-isocyanatobenzyl)phenyl isocyanate Methylenediphenyl diisocyanate, modified 2.3 Other hazards 2.3 Utter nazaros 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 %).</p> **SECTION 3: Composition/information on ingredients**

| n.a. 3 2 Mixturos | |
|--|--|
| 3.2 Mixtures Diphenylmethanediisocyanate, isomeres and | |
| nomologues Registration number (REACH) | |
| ndex | |
| INECS, ELINCS, NLP, REACH-IT List-No. | |
| AS ontent % | <u>9016-87-9</u> 10-<20 |
| lassification according to Regulation (EC) 1272/2008 | Acute Tox. 4, H332 |
| CLP), M-factors | Skin Irrit. 2, H315 Eye Irrit. 2, H319 |
| | Resp. Sens. 1, H334 |
| | Skin Sens. 1, H317 Carc. 2, H351 |
| | STOT SE 3, H335 |
| | STOT RE 2, H373 (respiratory system) (as inhalation) |
| pecific Concentration Limits and ATE | Skin Irrit. 2, H315: >=5 % |
| | Eye Irrit. 2, H319: >=5 % Resp. Sens. 1, H334: >=0,1 % |
| | STOT SE 3, H335: >=5 % |
| eaction mass of 4,4'-methylenediphenyl diisocyanate | |
| nd o-(p-isocyanatobenzyl)phenyl isocyanate | |
| egistration number (REACH) | 01-2119457015-45-XXXX |
| Idex INECS, ELINCS, NLP, REACH-IT List-No. | 905-806-4 |
| AS | |
| ontent % lassification according to Regulation (EC) 1272/2008 | 5-<10 Acute Tox. 4, H332 |
| CLP), M-factors | Skin Irrit. 2, H315 |
| | Eye Irrit. 2, H319 Skin Sens. 1, H317 |
| | Resp. Sens. 1, H334 |
| | Carc. 2, H351 STOT SE 3, H335 |
| | STOT RE 2, H373 (respiratory system) (as |
| pecific Concentration Limits and ATE | inhalation) Skin Irrit. 2, H315: >=5 % |
| pecific Concentration Limits and ATE | Eye Irrit. 2, H319: >=5 % |
| | Resp. Sens. 1, H334: >=0,1 % |
| | STOT SE 3, H335: >=5 % |
| Iethylenediphenyl diisocyanate, modified | 01-2119457013-49-XXXX |
| Registration number (REACH) ndex | |
| INECS, ELINCS, NLP, REACH-IT List-No. | 500-040-3 |
| AS ontent % | 25686-28-6 5-<10 |
| Classification according to Regulation (EC) 1272/2008 | Acute Tox. 4, H332 |
| CLP), M-factors | Skin Irrit. 2, H315 Eye Irrit. 2, H319 |
| | Skin Sens. 1, H317 |
| | Resp. Sens. 1, H334 Carc. 2, H351 |
| | STOT SE 3, H335 |
| | STOT RE 2, H373 (respiratory system) (as inhalation) |
| pecific Concentration Limits and ATE | Skin Irrit. 2, H315: >=5 % |
| | Eye Irrit. 2, H319: >=5 % Resp. Sens. 1, H334: >=0,1 % |
| | STOT SE 3, H335: >=5 % |
| ropylene carbonate | |
| egistration number (REACH) | 01-2119537232-48-XXXX |
| Idex INECS, ELINCS, NLP, REACH-IT List-No. | 607-194-00-1 203-572-1 |
| AS | 108-32-7 |
| ontent % | 5-<10 Evolveit 2 H210 |
| lassification according to Regulation (EC) 1272/2008 CLP), M-factors | Eye Irrit. 2, H319 |
| | |
| 4 mothy long dishen yil dija a su su sta | |
| | 01-2119457014-47-XXXX |
| egistration number (REACH) ndex | 615-005-00-9 |
| egistration number (REACH) ndex INECS, ELINCS, NLP, REACH-IT List-No. | 615-005-00-9 202-966-0 |
| egistration number (REACH) Idex INECS, ELINCS, NLP, REACH-IT List-No. AS ontent % | 615-005-00-9 202-966-0 101-68-8 17 |
| egistration number (REACH) Idex INECS, ELINCS, NLP, REACH-IT List-No. IAS ontent % Tassification according to Regulation (EC) 1272/2008 | 615-005-00-9 202-966-0 101-68-8 1-<7 Acute Tox. 4, H332 |
| egistration number (REACH) Idex INECS, ELINCS, NLP, REACH-IT List-No. IAS ontent % Tassification according to Regulation (EC) 1272/2008 | 615-005-00-9 202-966-0 101-68-8 17 |
| egistration number (REACH) Idex INECS, ELINCS, NLP, REACH-IT List-No. IAS ontent % Tassification according to Regulation (EC) 1272/2008 | 615-005-00-9 202-966-0 101-68-8 1-<7 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Resp. Sens. 1, H334 |
| egistration number (REACH) Idex INECS, ELINCS, NLP, REACH-IT List-No. IAS ontent % lassification according to Regulation (EC) 1272/2008 | 615-005-00-9 202-966-0 101-68-8 1-<7 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 |
| egistration number (REACH) Idex INECS, ELINCS, NLP, REACH-IT List-No. IAS ontent % lassification according to Regulation (EC) 1272/2008 | 615-005-00-9 202-966-0 101-68-8 1-<7 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Resp. Sens. 1, H317 Carc. 2, H351 STOT SE 3, H335 |
| egistration number (REACH) Idex INECS, ELINCS, NLP, REACH-IT List-No. IAS ontent % lassification according to Regulation (EC) 1272/2008 | 615-005-00-9 202-966-0 101-68-8 1-<7 Acute Tox. 4, H332 Skin Irit. 2, H315 Eye Irit. 2, H319 Resp. Sens. 1, H317 Carc. 2, H351 STOT SE 3, H335 STOT SE 2, H373 (respiratory system) (as |
| tegistration number (REACH) ndex INECS, ELINCS, NLP, REACH-IT List-No. AS ontent % Jassification according to Regulation (EC) 1272/2008 CLP), M-factors | 615-005-00-9 202-966-0 101-68-8 1-<7 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Resp. Sens. 1, H317 Carc. 2, H351 STOT SE 3, H335 STOT RE 2, H373 (respiratory system) (as inhalation) Skin Irrit. 2, H315: >=5 % |
| k,4-methylenediphenyl diisocyanate Registration number (REACH) ndex INECS, ELINCS, NLP, REACH-IT List-No. SAS Jassification according to Regulation (EC) 1272/2008 CLP), M-factors | 615-005-00-9 202-966-0 101-68-8 1-<7 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Resp. Sens. 1, H334 Skin Sens. 1, H317 Carc. 2, H351 STOT SE 3, H335 STOT RE 2, H373 (respiratory system) (as inhalation) |

a and additional information may have been taken into account in classifying and labelling Implifies, less data and additional information may neve been taken mice become a strategy in 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!



| GB Page 2 of 8 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II | Avoid inholation of the | | | | | | |
|---|---|---|---|------------------------|-------------|----------------------|---------------|
| Safety data sheet according to Regulation (EC) No 1907/2006, Annex II | Avoid inhalation of the | vapours. neasures at the workstation | on or on the processi | na machine | necessar | v | |
| Revision date / version: 01.11.2021 / 0009 | Avoid contact with eye | | | ng maonine | neccosai | y. | |
| Replacing version dated / version: 02.08.2021 / 0008 | No contact with produc | cts of this type in case of | allergies, asthma und | d chronic res | piratory ti | act disorde | rs. |
| Valid from: 01.11.2021 | | ing, as well as food-stora | | ork-room. | | | |
| PDF print date: 01.11.2021 COSMO® PU-160.540 | | label and instructions for according to operating in | | | | | |
| COSMO® PU-160.690 | | eneral hygiene me | | orkolaco | | | |
| COSMO® PU-160.710 | | sures for the handling of c | | | • | | |
| COSMO® PU-160.720 | | eaks and at end of work. | | | | | |
| Encycle damae that are listed in annual in Musella 0.4 c(the completion (EQ) and 4070/0000 (OLD encycletion) | Keep away from food, | drink and animal feeding | | | | | |
| 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. | | clothing and protective e | | | | ood is consi | umed. |
| The addition of the highest concentrations listed here can result in a classification. Only when this | | or safe storage, ind | | ompatibi | lities | | |
| classification is listed in Section 2 does it apply. In all other cases the total concentration is below the | Keep out of access to | unauthorised individuals. | | | | | |
| classification. | Not to be stored in gan | ngways or stair wells. Ind only in original packin | a | | | | |
| SECTION 4. Einst aid massures | | irect sunlight and temper | | | | | |
| SECTION 4: First aid measures | Only store at temperat | ures from 15°C to 25°C. | | | | | |
| | Store in a dry place. | | | | | | |
| 4.1 Description of first aid measures | 7.3 Specific end | use(s) | | | | | |
| First-aiders should ensure they are protected! | Adhesive | | | | | | |
| Never pour anything into the mouth of an unconscious person! | | ns for good working pract | | | | | |
| Inhalation | industry or different inc | ostance information syste | nis, e.g. nom tile pro | lessional as | SUCIALIUN | s, the chem | ICdi |
| Remove person from danger area. | | ication (building materials | s, wood, chemistry, la | aboratory, lea | ather, me | tal). | |
| 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. | Observe special requir | ements for isocyanates, | | | | | definition |
| Respiratory arrest - Artificial respiration apparatus necessary. | of protective measures | S. | | | | | |
| Skin contact | SECT | ION 8: Exposur | a controls/n | orsonal | nrote | ction | |
| Wipe off residual product carefully with a soft, dry cloth. | 02011 | | c 00111 013/p | ci soniui | prote | | |
| Remove polluted, soaked clothing immediately, wash thoroughly with plenty of water and soap, in case of | | | | | | | |
| irritation of the skin (flare), consult a doctor. | 8.1 Control para | meters | | | | | |
| Dab away with polyethylene glycol 400 | · · | | | | | | |
| Eye contact Remove contact lenses. | GB Chemical Name | | anediisocyanate, isor | | | | |
| Remove contact lenses. Wash thoroughly for several minutes using copious water - call doctor immediately, have Data Sheet available. | WEL-TWA: 0,02 mg/ | | VEL-STEL: 0,07 m | g/m3 (Isocya | inates, | | |
| Ingestion | all (as -NCO)) Monitoring procedures | | II (as -NCO)) | | | | |
| Rinse the mouth thoroughly with water. | | anate-derived diamine/m | ol creatinine in urine | Other in | formation | n: Sen | |
| Do not induce vomiting - give copious water to drink. Consult doctor immediately. | (At the end of the perio | | | | | (as -NCO)) | |
| 4.2 Most important symptoms and effects, both acute and delayed | | Deseties | | a ha sa a di all'a a s | | | |
| If applicable delayed symptoms and effects can be found in section 11 and the absorption route in section 4.1. | GB Chemical Name | | s of 4,4'-methylenedi zyl)phenyl isocyanat | | cyanate a | na o-(p- | |
| In certain cases, the symptoms of poisoning may only appear after an extended period / after several hours. | WEL-TWA: 0,02 mg/ | | VEL-STEL: 0,07 m | | inates. | | |
| 4.3 Indication of any immediate medical attention and special treatment needed | all (as -NCO)) | a | ll (as -NCO)) | 5 . (, . | , | | |
| In case of irritation of the lungs, perform first-aid with controlled-dosage aerosol dexamethasone. Pulmonary oedema prophylaxis | Monitoring procedures | : <u></u> | | 0.1 | | | |
| Medical supervision necessary due to possibility of delayed reaction. | (At the end of the period | anate-derived diamine/m | ol creatinine in urine | | nformation | i: Sen (as -NCO)) | |
| | | | | | natos, an | | |
| SECTION 5: Firefighting measures | GB Chemical Name | | enyl diisocyanate, m | | | | |
| | * WEL-TWA: 0,02 mg/ all (as -NCO)) | | VEL-STEL: 0,07 m II (as -NCO)) | g/m3 (Isocya | inates, | | |
| 5.1 Extinguishing media | Monitoring procedures | | 16702 (Workplace a | air quality – q | determina | tion of total | |
| Suitable extinguishing media | | | yanate groups in air | | | | zine and |
| CO2 | | - liqu | id chromatography) - | 2007 | | | |
| Extinction powder | | MD | HS 25/4 (Organic iso | cyanates in | air – Lab | pratory meth | nod using |
| Water jet spray | | | npling either onto 2-(e filters followed by s | | | | |
| Foam | | | lysis using high perfe | | | | |
| Unsuitable extinguishing media | | anate-derived diamine/m | | | formation | | |
| High volume water jet | (At the end of the period | od of exposure) | | | | | |
| 5.2 Special hazards arising from the substance or mixture | GB Chemical Name | 4 4'-methylene | diphenyl diisocyanat | e | | | |
| In case of fire the following can develop: Oxides of carbon | WEL-TWA: 0,02 mg/ | | VEL-STEL: 0,07 m | | inates, | | |
| Oxides of nitrogen | all (as -NCO)) | a | II (as -NCO)) | | | | |
| Isocyanates | Monitoring procedures | : ISC | 16702 (Workplace a syanate groups in air | | | | to a solution |
| Hydrocyanic acid (hydrogen cyanide) | | | id chromatography) - | | lietnoxypr | ienyipipera. | zine and |
| Toxic gases Danger of bursting (explosion) when heated | | | HS 25/4 (Organic iso | | air – Lab | oratory meth | nod using |
| 5.3 Advice for firefighters | | | npling either onto 2-(| | | | |
| For personal protective equipment see Section 8. | | | e filters followed by s lysis using high perfe | | | | |
| In case of fire and/or explosion do not breathe fumes. | | | project BC/CEN/EN | | | | 2015 - |
| Protective respirator with independent air supply. | | | SH 5521 (ISOCYAN | | | | |
| According to size of fire Full protection, if necessary. | | | SH 5522 (ISOCYAN | | | | |
| Cool container at risk with water. | | | SH 5525 (ISOCYAN HA 18 (Diisocyanate | | | | |
| Dispose of contaminated extinction water according to official regulations. | | | HA 18 (Dilsocyanate HA 47 (Methylene Bi | | | | |
| SECTION 6: Accidental release measures | | anate-derived diamine/m | ol creatinine in urine | Other in | nformation | n: Sen | |
| SECTION 6. ACCIDENTAL TELEASE INEASULES | (At the end of the period | od of exposure) | | (Isocya | nates, all | (as -NCO)) | |
| | | | | | | | |
| 6.1 Personal precautions, protective equipment and emergency procedures | | | | | | | |
| 6.1.1 For non-emergency personnel | | ocyanate, isomeres and | | Der 1 | N | 1114 | Nete |
| In case of spillage or accidental release, wear personal protective equipment as specified in section 8 to | Area of application | Exposure route / Environmental | Effect on health | Descri ptor | Valu e | Unit | Note |
| prevent contamination. Ensure sufficient ventilation, remove sources of ignition. | | compartment | neaith | pior | e | | |
| Avoid dust formation with solid or powder products. | | Environment - | | PNEC | 3,7 | µg/l | |
| Leave the danger zone if possible, use existing emergency plans if necessary. | | freshwater | | | | | |
| Ensure sufficient supply of air. | | Environment - marine | | PNEC | 0,37 | µg/l | |
| Avoid inhalation, and contact with eyes or skin. | | Environment - | | PNEC | 11,7 | mg/kg | <u> </u> |
| If applicable, caution - risk of slipping. 6.1.2 For emergency responders | | sediment, freshwater | | | | | |
| See section 8 for suitable protective equipment and material specifications. | | Environment - | | PNEC | 1,17 | mg/kg | |
| 6.2 Environmental precautions | | sediment, marine | | DNEO | 2.22 | ma/ka | |
| If leakage occurs, dam up. | Workers / | Environment - soil Human - inhalation | Short term, | PNEC DNEL | 2,33 0,1 | mg/kg mg/m3 | |
| Resolve leaks if this possible without risk. | employees | | local effects | DINEL | 0,1 | ilig/ilio | |
| Prevent surface and ground-water infiltration, as well as ground penetration. | Workers / | Human - inhalation | Long term, | DNEL | 0,05 | mg/m3 | |
| Prevent from entering drainage system. | employees | | local effects | | | | |
| 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 | Reaction mass of 4 4 | -methylenediphenyl dii | socyanate and o-(n | -isocvanato | benzvi)n | henvl isoc | vanate |
| Soak up with absorbent material (e.g. universal binding agent, sand, diatomaceous earth, sawdust) and dispose of according to Section 13. | Area of application | Exposure route / | Effect on | Descri | Valu | Unit | Note |
| Allow to stand for a few days in an unclosed container until reaction no longer occurs. | | Environmental | health | ptor | e | | |
| Keep moist. | | compartment | | | 67 | | |
| Do not close packing drum. | | Environment - | | PNEC | 37 | µg/l | |
| CO2 formation in closed tanks causes pressure to rise. | | freshwater Environment - | | PNEC | 0,37 | µg/l | |
| 6.4 Reference to other sections For personal protective equipment see Section 8 and for disposal instructions see Section 13. | | marine | | | | | |
| | | Environment - soil | | PNEC | 2,33 | mg/kg | |
| SECTION 7: Handling and storage | | Environment - | | PNEC | 1 | mg/l | 7 |
| | | | | | | | |
| | | sewage treatment | | | | | |
| In addition to information given in this section, relevant information can also be found in section 8 and 6.1 | | | | PNEC | 3,7 | µg/l | |
| 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 | | sewage treatment plant Environment - water, sporadic | | PNEC | 3,7 | µg/l | |
| 7.1 Precautions for safe handling | | sewage treatment plant Environment - | | PNEC | 3,7 | µg/l | |
| | | sewage treatment plant Environment - water, sporadic | | PNEC | 3,7 | µg/I | |



