

ZW POLYFLEX 452 GRAY
Supersedes Date: 02-Jun-2020

Revision date 17-Dec-2020
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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product Identifier

Product Name ZW POLYFLEX 452 GRAY
Pure substance/mixture Mixture

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

Recommended use Sealant.
Uses advised against None known.

1.3. Details of the supplier of the safety data sheet

Company Name
Den Braven France SARL
Z.I. du Meux - B.P. 20114
60881 Le Meux Cedex
France
Tel: + 33 344 91 68 68

E-mail address SDS.box-EU@bostik.com

1.4. Emergency telephone number

Emergency Telephone No information available

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Not classified

2.2. Label Elements

Not classified

Signal word
None

Hazard statements
Not classified

EU Specific Hazard Statements

EUH208 - Contains Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate. May produce an allergic reaction
EUH210 - Safety data sheet available on request
EUH212 - Warning! Hazardous respirable dust may be formed when used. Do not breathe dust
EUH204 - Contains isocyanates. May produce an allergic reaction

2.3. Other Hazards

No information available

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PBT & vPvB

This mixture contains no substance considered to be persistent, bioaccumulating or toxic (PBT). This mixture contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

| Chemical name | EC No. | CAS No | Weight-% | Classification according to Regulation (EC) No. 1272/2008 [CLP] | Specific concentration limit (SCL) | REACH Registration Number |
|--|-----------|--------------|-------------|---|---|---------------------------|
| Xylene (reaction mass of ethylbenzene and xylene) | 905-588-0 | RR-45541-4 | 5 - <10 | STOT SE 3 (H335) STOT RE 2 (H373) Asp. Tox. 1 (H304) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Acute Tox. 4 (H312) Acute Tox. 4 (H332) Flam Liq. 3 (H226) Aquatic Chronic 3 (H412) | STOT RE 2 (H373):: C>=10% | 01-2119488216-32-xxxx |
| Titanium dioxide | 236-675-5 | 13463-67-7 | 1 - <5 | Carc. 2 (H351i) | | 01-2119489379-17-XXXX |
| Aromatic Polyisocyanate | - | 53317-61-6 | 0.1 - <1 | Eye Irrit. 2 (H319) Skin Sens. 1 (H317) | | [7] |
| Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate | 915-687-0 | 1065336-91-5 | 0.01 - <0.1 | Skin Sens. 1A (H317) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410) | | 01-2119491304-40-XXXX |
| 4,4'-Methylenediphenyl diisocyanate | 202-966-0 | 101-68-8 | 0.01 - <0.1 | 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 | STOT SE 3 :: C>=5% Skin Irrit. 2 :: C>=5% Eye Irrit. 2 :: C>=5% Resp. Sens. 1 :: C>=0.1% | 01-2119457014-47-XXXX |

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|----------------------|-----------|------------|--------------|--|-----------------------------|---------------------------|
| | | | | (H335) STOT RE 2 (H373) | | |
| Toluene diisocyanate | 247-722-4 | 26471-62-5 | 0.01 - <0.05 | Acute Tox. 1 (H330) Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Resp. Sens. 1 (H334) Skin Sens. 1 (H317) Carc. 2 (H351) STOT SE 3 (H335) Aquatic Chronic 3 (H412) | Resp. Sens. 1 :: C>=0.1% | 01-2119454791- 34-XXXX |

NOTE [7] - No registration number is given for this substance because it is a polymer exempted from registration according to the provisions of Article 2(9) of REACH. All monomers or other substances within the polymer are registered or exempt from registration

Full text of H- and EUH-phrases: see section 16

Note: ^ indicates not classified, however, the substance is listed in section 3 as it has an OEL

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

SECTION 4: First aid measures

4.1. Description of first aid measures

| | |
|-----------------------|---|
| General advice | If medical advice is needed, have product container or label at hand. Show this safety data sheet to the doctor in attendance. |
| Inhalation | Remove to fresh air. IF exposed or concerned: Get medical advice/attention. |
| Eye contact | Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a doctor. |
| Skin contact | Wash skin with soap and water. In the case of skin irritation or allergic reactions see a doctor. |
| Ingestion | Clean mouth with water. Do NOT induce vomiting. Drink 1 or 2 glasses of water. Never give anything by mouth to an unconscious person. |

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

| | |
|-----------------|---|
| Symptoms | Prolonged contact may cause redness and irritation. |
|-----------------|---|

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

| | |
|------------------------|------------------------|
| Note to doctors | Treat symptomatically. |
|------------------------|------------------------|

SECTION 5: Firefighting measures

5.1. Extinguishing media

| | |
|-------------------------------------|---|
| Suitable extinguishing media | Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. |
|-------------------------------------|---|

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Unsuitable extinguishing media Full water jet. Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical Thermal decomposition can lead to release of toxic and corrosive gases/vapours.

Hazardous combustion products Carbon monoxide. Carbon dioxide (CO₂). Hydrocarbons. Nitrogen oxides (NO_x). Aldehydes. Hydrochloric acid. Sulphur oxides.

5.3. Advice for firefighters

Special protective equipment for fire-fighters Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation. Avoid contact with skin, eyes or clothing.

Other information Ventilate the area. Prevent further leakage or spillage if safe to do so.

For emergency responders Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions Do not flush into surface water or sanitary sewer system. Do not allow to enter into soil/subsoil. See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

Methods for containment Do not scatter spilled material with high pressure water streams.

Methods for cleaning up Take up mechanically, placing in appropriate containers for disposal.

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling Ensure adequate ventilation. Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Take off all contaminated clothing and wash it before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Protect from moisture.

7.3. Specific end use(s)

Specific Use(s)
Sealant.

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

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Other information

Observe technical data sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits

Only European Community Occupational Exposure Limits will be shown in this document. Please refer to regional SDS for further information.

| Chemical name | European Union |
|---|---|
| Xylene (reaction mass of ethylbenzene and xylene) RR-45541-4 | TWA: 50 ppm TWA: 221 mg/m ³ STEL: 100 ppm STEL: 442 mg/m ³ S* |

Derived No Effect Level (DNEL) No information available

| Derived No Effect Level (DNEL) | | | |
|--|----------------|--------------------------------|---------------|
| Xylene (reaction mass of ethylbenzene and xylene) (RR-45541-4) | | | |
| Type | Exposure route | Derived No Effect Level (DNEL) | Safety factor |
| worker Long term Systemic health effects | Inhalation | 221 mg/m ³ | |
| worker Long term Local health effects | Inhalation | 221 mg/m ³ | |
| worker Short term Local health effects | Inhalation | 442 mg/m ³ | |
| worker Long term Systemic health effects | Dermal | 212 mg/kg bw/d | |

| Titanium dioxide (13463-67-7) | | | |
|---|----------------|--------------------------------|---------------|
| Type | Exposure route | Derived No Effect Level (DNEL) | Safety factor |
| worker Long term Local health effects | Inhalation | 10 mg/m ³ | |

| Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate (1065336-91-5) | | | |
|---|----------------|--------------------------------|---------------|
| 4,4'-Methylenediphenyl diisocyanate (101-68-8) | | | |
| Type | Exposure route | Derived No Effect Level (DNEL) | Safety factor |
| worker Short term Systemic health effects | Dermal | 50 mg/kg bw/d | |
| worker Short term Systemic health effects | Inhalation | 0.1 mg/m ³ | |
| worker Short term Local health effects | Dermal | 28700 µg/cm ² | |
| worker | Inhalation | 0.1 mg/m ³ | |

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| | | | |
|--|------------|------------------------|--|
| Short term Local health effects | | | |
| worker Long term Systemic health effects | Inhalation | 0.05 mg/m ³ | |
| worker Long term Local health effects | Inhalation | 0.05 mg/m ³ | |

| Toluene diisocyanate (26471-62-5) | | | |
|---|----------------|--------------------------------|---------------|
| Type | Exposure route | Derived No Effect Level (DNEL) | Safety factor |
| worker Long term Systemic health effects | Inhalation | 0.035 mg/m ³ | |
| worker Short term Systemic health effects | Inhalation | 0.14 mg/m ³ | |
| worker Long term Local health effects | Inhalation | 0.035 mg/m ³ | |
| worker Short term Local health effects | Inhalation | 0.14 mg/m ³ | |