GB Page 3 of 8 Safety data sheet according to Regulation (EC) No 1907/2006, Annex II Revision date / version: 01.11.2021 / 0009 Replacing version tatel / version: 02.08.2021 / 0008 Valid from: 01.11.2021 PDF print date: 01.11.2021 COSMO® PU-160.540 COSMO® PU-160.690 COSMO® PU-160.710 COSMO® PU-160.720

| | Environment - sediment, freshwater | | PNEC | 11,7 | mg/kg dry weight | |
|------------------------|---------------------------------------|------------------------------|------|-----------|------------------------|--|
| | Environment - sediment, marine | | PNEC | 1,17 | mg/kg dry weight | |
| Consumer | Human - inhalation | Long term, local effects | DNEL | 0,02 5 | mg/m3 | |
| Consumer | Human - inhalation | Short term, local effects | DNEL | 0,05 | mg/m3 | |
| Workers / employees | Human - inhalation | Short term, local effects | DNEL | 0,1 | mg/m3 | |
| Workers / employees | Human - inhalation | Long term, local effects | DNEL | 0,05 | mg/m3 | |

| Area of application | Exposure route / Environmental compartment | Effect on health | Descri ptor | Valu e | Unit | Note |
|------------------------|---|--------------------------------|----------------|-----------|-------|------|
| | Environment - sporadic (intermittent) release | | PNEC | 9 | mg/l | |
| | Environment - marine | | PNEC | 0,09 | mg/l | |
| | Environment - sediment, marine | | PNEC | 0,08 3 | mg/l | |
| | Environment - soil | | PNEC | 0,81 | mg/l | |
| | Environment - freshwater | | PNEC | 0,9 | mg/l | |
| | Environment - sediment, freshwater | | PNEC | 0,83 | mg/l | |
| | Environment - sewage treatment plant | | PNEC | 740 0 | mg/l | |
| Consumer | Human - oral | Long term, systemic effects | DNEL | 10 | mg/kg | |
| Consumer | Human - dermal | Long term, systemic effects | DNEL | 10 | mg/kg | |
| Consumer | Human - inhalation | Long term, local effects | DNEL | 10 | mg/m3 | |
| Consumer | Human - inhalation | Long term, systemic effects | DNEL | 17,4 | mg/m3 | |
| Workers / employees | Human - inhalation | Long term, systemic effects | DNEL | 70,5 3 | mg/kg | |
| Workers / employees | Human - inhalation | Long term, systemic effects | DNEL | 176 | mg/m3 | |
| Workers / employees | Human - dermal | Long term, systemic effects | DNEL | 20 | mg/kg | |
| Workers / employees | Human - inhalation | Long term, local effects | DNEL | 20 | mg/m3 | |

| Area of application | Exposure route / | Effect on | Descri | Valu | Unit | Note | |
|---------------------|------------------------|------------------|----------|------|--------|------|--|
| | Environmental | health | ptor | e | | | |
| | compartment | | P | - | | | |
| | Environment - | | PNEC | 3,7 | µg/l | | |
| | freshwater | | | | | | |
| | Environment - | | PNEC | 0,37 | µg/l | | |
| | marine | | | | | | |
| | Environment - | | PNEC | 1 | mg/l | | |
| | sewage treatment | | | | - | | |
| | plant | | | | | | |
| | Environment - soil | | PNEC | 2,33 | mg/kg | | |
| | | | | | dw | | |
| | Environment - | | PNEC | 37 | µg/l | | |
| | sporadic | | | | | | |
| | (intermittent) release | | | | | | |
| | Environment - | | PNEC | 11,7 | mg/kg | | |
| | sediment, freshwater | | | | dry | | |
| | | | | | weight | | |
| | Environment - | | PNEC | 1,17 | mg/kg | | |
| | sediment, marine | | | | dry | | |
| | | | | | weight | | |
| Consumer | Human - oral | Short term, | DNEL | 20 | mg/kg | | |
| | | systemic effects | | | bw/day | | |
| Consumer | Human - dermal | Short term, | DNEL | 17,2 | mg/cm | | |
| | | local effects | | | 2 | | |
| Consumer | Human - dermal | Short term, | DNEL | 25 | mg/kg | | |
| | | systemic effects | | | bw/day | | |
| Consumer | Human - inhalation | Short term, | DNEL | 0,05 | mg/m3 | | |
| | | local effects | | | - | | |
| Consumer | Human - inhalation | Short term, | DNEL | 0,05 | mg/m3 | | |
| | | systemic effects | | | | | |
| Consumer | Human - inhalation | Long term, | DNEL | 0,02 | mg/m3 | | |
| | | local effects | | 5 | | | |
| Consumer | Human - inhalation | Long term, | DNEL | 0,02 | mg/m3 | | |
| | | systemic effects | | 5 | | | |
| Workers / | Human - dermal | Short term, | DNEL | 28,7 | mg/cm | | |
| employees | | local effects | | | 2 | | |
| Workers / | Human - dermal | Short term, | DNEL | 50 | mg/kg | | |
| employees | | systemic effects | | | bw/day | | |
| Workers / | Human - inhalation | Short term, | DNEL | 0,1 | mg/m3 | | |
| employees | | local effects | | | | | |
| Workers / | Human - inhalation | Short term, | DNEL | 0,1 | mg/m3 | | |
| employees | | systemic effects | | | | | |
| Workers / | Human - inhalation | Long term, | DNEL | 0,05 | mg/m3 | | |
| employees | | local effects | | | - | | |
| Workers / | Human - inhalation | Long term, | DNEL | 0,05 | mg/m3 | | |
| employees | | systemic effects | | | | | |

 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). (9) = Respirable fraction (Directive 2017/164/EU, Directive 2004/37/CE). (11) = Inhalable fraction (Directive 2004/37/CE). (12) = Inhalable fraction in those Member States that implement, on the date of the entry into force of this Directive automative to biomediate 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, (a) = initiaadier taction (2017/04/E0, 2017/2596/E0). (b) = Kespiratier faultin (2017/04/E0, 2017/2598/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

(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 exposure to chemical and biological agents" Guide for the application and use of procedures for the assessment of

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.

Eve/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:

>= 120 The breakthrough times determined in accordance with EN 16523-1 were not obtained under practical

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 themeteric to expect the second 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 manufacture

values inclining additional additional 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 pro

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

| Physical state: | Liquid |
|---|--|
| Colour: | Reddish |
| Odour: | Characteristic |
| Melting point/freezing point: | There is no information available on this parameter. |
| Boiling point or initial boiling point and boiling range: | There is no information available on this parameter. |
| Flammability: | Combustible. |
| Lower explosion limit: | There is no information available on this parameter. |
| Upper explosion limit: | There is no information available on this parameter. |
| Flash point: | There is no information available on this parameter. |
| 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: | 4100 mPas (Dynamic viscosity) |
| Solubility: | Not miscible |
| 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: | ~1,1 g/cm3 (20°C) |
| 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 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:



| (GB) | | | | | | | | | | | | | |
|--|--|----------------------------------|---|---|--|---|---|----------------------|----------------------------|---|--|---|--|
| Page 4 of 8 Safety data sheet accor Revision date / version: Replacing version datec Valid from: 01.11.2021 PDF print date: 01.11.21 COSMO® PU-160.540 COSMO® PU-160.590 | 01.11.2021 I / version: 0 | / 0009 | | 06, Annex II | | | Specific target organ toxicity - single exposure (STOT-SE), inhalative: Specific target organ | | | | | | Target organ(s): respiratory system, May cause respiratory irritation. Target |
| COSMO® PU-160.710 COSMO® PU-160.720 | | | | | | | toxicity - repeated exposure (STOT-RE), | | | | | | organ(s): respiratory |
| Carbon dioxide | | | | | | | inhalat.: Symptoms: | | | | | | system breathing |
| CO2 formation in closed Pressure increase will re 10.4 Conditions t e Protect from humidity. Polymerisation due to h | esult in dang o avoid | er of bursting | | | | | Specific target organ toxicity - repeated exposure (STOT-RE), inhalat.: | LOAE L | 1 | mg/m 3 | Rat | OECD 453 (Combined Chronic Toxicity/Carcinog | difficulties Aerosol, Analogous conclusion |
| T > ~ 260°C 10.5 Incompatible Acids Bases | material | s | | | | | Specific target organ toxicity - repeated exposure (STOT-RE), inhalat.: | NOAE L | 0,2 | mg/m 3 | Rat | enicity Studies) OECD 453 (Combined Chronic Toxicity/Carcinog | Aerosol, Analogous conclusion |
| Amines Alcohols | | | | | | | | | | | | enicity Studies) | |
| Water 10.6 Hazardous d | ecompos | sition pro | ducts | | | | Reaction mass of 4,4'-n Toxicity / effect | nethylened Endpo | iphenyl diisc Value | cyanate a Unit | nd o-(p-isocy Organis | anatobenzyl)phenyl Test method | isocyanate Notes |
| No decomposition when | | | | | | | | int | | | m | | Notes |
| | SECTIO | N 11: To | oxicolo | gical info | ormation | | Acute toxicity, by oral route: | LD50 | > 10000 | mg/k g | Rat | | |
| | | | | | | | Acute toxicity, by dermal route: | LD50 | > 9400 | mg/k g | Rabbit | | |
| 11.1. Information Possibly more information | | | | | | 1272/2008 | Acute toxicity, by inhalation: | LC50 | 0,49 | mg/l/ 4h | Rat | | Mist, Dust:, |
| COSMO® PU-160.540 COSMO® PU-160.690 COSMO® PU-160.710 COSMO® PU-160.720 | | | | | | | | | | | | | Does not conform with EU classificatio |
| Toxicity / effect | Endpo int | Value | Unit | Organis m | Test method | Notes | Skin | | | | Rabbit | OECD 404 | n. Irritant |
| Acute toxicity, by oral route: Acute toxicity, by | | | | | | n.d.a. | corrosion/irritation: | | | | | (Acute Dermal Irritation/Corrosio n) | |
| dermal route: Acute toxicity, by inhalation: | ATE | >20 | mg/l/ 4h | | | calculated value, | Respiratory or skin sensitisation: | | | | Guinea pig | OECD 406 (Skin Sensitisation) | Yes (inhalation and skin |
| Skin corrosion/irritation: | | | | | | Vapours n.d.a. | Germ cell mutagenicity: | | | | Salmonel | Regulation (EC) 440/2008 | contact) Negative |
| Serious eye | | | | | | n.d.a. | | | | | typhimuri um | B.13/B.14 (REVERSE | |
| damage/irritation: Respiratory or skin | | | | | | n.d.a. | | | | | un | MUTATION TEST USING | |
| sensitisation: Germ cell | | | - | | | n.d.a. | Germ cell | | | | Rat | BACTERIA) OECD 474 | Negotivo |
| mutagenicity: Carcinogenicity: Reproductive toxicity: Specific target organ | | | | | | n.d.a. n.d.a. n.d.a. | mutagenicity: | | | | Rat | (Mammalian Erythrocyte Micronucleus Test) | Negative |
| toxicity - single exposure (STOT-SE): Specific target organ toxicity - repeated | | | | | | n.d.a. | Carcinogenicity: | | | | Rat | OECD 453 (Combined Chronic | Carc. 2 |
| | | | | | | | | | | | | Toxicity/Carcinog | |
| exposure (STOT-RE): Aspiration hazard: | | | | | | n.d.a. | | | | | | | |
| exposure (STOT-RE): Aspiration hazard: Symptoms: | | moros and | homologu | | | n.d.a. n.d.a. | Methylenediphenyl diis Toxicity / effect | | modified Value | Unit | Organis | Toxicity/Carcinog enicity Studies) | Notes |
| exposure (STOT-RE): Aspiration hazard: | Endpo | omeres and Value | homologue | Organis | Test method | | Toxicity / effect | Endpo int | Value | Unit | Organis m Rat | Toxicity/Carcinog enicity Studies) Test method | Notes |
| exposure (STOT-RE): Aspiration hazard: Symptoms: Diphenylmethanediiso | | | | | OECD 401 (Acute Oral | n.d.a. | Toxicity / effect Acute toxicity, by oral route: | Endpo | modified Value >2000 | Unit mg/k g | m Rat | Toxicity/Carcinog enicity Studies) Test method OECD 401 (Acute Oral Toxicity) | Analogous conclusion |
| exposure (STOT-RE): Aspiration hazard: Symptoms: Diphenylmethanediiso Toxicity / effect Acute toxicity, by oral | Endpo int | Value | Unit mg/k | Organis m | OECD 401 (Acute Oral Toxicity) OECD 402 (Acute Dermal | n.d.a. | Skin corrosion/irritation: | Endpo int | Value | mg/k | m Rat Rabbit | Toxicity/Carcinog enicity Studies) Test method OECD 401 (Acute Oral Toxicity) OECD 404 (Acute Dermal Irritation/Corrosio n) | Analogous conclusion Skin Irrit. 2 |
| exposure (STOT-RE): Aspiration hazard: Symptoms: Diphenylmethanediiso Toxicity / effect Acute toxicity, by oral route: Acute toxicity, by | Endpo int LD50 | Value >5000 | Unit mg/k g mg/k | Organis m Rat | OECD 401 (Acute Oral Toxicity) OECD 402 | Aerosol, Does not conform | Toxicity / effect Acute toxicity, by oral route: Skin corrosion/irritation: Serious eye damage/irritation: | Endpo int | Value | mg/k | m Rat | Toxicity/Carcinog enicity Studies) Test method OECD 401 (Acute Oral Toxicity) OECD 404 (Acute Dermal Irritation/Corrosio | Analogous conclusion Skin Irrit. 2 Eye Irrit. 2 |
| exposure (STOT-RE): Aspiration hazard: Symptoms: Diphenylmethanediiso Toxicity / effect Acute toxicity, by oral route: Acute toxicity, by dermal route: Acute toxicity, by | Endpo int LD50 LD50 | Value >5000 >5000 0,31- | Unit mg/k g mg/k g mg/l/ | Organis m Rat Rabbit | OECD 401 (Acute Oral Toxicity) OECD 402 (Acute Dermal Toxicity) OECD 403 (Acute Inhalation | n.d.a. Notes Aerosol, Does not conform with EU classificatio | Toxicity / effect Acute toxicity, by oral route: Skin corrosion/irritation: Serious eye | Endpo int | Value | mg/k | m Rat | Toxicity/Carcinog enicity Studies) Test method OECD 401 (Acute Oral Toxicity) OECD 404 (Acute Dermal Irritation/Corrosio n) OECD 405 (Acute Eye Irritation/Corrosio n) | Analogous conclusion Skin Irrit. 2 Eye Irrit. 2 Yes (inhalation) |
| exposure (STOT-RE): Aspiration hazard: Symptoms: DiphenyImethanediiso Toxicity / effect Acute toxicity, by oral route: Acute toxicity, by dermal route: Acute toxicity, by inhalation: Skin | Endpo int LD50 LD50 | Value >5000 >5000 0,31- | Unit mg/k g mg/k g mg/l/ | Organis m Rat Rabbit | OECD 401 (Acute Oral Toxicity) OECD 402 (Acute Dermal Toxicity) OECD 403 (Acute Inhalation Toxicity) OECD 404 | n.d.a. Notes Aerosol, Does not conform with EU | Toxicity / effect Acute toxicity, by oral route: Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitisation: Respiratory or skin sensitisation: | Endpo int | Value | mg/k | m Rat Rabbit Rabbit Mouse Guinea pig | Toxicity/Carcinog enicity Studies) Test method OECD 401 (Acute Oral Toxicity) OECD 404 (Acute Dermal Irritation/Corrosio n) OECD 405 (Acute Eye Irritation/Corrosio n) OECD 406 (Skin Sensitisation) | Analogous conclusion Skin Irrit. 2 Eye Irrit. 2 Yes |
| exposure (STOT-RE): Aspiration hazard: Symptoms: Diphenylmethanediiso Toxicity / effect Acute toxicity, by oral route: Acute toxicity, by dermal route: Acute toxicity, by inhalation: | Endpo int LD50 LD50 | Value >5000 >5000 0,31- | Unit mg/k g mg/k g mg/l/ | Organis m Rat Rabbit Rat | OECD 401 (Acute Oral Toxicity) OECD 402 (Acute Dermal Toxicity) OECD 403 (Acute Inhalation Toxicity) OECD 404 (Acute Dermal Irritation/Corrosio | n.d.a. Notes Aerosol, Does not conform with EU classificatio n. | Toxicity / effect Acute toxicity, by oral route: Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin Respiratory or skin | Endpo int | Value | mg/k | m Rat Rabbit Rabbit Mouse Guinea | Toxicity/Carcinog enicity Studies) Test method OECD 401 (Acute Oral Toxicity) OECD 404 (Acute Dermal Irritation/Corrosio n) OECD 405 (Acute Eye Irritation/Corrosio n) OECD 406 (Skin | Analogous conclusion Skin Irrit. 2 Eye Irrit. 2 Yes (inhalation) Yes (skin |
| exposure (STOT-RE): Aspiration hazard: Symptoms: DiphenyImethanediiso Toxicity / effect Acute toxicity, by oral route: Acute toxicity, by dermal route: Acute toxicity, by inhalation: Skin corrosion/irritation: Serious eye damage/irritation: | Endpo int LD50 LD50 | Value >5000 >5000 0,31- | Unit mg/k g mg/k g mg/l/ | Organis m Rat Rabbit Rat Rabbit Rabbit | OECD 401 (Acute Oral Toxicity) OECD 402 (Acute Dermal Toxicity) OECD 403 (Acute Inhalation Toxicity) OECD 404 (Acute Dermal Irritation/Corrosio n) OECD 405 (Acute Eye Irritation/Corrosio n) | n.d.a. Notes Aerosol, Does not conform with EU classificatio n. Skin Irrit. 2 Eye Irrit. 2 | Toxicity / effect Acute toxicity, by oral route: Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitisation: Respiratory or skin sensitisation: Germ cell | Endpo int | Value | mg/k | m Rat Rabbit Rabbit Mouse Guinea pig Salmonel | Toxicity/Carcinog enicity Studies) Test method OECD 401 (Acute Oral Toxicity) OECD 404 (Acute Dermal Initation/Corrosio n) OECD 405 (Acute Eye Initiation/Corrosio n) OECD 406 (Skin Sensitisation) Regulation (EC) | Analogous conclusion Skin Irrit. 2 Eye Irrit. 2 Yes (inhalation) Yes (skin contact) |
| exposure (STOT-RE): Aspiration hazard: Symptoms: Diphenylmethanediiso Toxicity / effect Acute toxicity, by oral route: Acute toxicity, by dermal route: Acute toxicity, by dermal route: Acute toxicity, by inhalation: Skin corrosion/irritation: Serious eye | Endpo int LD50 LD50 | Value >5000 >5000 0,31- | Unit mg/k g mg/k g mg/l/ | Organis m Rat Rabbit Rat Rabbit | OECD 401 (Acute Oral Toxicity) OECD 402 (Acute Dermal Toxicity) OECD 403 (Acute Inhalation Toxicity) OECD 404 (Acute Dermal Irritation/Corrosio n) OECD 405 (Acute Eye Irritation/Corrosio n) OECD 405 (Acute Eye Irritation/Corrosio n) OECD 406 (Skin | n.d.a. Notes Aerosol, Does not conform with EU classificatio n. Skin Irrit. 2 | Toxicity / effect Acute toxicity, by oral route: Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitisation: Respiratory or skin sensitisation: Germ cell | Endpo int | Value | mg/k | m Rat Rabbit Rabbit Mouse Guinea pig Salmonel Ia typhimuri | Toxicity/Carcinog enicity Studies) Test method OECD 401 (Acute Oral Toxicity) OECD 404 (Acute Dermal Initation/Corrosio n) OECD 405 (Acute Eye Initiation/Corrosio n) OECD 406 (Skin Sensitisation) Regulation (EC) 440/2008 B.13/B.14 (REVERSE MUTATION TEST USING BACTERIA) OECD 474 (Mammalian Erythrocyte Micronucleus | Analogous conclusion Skin Irrit. 2 Eye Irrit. 2 Yes (inhalation) Yes (skin contact) |
| exposure (STOT-RE): Aspiration hazard: Symptoms: DiphenyImethanediiso Toxicity / effect Acute toxicity, by oral route: Acute toxicity, by dermal route: Acute toxicity, by inhalation: Skin corrosion/irritation: Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitisation: | Endpo int LD50 LD50 | Value >5000 >5000 0,31- | Unit mg/k g mg/k g mg/l/ | Organis m Rat Rabbit Rat Rabbit Rabbit Mouse | OECD 401 (Acute Oral Toxicity) OECD 402 (Acute Dermal Toxicity) OECD 403 (Acute Inhalation Toxicity) OECD 404 (Acute Dermal Irritation/Corrosio n) OECD 405 (Acute Eye Irritation/Corrosio n) OECD 429 (Skin Sensitisation - Local Lymph Node Assay) | n.d.a. Notes Aerosol, Does not conform with EU classificatio n. Skin Irrit. 2 Eye Irrit. 2 Yes (skin contact), Analogous conclusion | Toxicity / effect Acute toxicity, by oral route: Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitisation: Respiratory or skin sensitisation: Germ cell mutagenicity: Germ cell mutagenicity: Specific target organ | Endpo int | Value | mg/k g | m Rat Rabbit Rabbit Mouse Guinea pig Salmonel Ia typhimuri um | Toxicity/Carcinog enicity Studies) Test method OECD 401 (Acute Oral Toxicity) OECD 404 (Acute Dermal Irritation/Corrosio n) OECD 405 (Acute Eye Irritation/Corrosio n) OECD 406 (Skin Sensitisation) Regulation (EC) 440/2008 B.13/B.14 (REVERSE MUTATION EST USING BACTERIA) OECD 474 (Mammalian Erythrocyte Micronucleus Test) OECD 453 | Analogous conclusion Skin Irrit. 2 Eye Irrit. 2 Yes (inhalation) Yes (skin contact) Negative |
| exposure (STOT-RE): Aspiration hazard: Symptoms: DiphenyImethanediiso Toxicity / effect Acute toxicity, by oral route: Acute toxicity, by dermal route: Acute toxicity, by inhalation: Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitisation: Respiratory or skin sensitisation: | Endpo int LD50 LD50 | Value >5000 >5000 0,31- | Unit mg/k g mg/k g mg/l/ | Organis m Rat Rabbit Rat Rabbit Rabbit Mouse Guinea pig Rat | OECD 401 (Acute Oral Toxicity) OECD 402 (Acute Dermal Toxicity) OECD 403 (Acute Inhalation Toxicity) OECD 404 (Acute Dermal Irritation/Corrosio n) OECD 405 (Acute Eye Irritation/Corrosio n) OECD 405 (Acute Eye Irritation/Corrosio n) OECD 406 (Skin Sensitisation) OECD 406 (Skin | n.d.a. Aerosol, Does not conform with EU classificatio n. Skin Irrit. 2 Yes (skin contact), Analogous conclusion Yes (skin (inhalation)) | Toxicity / effect Acute toxicity, by oral route: Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitisation: Respiratory or skin sensitisation: Germ cell mutagenicity: Specific target organ toxicity - repeated | Endpo int LD50 | Value >2000 | mg/k g | m Rat Rabbit Rabbit Mouse Guinea pig Salmonel Ia typhimuri um | Toxicity/Carcinog enicity Studies) Test method OECD 401 (Acute Oral Toxicity) OECD 404 (Acute Dermal Irritation/Corrosio n) OECD 405 (Acute Eye Irritation/Corrosio n) OECD 406 (Skin Sensitisation) Regulation (EC) 440/2008 B.13/B.14 (REVERSE MUTATION TEST USING BACTERIA) OECD 474 (Marmalian Erythrocyte Micronucleus Test) | Analogous conclusion Skin Irrit. 2 Eye Irrit. 2 Yes (inhalation) Yes (skin contact) Negative |