| Derived No Effect Level (DNEL) | | | |
|---|----------------|--------------------------------|---------------|
| Xylene (reaction mass of ethylbenzene and xylene) (RR-45541-4) | | | |
| Type | Exposure route | Derived No Effect Level (DNEL) | Safety factor |
| Consumer Long term Systemic health effects | Inhalation | 65.3 mg/m ³ | |
| Consumer Short term Systemic health effects | Inhalation | 260 mg/m ³ | |
| Consumer Long term Local health effects | Inhalation | 65.3 mg/m ³ | |
| Consumer Short term Local health effects | Inhalation | 260 mg/m ³ | |
| Consumer Long term Systemic health effects | Dermal | 125 mg/kg bw/d | |
| Consumer Long term Systemic health effects | Oral | 12.5 mg/kg bw/d | |

| Titanium dioxide (13463-67-7) | | | |
|--|----------------|--------------------------------|---------------|
| Type | Exposure route | Derived No Effect Level (DNEL) | Safety factor |
| Consumer Long term Systemic health effects | Oral | 700 mg/kg bw/d | |

| 4,4'-Methylenediphenyl diisocyanate (101-68-8) | | | |
|---|----------------|--------------------------------|---------------|
| Type | Exposure route | Derived No Effect Level (DNEL) | Safety factor |
| Consumer Short term | Dermal | 25 mg/kg bw/d | |

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| | | | |
|---|------------|--------------------------|--|
| Systemic health effects | | | |
| Consumer Short term Systemic health effects | Inhalation | 0.05 mg/m ³ | |
| Consumer Short term Systemic health effects | Oral | 20 mg/kg bw/d | |
| Consumer Short term Local health effects | Dermal | 17200 µg/cm ² | |
| Consumer Short term Local health effects | Inhalation | 0.05 mg/m ³ | |
| Consumer Long term Systemic health effects | Inhalation | 0.025 mg/m ³ | |
| Consumer Long term Local health effects | Inhalation | 0.025 mg/m ³ | |

Predicted No Effect Concentration (PNEC) No information available.

| Predicted No Effect Concentration (PNEC) | |
|---|--|
| Xylene (reaction mass of ethylbenzene and xylene) (RR-45541-4) | |
| Environmental compartment | Predicted No Effect Concentration (PNEC) |
| Freshwater | 0.327 mg/l |
| Marine water | 0.327 mg/l |
| Microorganisms in sewage treatment | 6.58 mg/l |
| Freshwater sediment | 12.46 mg/kg dry weight |
| Soil | 2.31 mg/kg dry weight |

| Titanium dioxide (13463-67-7) | |
|--------------------------------------|--|
| Environmental compartment | Predicted No Effect Concentration (PNEC) |
| Marine water | 0.0184 mg/l |
| Freshwater sediment | 1000 mg/kg |
| Freshwater | 0.184 mg/l |
| Marine sediment | 100 mg/kg |
| Soil | 100 mg/kg |
| Microorganisms in sewage treatment | 100 mg/l |
| Freshwater - intermittent | 0.193 mg/l |

| 4,4'-Methylenediphenyl diisocyanate (101-68-8) | |
|---|--|
| Environmental compartment | Predicted No Effect Concentration (PNEC) |
| Freshwater | 1 mg/l |
| Marine water | 0.1 mg/l |
| Soil | 1 mg/kg dry weight |
| Sewage treatment plant | 1 mg/l |
| Freshwater - intermittent | 10 mg/l |

| Toluene diisocyanate (26471-62-5) | |
|--|--|
| Environmental compartment | Predicted No Effect Concentration (PNEC) |
| Freshwater | 0.013 mg/l |
| Marine water | 0.00125 mg/l |
| Microorganisms in sewage treatment | >1 mg/l |
| Soil | >1 mg/kg dry weight |