| exposure (STOT-RE): Aspiration hazard: Symptoms: DiphenyImethanediiso Toxicity / effect Acute toxicity, by oral route: Acute toxicity, by dermal route: Acute toxicity, by inhalation: Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitisation: Respiratory or skin | Endpo int LD50 LD50 | Value >5000 >5000 0,31- | Unit mg/k g mg/k g mg/l/ | Organis m Rat Rabbit Rat Rabbit Rabbit Mouse Guinea pig | OECD 401 (Acute Oral Toxicity) OECD 402 (Acute Dermal Toxicity) OECD 403 (Acute Inhalation Toxicity) OECD 403 (Acute Inhalation Toxicity) OECD 404 (Acute Dermal Irritation/Corrosio n) OECD 405 (Acute Eye Irritation/Corrosio n) OECD 405 (Acute Eye Irritation/Corrosio n) OECD 429 (Skin Sensitisation - Local Lymph Node Assay) OECD 406 (Skin Sensitisation) OECD 474 (Mammalian Erythrocyte Micronucleus | n.d.a. Notes Aerosol, Does not conform with EU classificatio n. Skin Irrit. 2 Eye Irrit. 2 Yes (skin contact), Analogous conclusion Yes (skin contact) Yes | Toxicity / effect Acute toxicity, by oral route: Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitisation: Respiratory or skin sensitisation: Germ cell mutagenicity: Germ cell mutagenicity: Specific target organ toxicity - repeated exposure (STOT-RE), inhalat.: | Endpo int LD50 | Value >2000 | mg/k g | m Rat Rabbit Rabbit Mouse Guinea pig Salmonel Ia typhimuri um | Toxicity/Carcinog enicity Studies) Test method OECD 401 (Acute Oral Toxicity) OECD 404 (Acute Dermal Irritation/Corrosio n) OECD 405 (Acute Eye Irritation/Corrosio n) OECD 406 (Skin Sensitisation) Regulation (EC) 440/2008 B.13/B.14 (REVERSE MUTATION TEST USING BACTERIA) OECD 474 (Mammalian Erythrocyte Michrocyte | Analogous conclusion Skin Irrit. 2 Eye Irrit. 2 Yes (inhalation) Yes (skin contact) Negative |
| exposure (STOT-RE): Aspiration hazard: Symptoms: DiphenyImethanediiso Toxicity / effect Acute toxicity, by oral route: Acute toxicity, by dermal route: Acute toxicity, by inhalation: Skin corrosion/irritation: Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitisation: Respiratory or skin sensitisation: Germ cell | Endpo int LD50 LD50 | Value >5000 >5000 0,31- | Unit mg/k g mg/k g mg/l/ | Organis m Rat Rabbit Rat Rabbit Rabbit Mouse Guinea pig Rat Salmonel | OECD 401 (Acute Oral Toxicity) OECD 402 (Acute Dermal Toxicity) OECD 403 (Acute Inhalation Toxicity) OECD 403 (Acute Dermal Irritation/Corrosio n) OECD 405 (Acute Eye Irritation/Corrosio n) OECD 429 (Skin Sensitisation - Local Lymph Node Assay) OECD 406 (Skin Sensitisation) OECD 406 (Skin Sensitisation) OECD 406 (Skin Sensitisation) | n.d.a. Notes Aerosol, Does not conform with EU classificatio n. Skin Irrit. 2 Yes (skin contact), Analogus conclusion Yes (skin contact) Yes (inhalation) Negative, Analogous | Toxicity / effect Acute toxicity, by oral route: Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitisation: Respiratory or skin sensitisation: Germ cell mutagenicity: Germ cell mutagenicity: Specific target organ toxicity - repeated exposure (STOT-RE), | Endpo int LD50 | Value >2000 | mg/k g | m Rat Rabbit Rabbit Mouse Guinea pig Salmonel la typhimuri um Rat Rat | Toxicity/Carcinog enicity Studies) Test method OECD 401 (Acute Oral Toxicity) OECD 404 (Acute Dermal Irritation/Corrosio n) OECD 405 (Acute Eye Irritation/Corrosio n) OECD 406 (Skin Sensitisation) Regulation (EC) 440/2008 B.13/B.14 (REVERSE MUTATION TEST USING BACTERIA) OECD 474 (Mammalian Erythrocyte Micronucleus Test) OECD 453 (Combined Chronic Toxicity/Carcinog | Analogous conclusion Skin Irrit. 2 Eye Irrit. 2 Yes (inhalation) Yes (skin contact) Negative |
| exposure (STOT-RE): Aspiration hazard: Symptoms: DiphenyImethanediiso Toxicity / effect Acute toxicity, by oral route: Acute toxicity, by dermal route: Acute toxicity, by inhalation: Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitisation: Respiratory or skin sensitisation: Germ cell mutagenicity: | Endpo int LD50 LD50 LC50 | Value >5000 >5000 0.31- 0.49 | Unit mg/k g mg/k g mg/l/ | Organis m Rat Rabbit Rat Rabbit Rabbit Mouse Guinea pig Rat Rat Salmonel la typhimuri umi | OECD 401 (Acute Oral Toxicity) OECD 402 (Acute Dermal Toxicity) OECD 403 (Acute Inhalation Toxicity) OECD 403 (Acute Inhalation Toxicity) OECD 404 (Acute Dermal Irritation/Corrosio n) OECD 405 (Acute Eye Irritation/Corrosio n) OECD 404 (Skin Sensitisation) OECD 474 (Mammalian Erythrocyte Micronucleus Test) OECD 471 (Bacterial Reverse Mutation Test) | n.d.a. Notes Aerosol, Does not conform with EU classificatio n. Skin Irrit. 2 Yes (skin contact), Analogous Yes (skin contact), Negative, Analogous conclusion Negative | Toxicity / effect Acute toxicity, by oral route: Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitisation: Respiratory or skin sensitisation: Germ cell mutagenicity: Germ cell mutagenicity: Specific target organ toxicity - repeated exposure (STOT-RE), inhalat.: Propylene carbonate | NOEC | Value >2000 | mg/k g | m Rat | Toxicity/Carcinog enicity Studies) Test method OECD 401 (Acute Oral Toxicity) OECD 404 (Acute Dermal Irritation/Corrosio n) OECD 405 (Acute Eye Irritation/Corrosio n) OECD 406 (Skin Sensitisation) Regulation (EC) 440/2008 B.13/B.14 (REVERSE MUTATION BACTERIA) OECD 405 (Mammalian Erythrocyte Micronucleus Test) OECD 453 (Combined Chronic Toxicity/Carcinog enicity Studies) Test method OECD 401 (Acute Oral | Analogous conclusion Skin Irrit. 2 Eye Irrit. 2 Yes (inhalation) Yes (skin contact) Negative Negative |
| exposure (STOT-RE): Aspiration hazard: Symptoms: DiphenyImethanediiso Toxicity / effect Acute toxicity, by oral route: Acute toxicity, by dermal route: Acute toxicity, by inhalation: Skin corrosion/irritation: Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitisation: Respiratory or skin sensitisation: Germ cell | Endpo int LD50 LD50 | Value >5000 >5000 0,31- | Unit mg/k g mg/k g mg/l/ | Organis m Rat Rabbit Rabbit Rabbit Rabbit Mouse Guinea pig Rat Rat Salmonel la System | OECD 401 (Acute Oral Toxicity) OECD 402 (Acute Dermal Toxicity) OECD 403 (Acute Inhalation Toxicity) OECD 404 (Acute Dermal Irritation/Corrosio n) OECD 404 (Acute Eye Irritation/Corrosio n) OECD 429 (Skin Sensitisation - Local Lymph Node Assay) OECD 406 (Skin Sensitisation) OECD 474 (Mammalian Erythrocyte Micronucleus Test) OECD 474 (Marmalian Erythrocyte Micronucleus Test) OECD 414 (Prenatal Developmental | n.d.a. Notes Aerosol, Does not conform with EU classificatio n. Skin Irrit. 2 Yes (skin contact), Analogous conclusion Yes (skin contact) Yes (skin conclusion | Toxicity / effect Acute toxicity, by oral route: Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitisation: Respiratory or skin sensitisation: Germ cell mutagenicity: Specific target organ toxicity - repeated exposure (STOT-RE), inhalat.: Propylene carbonate Toxicity / effect Acute toxicity, by oral | Endpo int LD50 | Value >2000 | mg/k g mg/m 3 Unit mg/k | m Rat Rabbit Rabbit Mouse Guinea pig Salmonel Ia typhimuri um Rat Rat | Toxicity/Carcinog enicity Studies) Test method OECD 401 (Acute Oral Toxicity) OECD 404 (Acute Dermal Irritation/Corrosio n) OECD 405 (Acute Eye Irritation/Corrosio n) OECD 406 (Skin Sensitisation) Regulation (EC) 440/2008 B.13/B.14 (REVERSE MUTATION TEST USING BACTERIA) OECD 474 (Mammalian Erythrocyte Micronucleus Test) OECD 453 (Combined Chronic Toxicity/Carcinog enicity Studies) Test method OECD 401 (Acute Oral Toxicity) OECD 402 (Acute Dermal | Analogous conclusion Skin Irrit. 2 Eye Irrit. 2 Yes (inhalation) Yes (skin contact) Negative Negative |
| exposure (STOT-RE): Aspiration hazard: Symptoms: DiphenyImethanediiso Toxicity / effect Acute toxicity, by oral route: Acute toxicity, by dermal route: Acute toxicity, by inhalation: Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitisation: Respiratory or skin sensitisation: Germ cell mutagenicity: | Endpo int LD50 LD50 LD50 LC50 | Value >5000 >5000 0.31- 0.49 | Unit mg/k 9 mg/k 9 mg/l/ 4h | Organis m Rat Rabbit Rat Rabbit Rabbit Mouse Guinea pig Rat Rat Salmonel la typhimuri umi | OECD 401 (Acute Oral Toxicity) OECD 402 (Acute Dermal Toxicity) OECD 403 (Acute Inhalation Toxicity) OECD 404 (Acute Dermal Irritation/Corrosio n) OECD 405 (Acute Eye Irritation/Corrosio n) OECD 405 (Acute Eye Irritation/Corrosio n) OECD 429 (Skin Sensitisation - Local Lymph Node Assay) OECD 429 (Skin Sensitisation) OECD 429 (Skin Sensitisation) OECD 406 (Skin Sensitisation) OECD 406 (Skin Sensitisation) OECD 471 (Bacterial Reverse Mutation Test) OECD 414 (Prenatal Developmental Toxicity Study) OECD 414 | n.d.a. Notes Aerosol, Does not conform with EU classificatio n. Skin Irrit. 2 Eye Irrit. 2 Yes (skin contact), Analogous conclusion Yes (skin conclusion Yes (skin conclusion Negative Aerosol, Negative Aerosol, Limited | Toxicity / effect Acute toxicity, by oral route: Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitisation: Respiratory or skin sensitisation: Germ cell mutagenicity: Specific target organ toxicity - repeated exposure (STOT-RE), inhalat.: Propylene carbonate Toxicity / effect Acute toxicity, by oral route: Acute toxicity, by | Endpo int LD50 | Value >2000 | mg/k g mg/m 3 Unit mg/k g | m Rat Rabbit Rabbit Mouse Guinea pig Salmonel Ia typhimuri um Rat Rat | Toxicity/Carcinog enicity Studies) Test method OECD 401 (Acute Oral Toxicity) OECD 404 (Acute Dermal Irritation/Corrosio n) OECD 405 (Acute Eye Irritation/Corrosio n) OECD 406 (Skin Sensitisation) Regulation (EC) 440/2008 B.13/B.14 (REVERSE MUTATION REST USING BACTERIA) OECD 474 (Marmalian Erythrocyte Micronucleus Test) OECD 433 (Combined Chronic Toxicity/Carcinog enicity Studies) Test method OECD 401 (Acute Dermal Toxicity) OECD 404 (Acute Dermal | Analogous conclusion Skin Irrit. 2 Eye Irrit. 2 Yes (inhalation) Yes (skin contact) Negative Negative |
| exposure (STOT-RE): Aspiration hazard: Symptoms: DiphenyImethanediiso Toxicity / effect Acute toxicity, by oral route: Acute toxicity, by dermal route: Acute toxicity, by inhalation: Acute toxicity, by inhalation: Skin corrosion/irritation: Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitisation: Respiratory or skin sensitisation: Germ cell mutagenicity: Reproductive toxicity: | Endpo int LD50 LD50 LD50 LC50 | Value >5000 >5000 0.31- 0.49 | Unit mg/k 9 mg/k 9 mg/l/ 4h | Organis m Rat Rabbit Rat Rabbit Rabbit Mouse Guinea pig Rat Rat Salmonel Ia Yphimuri um Rat | OECD 401 (Acute Oral Toxicity) OECD 402 (Acute Dermal Toxicity) OECD 403 (Acute Inhalation Toxicity) OECD 403 (Acute Inhalation Toxicity) OECD 404 (Acute Dermal Irritation/Corrosio n) OECD 429 (Skin Sensitisation - Local Lymph Node Assay) OECD 429 (Skin Sensitisation) OECD 429 (Skin Sensitisation) OECD 429 (Skin Sensitisation) OECD 420 (Skin Sensitisation) OECD 420 (Skin Sensitisation) OECD 420 (Skin Sensitisation) OECD 474 (Mammalian Erythrocyte Micronucleus Test) OECD 471 (Bacterial Reverse Mutation Test) OECD 413 | n.d.a. Notes Aerosol, Does not conform with EU classification n. Skin Irrit. 2 Eye Irrit. 2 Yes (skin contact), Analogous conclusion Yes (skin contact), Analogous conclusion Yes (skin contact), Negative, Negative Aerosol, Negative Aerosol, Limited evidence of a carcinogeni | Toxicity / effect Acute toxicity, by oral route: Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitisation: Respiratory or skin sensitisation: Germ cell mutagenicity: Specific target organ toxicity - repeated exposure (STOT-RE), inhalat: Propylene carbonate Toxicity / effect Acute toxicity, by oral route: Skin corrosion/irritation: Serious eye | Endpo int LD50 | Value >2000 | mg/k g mg/m 3 Unit mg/k g | m Rat Rabbit Rabbit Mouse Guinea pig Salmonel Ia typhimuri um Rat Rat Organis m Rat | Toxicity/Carcinog enicity Studies) Test method OECD 401 (Acute Oral Toxicity) OECD 404 (Acute Dermal Initiation/Corrosio n) OECD 405 (Acute Eye Initiation/Corrosio n) OECD 406 (Skin Sensitisation) Corrosio n) OECD 406 (Skin Sensitisation) Corrosio n) OECD 406 (Skin Sensitisation) Corrosio n) OECD 406 (Skin Sensitisation) Corrosio n) OECD 406 (Skin Sensitisation) Corrosio n) OECD 407 (Acute Eye MUTATION TEST USING BACTERIA) OECD 474 (Mammalian Erythrocyte Micronucleus Test) OECD 453 (Combined Chronic Toxicity/Carcinog enicity Studies) OECD 401 (Acute Oral Toxicity) OECD 402 (Acute Dermal Toxicity) OECD 404 (Acute Dermal Initiation/Corrosio n) OECD 405 | Analogous conclusion Skin Irrit. 2 Eye Irrit. 2 Yes (inhalation) Yes (skin contact) Negative Negative Negative |
| exposure (STOT-RE): Aspiration hazard: Symptoms: DiphenyImethanediiso Toxicity / effect Acute toxicity, by oral route: Acute toxicity, by dermal route: Acute toxicity, by inhalation: Acute toxicity, by inhalation: Skin corrosion/irritation: Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitisation: Respiratory or skin sensitisation: Germ cell mutagenicity: Reproductive toxicity: | Endpo int LD50 LD50 LD50 LC50 | Value >5000 >5000 0.31- 0.49 | Unit mg/k 9 mg/k 9 mg/l/ 4h | Organis m Rat Rabbit Rat Rabbit Rabbit Mouse Guinea pig Rat Rat Salmonel Ia Yphimuri um Rat | OECD 401 (Acute Oral Toxicity) OECD 402 (Acute Dermal Toxicity) OECD 403 (Acute Inhalation Toxicity) OECD 404 (Acute Dermal Irritation/Corrosio n) OECD 404 (Acute Eye Irritation/Corrosio n) OECD 404 (Acute Eye Irritation/Corrosio n) OECD 429 (Skin Sensitisation - Local Lymph Node Assay) OECD 406 (Skin Sensitisation) OECD 406 (Skin Sensitisation) OECD 474 (Mammalian Erythrocyte Micronucleus Test) OECD 471 (Bacterial Reverse Mutation Test) OECD 414 (Prenatal Developmental Toxicity/Carcinog | n.d.a. Notes Aerosol, Does not conform with EU classificatio n. Skin Irrit. 2 Yes (skin contact), Analogous contact), Yes (skin contact) Yes (skin contact) Negative, Aerosol, Negative Aerosol, Limited evidence of a | Toxicity / effect Acute toxicity, by oral route: Skin corrosion/irritation: Serious eye damage/irritation: Respiratory or skin sensitisation: Respiratory or skin sensitisation: Germ cell mutagenicity: Specific target organ toxicity - repeated exposure (STOT-RE), inhalat.: Propylene carbonate Toxicity / effect Acute toxicity, by oral route: Acute toxicity, by oral route: Skin corrosion/irritation: | Endpo int LD50 | Value >2000 | mg/k g mg/m 3 Unit mg/k g | m Rat Rabbit Rabbit Mouse Guinea pig Salmonel la typhimuri um Rat Rat Organis m Rat Rabbit Rabbit | Toxicity/Carcinog enicity Studies) Test method OECD 401 (Acute Oral Toxicity) OECD 404 (Acute Dermal Irritation/Corrosio n) OECD 405 (Acute Eye Irritation/Corrosio n) OECD 406 (Skin Sensitisation) Regulation (EC) 440/2008 B.13/B.14 (REVERSE MUTATION TEST USING BACTERIA) OECD 474 (Mammalian Erythrocyte Micronucleus Test) OECD 433 (Combined Chronic Toxicity/Carcinog enicity Studies) Test method OECD 401 (Acute Dermal Toxicity) OECD 404 (Acute Dermal Toxicity) OECD 404 (Acute Dermal Toxicity) | Analogous conclusion Skin Irrit. 2 Eye Irrit. 2 Yes (inhalation) Yes (skin contact) Negative Negative Negative |



| 3D) | | | | | | | | | | | | | | |
|--|-----------------------|---------------|-------------|--|---|--|---|---|---|--|----------------------|--|--|---|
| B Page 5 of 8 Safety data sheet accord | ding to Regu | lation (EC) N | lo 1907/200 |)6, Annex II | | | Specific target orga toxicity - single | n | | | | | | May cause respiratory |
| Revision date / version: (| 01.11.2021 | / 0009 | | | | | exposure (STOT-SE | E), | | | | | | irritation. |
| Replacing version dated Valid from: 01.11.2021 | / version: 02 | 2.08.2021 / 0 | 008 | | | | inhalative: Specific target orga | n NOA | E 0,2 | | mg/m | Rat | OECD 453 | Aerosol, |
| PDF print date: 01.11.20 COSMO® PU-160.540 | 21 | | | | | | toxicity - repeated exposure (STOT-RI | L | | | 3 | | (Combined Chronic | Analogous conclusion, |
| COSMO® PU-160.690 | | | | | | | inhalat.: | _), | | | | | Toxicity/Carcinog | Target |
| COSMO® PU-160.710 COSMO® PU-160.720 | | | | | | | | | | | | | enicity Studies) | organ(s): respiratory |
| | | | 1 | | | Nie (elde | | | | | | | | system |
| Respiratory or skin sensitisation: | | | | Human being | | No (skin contact) | 11.2. Informati | ion on oth | er haza | rds | | | | |
| Germ cell mutagenicity: | | | | | OECD 471 (Bacterial | Negative | COSMO® PU-160. | | | | | | | |
| matagementy. | | | | | Reverse | | COSMO® PU-160.0 COSMO® PU-160.0 | | | | | | | |
| Germ cell | | | | | Mutation Test) OECD 474 | Negative | COSMO® PU-160. Toxicity / effect | 720 Endp | o Va | 10 | Unit | Organis | Test method | Notes |
| mutagenicity: | | | | | (Mammalian Erythrocyte | | | int | | uc | onit | m | | |
| | | | | | Micronucleus Test) | | Endocrine disrupting properties: | g | | | | | | Does not apply to |
| Germ cell | | | | | OECD 482 | Negative | Other information: | | | | | | | mixtures. No other |
| mutagenicity: | | | | | (Gen. Tox DNA Damage | | Guici momidadi. | | | | | | | relevant |
| | | | | | and Repair, Unscheduled | | | | | | | | | information available |
| | | | | | DNA Synthesis | | | | | | | | | on adverse effects on |
| | | | | | in Mammalian Cells In Vitro) | | | | | | | | | health. |
| Carcinogenicity: | | | | Mouse | OECD 451 (Carcinogenicity | Negative | | 050 | | 10. F- | - 1! - | | | |
| | | | | _ | Studies) | | | SEC | | 12: EC | ologi | cal inforr | nation | |
| Reproductive toxicity: | NOAE L | 1000 | mg/k g | Rat | OECD 414 (Prenatal | Negative | Possibly more infor | mation on env | ironment | al effects | see Sect | ion 2.1 (classif | fication) | |
| | | | | | Developmental Toxicity Study) | | COSMO® PU-160. | 540 | Torinoria | ar encets, | 300 0000 | 1011 2.1 (010331 | ioution). | |
| Aspiration hazard: | | | | | | No | COSMO® PU-160.0 COSMO® PU-160.0 | | | | | | | |
| Symptoms: | | | | | | breathing difficulties, | COSMO® PU-160. Toxicity / effect | | Tim | Valu | Unit | Organism | Test | Notes |
| | | | | | | headaches, gastrointes | - | t | e | e | Unit | Organism | method | |
| | | | | | | tinal | 12.1. Toxicity to fish: | | | | | | | n.d.a. |
| | | | | | | disturbance s, | 12.1. Toxicity to | | | | | | | n.d.a. |
| | | | | | | dizziness, nausea | daphnia: 12.1. Toxicity to | | | | | | | n.d.a. |
| Specific target organ | NOEL | >5000 | mg/k | | OECD 408 | nausea | algae: 12.2. | | | | | | | With water |
| toxicity - repeated exposure (STOT-RE), | | | g | | (Repeated Dose 90-Day Oral | | Persistence and | | | | | | | at the |
| oral: | | | | | Toxicity Study in | | degradability: | | | | | | | interface, transforms |
| Specific target organ | NOEC | 100 | mg/m | | Rodents) OECD 413 | Dust, Mist | | | | | | | | slowly with formation |
| toxicity - repeated exposure (STOT-RE), | | | 3 | | (Subchronic Inhalation | | | | | | | | | of CO2 |
| inhalat.: | | | | | Toxicity - 90-Day Study) | | | | | | | | | into a firm, insoluble |
| | | | | | Study) | · | | | | | | | | reaction product |
| 4,4'-methylenediphenyl Toxicity / effect | l diisocyana Endpo | ate Value | Unit | Organis | Test method | Notes | | | | | | | | with a high melting |
| - | Int LD50 | >2000 | | m | | | | | | | | | | point |
| Acute toxicity, by oral route: | LD50 | >2000 | mg/k g | Rat | Regulation (EC) 440/2008 B.1 | Analogous conclusion | | | | | | | | (polycarba mide). |
| | | | | | (ACUTE ORAL TOXICITY) | | | | | | | | | According |
| Acute toxicity, by | LD50 | >9400 | mg/k | Rabbit | OECD 402 | Analogous | | | | | | | | to experience |
| dermal route: | | | g | | (Acute Dermal Toxicity) | conclusion | | | | | | | | available to date, |
| Acute toxicity, by inhalation: | LC50 | 0,368 | mg/l/ 4h | Rat | OECD 403 (Acute Inhalation | Aerosol, Does not | | | | | | | | polycarbam ide is inert |
| | | | | | Toxicity) | conform | | | | | | | | and non- |
| | | | | | | with EU classificatio | | | | | | | | degradable |
| Acute toxicity, by | | | | | | n. | | | | | | | | |
| inhalation: | LC50 | 1.5 | ma/l/ | | | Aerosol. | 12.3. Piococumulativo | | | | | | | n.d.a. |
| | LC50 | 1,5 | mg/l/ 4h | | | Aerosol, Expert | Bioaccumulative potential: | | | | | | | |
| Skin | LC50 | 1,5 | | Rabbit | OECD 404 | Expert judgement. Skin Irrit. | Bioaccumulative potential: 12.4. Mobility in soil: | | | | | | | n.d.a. |
| | LC50 | 1,5 | | Rabbit | OECD 404 (Acute Dermal Irritation/Corrosio | Expert judgement. Skin Irrit. 2, | Bioaccumulative potential: 12.4. Mobility in soil: 12.5. Results of | | | | | | | |
| Skin corrosion/irritation: | LC50 | 1,5 | | | (Acute Dermal | Expert judgement. Skin Irrit. 2, Analogous conclusion | Bioaccumulative potential: 12.4. Mobility in soil: 12.5. Results of PBT and vPvB assessment | | | | | | | n.d.a. n.d.a. |
| Skin corrosion/irritation: Respiratory or skin sensitisation: | LC50 | 1,5 | | Guinea pig | (Acute Dermal Irritation/Corrosio n) | Expert judgement. Skin Irrit. 2, Analogous conclusion Yes (inhalation) | Bioaccumulative potential: 12.4. Mobility in soil: 12.5. Results of PBT and vPvB | | | | | | | n.d.a. |
| Skin corrosion/irritation: Respiratory or skin | LC50 | 1,5 | | Guinea | (Acute Dermal Irritation/Corrosio n) OECD 429 (Skin Sensitisation - | Expert judgement. Skin Irrit. 2, Analogous conclusion Yes | Bioaccumulative potential: 12.4. Mobility in soil: 12.5. Results of PBT and vPvB assessment 12.6. Endocrine disrupting properties: | | | | | | | n.d.a. n.d.a. Does not apply to mixtures. |
| Skin corrosion/irritation: Respiratory or skin sensitisation: Respiratory or skin | LC50 | 1,5 | | Guinea pig | (Acute Dermal Irritation/Corrosio n) OECD 429 (Skin Sensitisation - Local Lymph | Expert judgement. Skin Irrit. 2, Analogous conclusion Yes (inhalation) Skin Sens. | Bioaccumulative potential: 12.4. Mobility in soil: 12.5. Results of PBT and vPvB assessment 12.6. Endocrine disrupting | | | | | | | n.d.a. n.d.a. Does not apply to mixtures. No information |
| Skin corrosion/irritation: Respiratory or skin sensitisation: Respiratory or skin sensitisation: Germ cell | LC50 | 1,5 | | Guinea pig Mouse Salmonel | (Acute Dermal Irritation/Corrosio n) OECD 429 (Skin Sensitisation - Local Lymph Node Assay) OECD 471 | Expert judgement. Skin Irrit. 2, Analogous conclusion Yes (inhalation) Skin Sens. 1 Negative, | Bioaccumulative potential: 12.4. Mobility in soil: 12.5. Results of PBT and VPvB assessment 12.6. Endocrine disrupting properties: 12.7. Other | | | | | | | n.d.a. n.d.a. Does not apply to mixtures. No |
| Skin corrosion/irritation: Respiratory or skin sensitisation: Respiratory or skin sensitisation: | LC50 | 1,5 | | Guinea pig Mouse | (Acute Dermal Irritation/Corrosio n) OECD 429 (Skin Sensitisation - Local Lymph Node Assay) | Expert judgement. Skin Irrit. 2, Analogous conclusion Yes (inhalation) Skin Sens. 1 | Bioaccumulative potential: 12.4. Mobility in soil: 12.5. Results of PBT and VPvB assessment 12.6. Endocrine disrupting properties: 12.7. Other | | | | | | | n.d.a. n.d.a. Does not apply to mixtures. No information available on other adverse |
| Skin corrosion/irritation: Respiratory or skin sensitisation: Respiratory or skin sensitisation: Germ cell mutagenicity: | LC50 | 1,5 | | Guinea pig Mouse Salmonel Ia typhimuri um | (Acute Dermal Irritation/Corrosio n) OECD 429 (Skin Sensitisation - Local Lymph Node Assay) OECD 471 (Bacterial Reverse Mutation Test) | Expert judgement. Skin Irrit. 2, Analogous conclusion Yes (inhalation) Skin Sens. 1 Negative, Analogous conclusion | Bioaccumulative potential: 12.4. Mobility in soil: 12.5. Results of PBT and VPvB assessment 12.6. Endocrine disrupting properties: 12.7. Other | | | | | | | n.d.a. n.d.a. Does not apply to mixtures. No information available on other adverse effects on the |
| Skin corrosion/irritation: Respiratory or skin sensitisation: Respiratory or skin sensitisation: Germ cell | | 1,5 | | Guinea pig Mouse Salmonel la typhimuri | (Acute Dermal Irritation/Corrosio n) OECD 429 (Skin Sensitisation - Local Lymph Node Assay) OECD 471 (Bacterial Reverse Mutation Test) OECD 474 (Mammalian | Expert judgement. Skin Irrit. 2, Analogous conclusion Yes (inhalation) Skin Sens. 1 Negative, Analogous | Bioaccumulative potential: 12.4. Mobility in soil: 12.5. Results of PBT and VPvB assessment 12.6. Endocrine disrupting properties: 12.7. Other | | | | | | | n.d.a. n.d.a. Does not apply to mixtures. No information available on other adverse effects on |
| Skin corrosion/irritation: Respiratory or skin sensitisation: Respiratory or skin sensitisation: Germ cell Germ cell | | 1,5 | | Guinea pig Mouse Salmonel Ia typhimuri um | (Acute Dermal Irritation/Corrosio n) OECD 429 (Skin Sensitisation - Local Lymph Node Assay) OECD 471 (Bacterial Reverse Mutation Test) OECD 474 (Mammalian Erythrocyte | Expert judgement. Skin Irrit. 2, Analogous conclusion Yes (inhalation) Skin Sens. 1 Negative, Analogous conclusion Negativem | Bioaccumulative potential: 12.4. Mobility in soli: 12.5. Results of PBT and vPvB assessment 12.6. Endocrine disrupting properties: 12.7. Other adverse effects: | | | | | | | n.d.a. n.d.a. Does not apply to mixtures. No information available on other adverse effects on the |
| Skin corrosion/irritation: Respiratory or skin sensitisation: Respiratory or skin sensitisation: Germ cell mutagenicity: Germ cell mutagenicity: | | 1,5 | | Guinea pig Mouse Salmonel Ia typhimuri um Rat | (Acute Dermal Irritation/Corrosio n) OECD 429 (Skin Sensitisation - Local Lymph Node Assay) OECD 471 (Bacterial Reverse Mutation Test) OECD 474 (Mammalian Erythrocyte Micronucleus Test) | Expert judgement. Skin Irrit. 2, Analogous conclusion Yes (inhalation) Skin Sens. 1 Negative, Analogous conclusion Negativem ale | Bioaccumulative potential: 12.4. Mobility in soil: 12.5. Results of PBT and VPvB assessment 12.6. Endocrine disrupting properties: 12.7. Other | diisocyanate, Endpoin | Tim | Valu | mologue: Unit | s Organism | | n.d.a. n.d.a. Does not apply to mixtures. No information available on other adverse effects on the |
| Skin corrosion/irritation: Respiratory or skin sensitisation: Respiratory or skin sensitisation: Germ cell Germ cell | | 1,5 | | Guinea pig Mouse Salmonel Ia typhimuri um | (Acute Dermal Irritation/Corrosio n) OECD 429 (Skin Sensitisation - Local Lymph Node Assay) OECD 471 (Bacterial Reverse Mutation Test) OECD 474 (Marmalian Erythrocyte Micronucleus Test) OECD 489 (In Vivo Marmalian | Expert judgement. Skin Irrit. 2, Analogous conclusion Yes (inhalation) Skin Sens. 1 Negative, Analogous conclusion Negativem | Bioaccumulative potential: 12.4. Mobility in soil: 12.5. Results of PBT and vPvB assessment 12.6. Endocrine disrupting properties: 12.7. Other adverse effects: Diphenylmethanec Toxicity / effect | Endpoin t | Tim e | Valu e | Unit | Organism | method | n.d.a. n.d.a. Does not apply to mixtures. No information available on other adverse effects on the environmen t. |
| Skin corrosion/irritation: Respiratory or skin sensitisation: Respiratory or skin sensitisation: Germ cell mutagenicity: Germ cell mutagenicity: | | 1,5 | | Guinea pig Mouse Salmonel Ia typhimuri um Rat | (Acute Dermal Irritation/Corrosio n) OECD 429 (Skin Sensitisation - Local Lymph Node Assay) OECD 471 (Bacterial Reverse Mutation Test) OECD 474 (Mammalian Erythrocyte Micronucleus Test) OECD 489 (In Vivo Mammalian Aikaline Comet | Expert judgement. Skin Irrit. 2, Analogous conclusion Yes (inhalation) Skin Sens. 1 Negative, Analogous conclusion Negativem ale | Bioaccumulative potential: 12.4. Mobility in soil: 12.5. Results of PBT and vPvB assessment 12.6. Endocrine disrupting properties: 12.7. Other adverse effects: Diphenylmethaneot | | Tim | Valu | | | io OECD 203 (Fish, Acute | n.d.a. n.d.a. Does not apply to mixtures. No information available on other adverse effects on the environmen t. |
| Skin corrosion/irritation: Respiratory or skin sensitisation: Respiratory or skin sensitisation: Germ cell mutagenicity: Germ cell mutagenicity: | | 1,5 | | Guinea pig Mouse Salmonel Ia typhimuri um Rat | (Acute Dermal Irritation/Corrosio n) OECD 429 (Skin Sensitisation - Local Lymph Node Assay) OECD 471 (Bacterial Reverse Mutation Test) OECD 474 (Mammalian Erythrocyte Micronucleus Test) OECD 489 (In Vivo Mammalian Alkaline Comet Assay) OECD 453 | Expert judgement. Skin Irrit. 2, Analogous conclusion Yes (inhalation) Skin Sens. 1 Negative, Analogous conclusion Negativem ale Negativem ale | Bioaccumulative potential: 12.4. Mobility in soil: 12.5. Results of PBT and vPvB assessment 12.6. Endocrine disrupting properties: 12.7. Other adverse effects: Diphenylmethanec Toxicity / effect 12.1. Toxicity to | Endpoin t LC50 | Tim e | Valu e >10 | Unit | Organism Brachydani | io OECD 203 | n.d.a. n.d.a. Does not apply to mixtures. No information available on other adverse effects on the environmen t. |
| Skin corrosion/irritation: Respiratory or skin sensitisation: Respiratory or skin sensitisation: Germ cell mutagenicity: Germ cell mutagenicity: Germ cell mutagenicity: | | 1,5 | | Guinea pig Mouse Salmonel la typhimuri um Rat Rat | (Acute Dermal Irritation/Corrosio n) OECD 429 (Skin Sensitisation - Local Lymph Node Assay) OECD 471 (Bacterial Reverse Mutation Test) OECD 471 (Mammalian Erythrocyte Micronucleus Test) OECD 489 (in Vivo Mammalian Alkaline Comet Assay) OECD 453 (Combined Chronic | Expert judgement. Skin Irrit. 2, Analogous conclusion Yes (inhalation) Skin Sens. 1 Negative, Analogous conclusion Negativem ale Aerosol, Analogous conclusion, | Bioaccumulative potential: 12.4. Mobility in soil: 12.5. Results of PBT and vPvB assessment 12.6. Endocrine disrupting properties: 12.7. Other adverse effects: Diphenylmethanec Toxicity / effect 12.1. Toxicity to | Endpoin t LC50 NOEC/N | Tim e | Valu e >10 00 >=1 | Unit | Organism Brachydani rerio Daphnia | method io OECD 203 (Fish, Acute Toxicity Test) OECD 211 | n.d.a. n.d.a. Does not apply to mixtures. No information available on other adverse effects on the environmen t. |
| Skin corrosion/irritation: Respiratory or skin sensitisation: Respiratory or skin sensitisation: Germ cell mutagenicity: Germ cell mutagenicity: Germ cell mutagenicity: | | 1,5 | | Guinea pig Mouse Salmonel la typhimuri um Rat Rat | Acute Dermal Irritation/Corrosio n) OECD 429 (Skin Sensitisation - Local Lymph Node Assay) OECD 471 (Bacterial Reverse Mutation Test) OECD 474 (Mammalian Erythrocyte Micronucleus Test) OECD 489 (In Vivo Mammalian Aikaline Comet Assay) OECD 453 (Combined Chronic Toxicity/Carcinog | Expert judgement. Skin Irrit. 2, Analogous conclusion Yes (inhalation) Skin Sens. 1 Negative, Analogous Negativem ale Negativem ale | Bioaccumulative potential: 12.4. Mobility in soil: 12.5. Results of PBT and vPvB assessment 12.6. Endocrine disrupting properties: 12.7. Other adverse effects: Diphenylmethanec Toxicity / effect 12.1. Toxicity to fish: | Endpoin t LC50 | Tim e 96h | Valu e >10 00 | Unit mg/l | Organism Brachydani rerio | io OECD 203 (Fish, Acute Toxicity Test) OECD 211 (Daphnia magna | n.d.a. n.d.a. Does not apply to mixtures. No information available on other adverse effects on the environmen t. |
| Skin corrosion/irritation: Respiratory or skin sensitisation: Respiratory or skin sensitisation: Germ cell mutagenicity: Germ cell mutagenicity: Germ cell mutagenicity: | NOAE | 4-12 | 4h | Guinea pig Mouse Salmonel la typhimuri um Rat Rat | (Acute Dermal Irritation/Corrosio n) OECD 429 (Skin Sensitisation - Local Lymph Node Assay) OECD 471 (Bacterial Reverse Mutation Test) OECD 474 (Mammalian Erythrocyte Micronucleus Test) OECD 489 (In Vivo Mammalian Aikaline Comet Assay) OECD 453 (Combined Chronic Toxicity/Carcinog enicity Studies) OECD 414 | Expert judgement. Skin Irrit. 2, Analogous conclusion Yes (inhalation) Skin Sens. 1 Negative, Analogous conclusion Negativem ale Negativem ale Aerosol, Analogous conclusion, Carc. 2 Aerosol, | Bioaccumulative potential: 12.4. Mobility in soil: 12.5. Results of PBT and vPvB assessment 12.6. Endocrine disrupting properties: 12.7. Other adverse effects: Diphenylmethanec Toxicity / effect 12.1. Toxicity to | Endpoin t LC50 NOEC/N OEL | Tim e 96h 21d | Valu e >10 00 >=1 | Unit mg/l | Organism Brachydani rerio Daphnia | method io OECD 203 (Fish, Acute Toxicity Test) OECD 211 (Daphnia magna Reproductio n Test) | n.d.a. n.d.a. Does not apply to mixtures. No information available on other adverse effects on the environmen t. |
| Skin corrosion/irritation: Respiratory or skin sensitisation: Respiratory or skin sensitisation: Germ cell mutagenicity: Germ cell mutagenicity: Germ cell mutagenicity: Carcinogenicity: | | | 4h | Guinea pig Mouse Salmonel la typhimuri um Rat Rat Rat | (Acute Dermal Irritation/Corrosio n) OECD 429 (Skin Sensitisation - Local Lymph Node Assay) OECD 471 (Bacterial Reverse Mutation Test) OECD 471 (Marmalian Erythrocyte Micronucleus Test) OECD 474 (Marmalian Erythrocyte Micronucleus Test) OECD 489 (in Vivo Marmalian Alkaline Comet Assay) OECD 453 (Combined Chronic Toxicity/Carcinog enicity Studies) OECD 414 (Prenatal Developmental | Expert judgement. Skin Irrit. 2, Analogous conclusion Yes (inhalation) Skin Sens. 1 Negative, Analogous conclusion Negativem ale Aerosol, Analogous conclusion, Carc. 2 | Bioaccumulative potential: 12.4. Mobility in soil: 12.5. Results of PBT and vPvB assessment 12.6. Endocrine disrupting properties: 12.7. Other adverse effects: Diphenylmethanec Toxicity / effect 12.1. Toxicity to daphnia: 12.1. Toxicity to | Endpoin t LC50 NOEC/N | Tim e 96h | Valu e >10 00 >=1 0 >10 | Unit mg/l | Organism Brachydani rerio Daphnia magna Daphnia | method io OECD 203 (Fish, Acute Toxicity Test) OECD 211 (Daphnia magna Reproductio n Test) OECD 212 | n.d.a. n.d.a. Does not apply to mixtures. No information available on other adverse effects on the environmen t. |
| Skin corrosion/irritation: Respiratory or skin Respiratory or skin sensitisation: Germ cell mutagenicity: Germ cell mutagenicity: Germ cell mutagenicity: Carcinogenicity: Reproductive toxicity: | NOAE | 4-12 | 4h | Guinea pig Mouse Salmonel la typhimuri m Rat Rat Rat | Acute Dermal Irritation/Corrosio n) OECD 429 (Skin Sensitisation - Local Lymph Node Assay) OECD 471 (Bacterial Reverse Mutation Test) OECD 474 (Mammalian Erythrocyte Micronucleus Test) OECD 489 (In Vivo Mammalian Aikaline Comet Assay) OECD 453 (Combined Chronic Toxicity/Carcinog enicity/Studies) OECD 414 (Prenatal Developmental Toxicity Study) | Expert judgement. Skin Irrit. 2, Analogous conclusion Yes (inhalation) Skin Sens. 1 Negative, Analogous conclusion Negativem ale Aerosol, Analogous conclusion, Carc. 2 Aerosol, Analogous conclusion | Bioaccumulative potential: 12.4. Mobility in soil: 12.5. Results of PBT and vPvB assessment 12.6. Endocrine disrupting properties: 12.7. Other adverse effects: Diphenylmethanec Toxicity / effect 12.1. Toxicity to fish: 12.1. Toxicity to daphnia: | Endpoin t LC50 NOEC/N OEL | Tim e 96h 21d | Valu e >10 00 >=1 0 | Unit mg/l mg/l | Organism Brachydani rerio Daphnia magna | method io OECD 203 (Fish, Acute Toxicity Test) OECD 211 (Daphnia magna Reproductio n Test) OECD 202 (Daphnia sp. Acute | n.d.a. n.d.a. Does not apply to mixtures. No information available on other adverse effects on the environmen t. |
| Skin corrosion/irritation: Respiratory or skin sensitisation: Respiratory or skin sensitisation: Germ cell mutagenicity: Germ cell mutagenicity: Carcinogenicity: Reproductive toxicity: Specific target organ toxicity - repeated | NOAE | | 4h | Guinea pig Mouse Salmonel la typhimuri um Rat Rat Rat | (Acute Dermal Irritation/Corrosio n) OECD 429 (Skin Sensitisation - Local Lymph Node Assay) OECD 471 (Bacterial Reverse Mutation Test) OECD 474 (Mammalian Erythrocyte Micronucleus Test) OECD 489 (In Vivo Mammalian Aikaline Comet Assay) OECD 453 (Combined Chronic Toxicity/Carcinog enicity Studies) OECD 414 (Prenatal Developmental Toxicity Study) OECD 414 | Expert judgement. Skin Irrit. 2, Analogous conclusion Yes (inhalation) Skin Sens. 1 Negative, Analogous conclusion Negativem ale Negativem ale Aerosol, Analogous conclusion, Carc. 2 Aerosol, Analogous conclusion, Carc. 2 | Bioaccumulative potential: 12.4. Mobility in soil: 12.5. Results of PBT and vPvB assessment 12.6. Endocrine disrupting properties: 12.7. Other adverse effects: Diphenylmethanec Toxicity / effect 12.1. Toxicity to daphnia: 12.1. Toxicity to | Endpoin t LC50 NOEC/N OEL | Tim e 96h 21d | Valu e >10 00 >=1 0 >10 | Unit mg/l mg/l | Organism Brachydani rerio Daphnia magna Daphnia | method io OECD 203 (Fish, Acute Toxicity Test) OECD 211 (Daphnia magna Reproductio n Test) OECD 202 (Daphnia sp. Acute Immobilisati | n.d.a. n.d.a. Does not apply to mixtures. No information available on other adverse effects on the environmen t. |
| Skin corrosion/irritation: Respiratory or skin sensitisation: Respiratory or skin sensitisation: Germ cell mutagenicity: Germ cell mutagenicity: Carcinogenicity: Reproductive toxicity: Specific target organ | NOAE | 4-12 | 4h | Guinea pig Mouse Salmonel la typhimuri m Rat Rat Rat | Acute Dermal Irritation/Corrosio n) OECD 429 (Skin Sensitisation - Local Lymph Node Assay) OECD 471 (Bacterial Reverse Mutation Test) OECD 474 (Mammalian Erythrocyte Micronucleus Test) OECD 453 (Combined Chronic Toxicity/Carcinog enicity Studies) OECD 414 (Prenatal Developmental Toxicity Study) OECD 453 | Expert judgement. Skin Irrit. 2, Analogous conclusion Yes (inhalation) Skin Sens. 1 Negative, Analogous conclusion Negativem ale Aerosol, Analogous conclusion, Carc. 2 Aerosol, Analogous conclusion Aanalogous conclusion | Bioaccumulative potential: 12.4. Mobility in soil: 12.5. Results of PBT and vPvB assessment 12.6. Endocrine disrupting properties: 12.7. Other adverse effects: Diphenylmethanec Toxicity / effect 12.1. Toxicity to daphnia: 12.1. Toxicity to daphnia: 12.1. Toxicity to | Endpoin t LC50 NOEC/N OEL | Tim e 96h 21d | Valu e >10 00 >=1 0 >10 00 >10 00 | Unit mg/l mg/l | Organism Brachydani rerio Daphnia magna Daphnia magna Scenedesn | method io OECD 203 (Fish, Acute Toxicity Test) OECD 211 (Daphnia sp. Acute Immobilisati on Test) Nettor | n.d.a. n.d.a. Does not apply to mixtures. No information available on other adverse effects on the environmen t. |
| Skin corrosion/irritation: Respiratory or skin sensitisation: Respiratory or skin sensitisation: Germ cell mutagenicity: Germ cell mutagenicity: Carcinogenicity: Reproductive toxicity: Specific target organ toxicity - repeated exposure (STOT-RE), | NOAE | 4-12 | 4h | Guinea pig Mouse Salmonel la typhimuri m Rat Rat Rat | Acute Dermal Irritation/Corrosio n) OECD 429 (Skin Sensitisation - Local Lymph Node Assay) OECD 471 (Bacterial Reverse Mutation Test) OECD 471 (Mammalian Erythrocyte Micronucleus Test) OECD 489 (In Vivo Mammalian Aikaline Comet Assay) OECD 453 (Combined Chronic Toxicity/Carcinog enicity Studies) OECD 414 (Prenatal Developmental Toxicity Study) OECD 453 (Combined Chronic | Expert judgement. Skin Irrit. 2, Analogous conclusion Yes (inhalation) Skin Sens. 1 Negative, Analogous conclusion Negativem ale Negativem ale Aerosol, Analogous conclusion, Carc. 2 Aerosol, Analogous conclusion | Bioaccumulative potential: 12.4. Mobility in soil: 12.5. Results of PBT and vPvB assessment 12.6. Endocrine disrupting properties: 12.7. Other adverse effects: Diphenylmethanec Toxicity / effect 12.1. Toxicity to fish: 12.1. Toxicity to daphnia: 12.1. Toxicity to daphnia: | Endpoin t LC50 NOEC/N OEL EC50 | Tim e 96h 21d 24h | Valu e >10 00 >=1 0 >10 00 | Unit mg/l mg/l | Organism Brachydani rerio Daphnia magna Daphnia magna | method io OECD 203 (Fish, Acute Toxicity Test) OECD 211 (Daphnia magna Reproductio n Test) OECD 202 (Daphnia sp. Acute Immobilisati on Test) n Test) n OECD 201 (Alga, | n.d.a. n.d.a. Does not apply to mixtures. No information available on other adverse effects on the environmen t. |



| B) Page 6 of 8 Safety data sheet a Revision date / vers Replacing version o | sion: 01.11.20 dated / versior | 21 / 0009 | 9 | | s, Annex II | | | 12.1. Toxicity to fish: | LC50 | 96h | >10 00 | mg/l | Brachydanio rerio | OECD 203 (Fish, Acute Toxicity Test) | |
|---|-----------------------------------|------------------|------------------|-------------------|-------------------------|---|--|--|--------------------------|-----------------|-----------------------|-----------|--------------------------------|---|--|
| /alid from: 01.11.20 PDF print date: 01.7 COSMO® PU-160.7 COSMO® PU-160.7 COSMO® PU-160.7 | 11.2021 540 690 | | | | | | | 12.1. Toxicity to daphnia: | NOEC/N OEL | 21d | >=1 0 | mg/l | Daphnia magna | OECD 211 (Daphnia magna Reproductio n Test) | |
| COSMO® PU-160. 2.2. Persistence and degradability: | 720 | 28d | 0 | % | activated sludge | OECD 302 C (Inherent Biodegradab ility - Modified | Not biodegrada ble, According to | 12.2. Persistence and degradability: | | 28d | 0 | % | activated sludge | OECD 302 C (Inherent Biodegradab ility - Modified MITI Test (II)) | |
| | | | | | | MITI Test (II)) | experience available to date, polycarbam ide is inert | 12.3. Bioaccumulative potential: | BCF | | 200 | | | OECD 305 (Bioconcentr ation - Flow- Through Fish Test) | Not to be expected |
| | | | | | | | and non- degradable ., With water at the interface, transforms slowly with formation of CO2 | Toxicity to bacteria: | EC50 | 3h | >10 0 | mg/l | activated sludge | OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation)) | |
| | | | | | | | into a firm, insoluble | Propylene carbon | | | | | - · | - | NI 4 |
| | | | | | | | reaction product with a bigh | Toxicity / effect | Endpoin t | Tim e | Valu e | Unit | Organism | Test method | Notes |
| | | | | | | | with a high melting | 12.1. Toxicity to fish: | LC50 | 96h | >10 | mg/l | Cyprinus caprio | 92/69/EC | |
| 12.3. | BCF | 42d | <14 | | Cyprinus | OECD 305 (Bioconcentr | point (polycarba mide). Not to be | 12.1. Toxicity to daphnia: | EC50 | 48h | >10 00 | mg/l | Daphnia magna | OECD 202 (Daphnia sp. Acute Immobilisati | |
| Bioaccumulative potential: 12.5. Results of | | | | | carpio | ation - Flow- Through Fish Test) | expected No vPvB | 12.1. Toxicity to algae: | EC50 | 72h | >90 0 | mg/l | Desmodesm us subspicatus | on Test) OECD 201 (Alga, Growth Inhibition | |
| PBT and vPvB assessment | | | | | | | substance, No PBT | 12.2. | | | 83,5 | % | | Test) OECD 301 | Readily |
| Toxicity to bacteria: | EC50 | 3h | >10 0 | mg/l | activated sludge | OECD 209 (Activated Sludge, Respiration | substance | Persistence and degradability: | | | -87- 7 | | | B (Ready Biodegradab ility - Co2 Evolution Test) | biodegra ble29d |
| | | | | | | Inhibition Test (Carbon and Ammonium Oxidation)) | | 12.2. Persistence and degradability: | DOC | 14d | 90- 100 | % | | OECD 301 A (Ready Biodegradab ility - DOC Die-Away Test) | |
| Other organisms: Other organisms: | NOEC/N OEL NOEC/N | 14d 14d | >10 00 >10 | mg/k g mg/k | Avena sativa | OECD 208 (Terrestrial Plants, Growth Test) OECD 208 | | 12.3. Bioaccumulative potential: | Log Pow | | - 0,41 | | | | Bioaccur ation is unlikely (LogPow 1)., calculate |
| - | OEL | | 00 | g | sativa | (Terrestrial Plants, Growth Test) | | 12.5. Results of PBT and vPvB assessment | | | | | | | value No PBT substanc No vPvB |
| Toxicity to annelids: | NOEC/N OEL | 14d | >10 00 | mg/k g | Lumbricus terrestris | OECD 207 (Earthworm, Acute Toxicity Tests) | | Toxicity to bacteria: Other | EC10 AOX | 16h | 740 0 0 | mg/l % | Pseudomon as putida | DIN 38412 T.8 | substanc |
| Reaction mass of | 4.4'-methyler | nediphen | vl diisoc | vanate an | d o-(p-isocvanat | | isocvanate | information: | | | | | | | contain any organica |
| Toxicity / effect | Endpoin t | Tim e | Valu e | Unit | Organism | Test method | Notes | | | | | | | | bound |
| 12.1. Toxicity to fish: | LC50 NOEC/N | 96h | > 100 0 | mg/l | Brachydanio rerio | OECD 203 (Fish, Acute Toxicity Test) OECD 211 | | | | | | | | | which car contribute to the AC value in |
| 12.1. Toxicity to daphnia: | OEL | 21d | >10 | mg/l | Daphnia magna | (Daphnia magna | | | | | | | | | waste water. |
| | | | | | | Reproductio n Test) | | 4,4'-methylenedip Toxicity / effect | henyl diisocy Endpoin | anate Tim | Valu | Unit | Organism | Test | Notes |
| 12.1. Toxicity to daphnia: | EC50 | 24h | > 100 0 | mg/l | Daphnia magna | OECD 202 (Daphnia sp. Acute Immobilisati | | 12.1. Toxicity to fish: | t LC50 | e 96h | e >10 00 | mg/l | Brachydanio rerio | method OECD 203 (Fish, Acute Toxicity | Analogou conclusio |
| 12.2. Persistence and degradability: | | 28d | 0 | % | activated sludge | on Test) OECD 302 C (Inherent Biodegradab ility - | | 12.1. Toxicity to daphnia: | EC50 | 24h | >10 00 | mg/l | Daphnia magna | Test) OECD 202 (Daphnia sp. Acute Immobilisati | Analogo conclusio |
| 12.3. | BCF | | 200 | | | Modified MITI Test (II)) | Not to be | 12.1. Toxicity to daphnia: | NOEC/N OEL | 21d | >10 | mg/l | Daphnia magna | on Test) OECD 211 (Daphnia magna | Analogou conclusio |
| Bioaccumulative potential: Toxicity to | EC50 | 3h | >10 | mg/l | activated | OECD 209 | expected | 12.1. Toxicity to | ErC50 | 72h | >16 | ma/! | Desmodesm | Reproductio n Test) OECD 201 | Analaa |
| oacteria: | ECSU | 30 | 0 | mgn | sludge | (Activated Sludge, Respiration Inhibition Test (Carbon | | algae: | ErC50 | 72n | >16 40 | mg/l | Us subspicatus | (Alga, Growth Inhibition Test) | Analogoi conclusio |
| | | | | | | and Ammonium Oxidation)) | | | | | | | | | |
| Methylenedipheny | l diisocyana Endpoin | te, modif Tim | ied Valu | Unit | Organism | Test | Notes | | | | | | | | |
| Toxicity / effect | | e | e | | | method | | | | | | | | | |



| Replacing version Valid from: 01.11.2 PDF print date: 01. COSMO® PU-160. COSMO® PU-160. COSMO® PU-160. | 021 11.2021 540 690 710 | n: 02.08.2 | 2021 / 00 | 08 | | | |
|---|-------------------------------------|------------|------------|---------------|---------------------|---|---|
| 12.2. Persistence and degradability: | | 28d | 0 | % | | OECD 302 C (Inherent Biodegradab liity - Modified MITI Test (II)) | Not biodeg ble, W water the slowly formata for |
| 12.3. Bioaccumulative potential: | Log Pow | | 5,22 | | | | A nota biologi accum on potent has to expect (LogPo 3). |
| 12.3. Bioaccumulative potential: | BCF | 28d | 200 | | Cyprinus caprio | IUCLID Chem. Data Sheet (ESIS) | Not to expect |
| 12.4. Mobility in soil: | H (Henry) | | 0,02 29 | Pa*m 3/mol | | (2010) | |
| 12.5. Results of PBT and vPvB assessment | (nony) | | 20 | <u>o</u> mor | | | No PB substa No vP substa |
| Toxicity to bacteria: | EC50 | 3h | >10 0 | mg/l | activated sludge | OECD 209 (Activated Sludge, Respiration Inhibition Test (Carbon and Ammonium Oxidation)) | Analog conclu |
| Other organisms: | NOEC/N OEL | 14d | >10 00 | mg/k g | Lactuca sativa | OECD 208 (Terrestrial Plants, Growth Test) | Analog conclu |
| Other organisms: | NOEC/N OEL | 14d | >10 00 | mg/k g | Avena sativa | OECD 208 (Terrestrial Plants, Growth Test) | Analog conclu |
| Other information: | AOX | | | | | | Does i contain any organi bound haloge which contrib to the value i |

| Other information: | | | | | | | According to experience available to date, polycarbam ide 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 (polycarba mide). |
|--------------------------|---------------|-----|---------------|-----------|-------------------------|--|--|
| Toxicity to annelids: | NOEC/N OEL | 14d | > 100 0 | mg/k g | Lumbricus terrestris | OECD 207 (Earthworm, Acute Toxicity Tests) | Analogous conclusion |
| Toxicity to annelids: | EC50 | 14d | >10 00 | mg/k g | Eisenia foetida | OECD 207 (Earthworm, Acute Toxicity Tests) | Analogous conclusion |

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.

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 o, suitable isocians o long

E.g. suitable incineration plant. Hardened product: E.g. dispose at suitable refuse site

E.g. unspose at suitable feruse 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

| Transport by road/by rail (ADR/RID) | | | |
|---|----------------|--|--|
| 14.1. UN number or ID number: | Not applicable | | |
| 14.2. UN proper shipping name: | | | |
| Not applicable | | | |
| 14.3. Transport hazard class(es): | Not applicable | | |
| 14.4. Packing group: | Not applicable | | |
| 14.5. Environmental hazards: | Not applicable | | |
| Tunnel restriction code: | Not applicable | | |
| Classification code: | Not applicable | | |
| LQ: | Not applicable | | |
| Transport category: | Not applicable | | |
| Transport by sea (IMDG-code) | | | |
| 14.1. UN number or ID number: | Not applicable | | |
| 14.2. UN proper shipping name: | | | |
| Not applicable | | | |
| 14.3. Transport hazard class(es): | Not applicable | | |
| 14.4. Packing group: | Not applicable | | |
| 14.5. Environmental hazards: | Not applicable | | |
| Marine Pollutant: | Not applicable | | |
| EmS: | Not applicable | | |
| Transport by air (IATA) | | | |
| 14.1. UN number or ID number: | Not applicable | | |
| 14.2. UN proper shipping name: | | | |
| Not applicable | | | |
| 14.3. Transport hazard class(es): | Not applicable | | |
| 14.4. Packing group: | Not applicable | | |
| 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 Regula

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 Diphenylmethanedilisocyanate, isomeres and homologues Reaction mass of 4,4'-methylenediphenyl diisocyanate and o-(p-isocyanatobenzyl)phenyl isocyanate Methylenediphenyl diisocyanate, modified 4,4'-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.



| ~ | |
|---|---|
| GB Page 8 of 8 Sofatu data about according to Degulation | |
| Safety data sheet according to Regulation | (EC) No 1907/2006, Annex II |
| Revision date / version: 01.11.2021 / 000 | |
| Replacing version dated / version: 02.08.2 | 021 / 0008 |
| Valid from: 01.11.2021 | |
| PDF print date: 01.11.2021 | |
| COSMO® PU-160.540 | |
| COSMO® PU-160.690 | |
| COSMO® PU-160.710 | |
| COSMO® PU-160.720 | |
| Regulation (EU) No 649/2012 'concerning as the product contains a substance that f | the export and import of hazardous chemicals' must be adhered to alls within the scope of this Regulation. |
| Directive 2010/75/EU (VOC): | 3,96 g/l |
| Directive 2010/75/EU (VOC): | 0,36 % |
| National requirements/regulations on safe equipment. | y and health protection must be applied when using work |
| 15.2 Chemical safety assessme | ent |
| A chemical safety assessment is not provi | ded for mixtures. |
| SECTIO | N 16: Other information |
| | |
| Revised sections: | 1-16 |
| These details refer to the product as it is d | elivered. |
| Employee instruction/training in handling h | azardous 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 |
|--|---|
| 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. |
| 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).

All the Consultation (specified in Declarol 2 and 5). H373 May cause damage to organs through prolonged or repeated exposure by inhalation. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation.

H332 Harmful if inhaled. H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled. H335 May cause respiratory irritation. H351 Suspected of causing cancer.

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 STOT RE — Specific target organ toxicity - repeated exposure Acute Tox. — Acute toxicity - inhalation

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. 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 Art., Art. no.Article number ASTM ASTM International (American Society for Testing and Materials)

Acute Toxicity Estimate Bundesanstalt für Materialforschung und -prüfung (Federal Institute for Materials Research and ATE BAM

Testing, Germany) BAuA Bundesans and Safety, Germany) BCF Bioconcen Bundesanstalt für Arbeitsschutz und Arbeitsmedizin (= Federal Institute for Occupational Health Bioconcentration factor

BSEF The International Bromine Council

 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.q. | for example (abbreviation of Latin 'exempli gratia'), for instance | |
| EbCx, EyC: | x, EbLx (x = 10, 50) Effect Concentration/Level of x % on reduction of the biomass | |
| (algae, plar | (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) | |
| | c, ErLx (x = 10, 50) Effect Concentration/Level of x % on inhibition of the growth rate | |
| (algae, plar 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 | |
| | International Bulk Chemical (Code) | |
| | International Maritime Code for Dangerous Goods | |
| incl. | including, inclusive | |
| IUCLID IUPAC | International Uniform Chemical Information Database 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, L | | |
| 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 EL No Observed Effect Concentration/Level | |
| NOEC, NO 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 (= | |
| | concerning the International Carriage of Dangerous Goods by Rail) | |
| SVHC | Substances of Very High Concern | |
| Tel. | Telephone | |
| TOC | Total organic carbon | |
| | United Nations Recommendations on the Transport of Dangerous Goods | |

UN RTDG United Nations Recommendations on the Transport of Dangerous Goods

VOC vPvB Volatile organic compounds 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 h

Chemical Check GmbH, Chemical Check Platz 1-7, D-32839 Steinheim, Tel.: +49 5233 94 17 0, Fax: +49 5233 94 17 90

© by Chemical Check GmbH Gefahrstoffberatung. The copying or changing of this document is forbidden except with consent of the Chemical Check GmbH Gefahrstoffberatung.