8.2. Exposure controls

Engineering controls Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

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| | |
|---------------------------------|--|
| Eye/face protection | Wear safety glasses with side shields (or goggles). Eye protection must conform to standard EN 166 |
| Hand protection | Nitrile rubber. Butyl rubber. Glove thickness > 0.4 mm. The breakthrough time of the gloves depends on the material and the thickness as well as the temperature. The breakthrough time for the mentioned glove material is in general greater than 60 min. Gloves must conform to standard EN 374 |
| Skin and body protection | Suitable protective clothing. |
| Respiratory protection | In case of insufficient ventilation, wear suitable respiratory equipment. |
| Recommended filter type: | Wear a respirator conforming to EN 140 with Type A/P2 filter or better. Organic gases and vapours filter conforming to EN 14387. |

Environmental exposure controls No information available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|------------------------|--------------------------|
| Physical state | Solid |
| Appearance | Paste |
| Colour | Grey |
| Odour | Characteristic |
| Odour threshold | No information available |

| Property | Values | Remarks • Method |
|--|---------------------------|------------------|
| pH | Not applicable | |
| Melting point / freezing point | No data available | |
| Boiling point / boiling range | Not applicable °C | |
| Flash point | > 61 °C | |
| Evaporation rate | No data available | |
| Flammability (solid, gas) | No data available | |
| Flammability Limit in Air | | |
| Upper flammability or explosive limits | No data available | |
| Lower flammability or explosive limits | No data available | |
| Vapour pressure | No data available | |
| Relative vapour density | No data available | |
| Relative density | No data available | |
| Water solubility | No data available | |
| Solubility(ies) | No data available | |
| Partition coefficient | No data available | |
| Autoignition temperature | No data available | |
| Decomposition temperature | No data available | |
| Kinematic viscosity | 600000 mm ² /s | |
| Dynamic viscosity | 600000 mPa s | |
| Explosive properties | No data available | |
| Oxidising properties | No data available | |

9.2. Other information

| | |
|--------------------------|--------------------------|
| Solid content (%) | No information available |
| VOC Content (%) | No information available |
| Density | 1.23 g/cm ³ |

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity No information available.

10.2. Chemical stability

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Stability Stable under normal conditions.

Explosion data
Sensitivity to mechanical impact None.
Sensitivity to static discharge None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoid Protect from moisture. Product cures with moisture.

10.5. Incompatible materials

Incompatible materials None known based on information supplied.

10.6. Hazardous decomposition products

Hazardous decomposition products None under normal use conditions. Stable under recommended storage conditions.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Information on likely routes of exposure

Product Information .

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

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

Skin contact Specific test data for the substance or mixture is not available. Causes mild skin irritation.

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

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Prolonged contact may cause redness and irritation.

Numerical measures of toxicity

Acute toxicity

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (dermal) 13,894.90 mg/kg
ATEmix (inhalation-vapour) 194.911 mg/l

Component Information

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|--|----------------------|--------------------------------------|--|
| Xylene (reaction mass of ethylbenzene and xylene) RR-45541-4 | =3500 mg/kg (Rattus) | >10000 mg/kg (Oryctolagus cuniculus) | =>47635 mg/L (Rattus) 4 h = >5000 ppm (Rattus) 4 h |

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| | | | |
|--|--|---|---|
| Titanium dioxide 13463-67-7 | >10000 mg/kg (Rattus) | LD50 > 10000 mg/Kg | >5 mg/l |
| Aromatic Polyisocyanate 53317-61-6 | LD50 >2000 mg/Kg (Rattus) | | LC50 >3.820 mg/L (Rattus) 4h dust/mist |
| Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-pi peridyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperi dyl sebacate 1065336-91-5 | LD50 = 3230 mg/Kg (Rat) | LD50 >3170 mg/Kg (Rat) | |
| 4,4'-Methylenediphenyl diisocyanate 101-68-8 | =31600 mg/kg (Rattus) = 9200 mg/kg (Rattus) | LD 50 > 9400 mg/kg (Oryctolagus cuniculus) OECD 402 | =1.5 mg/L (Rattus) 4 h |
| Toluene diisocyanate 26471-62-5 | =3060 mg/kg (Rattus) | = 10000 mg/kg (Oryctolagus cuniculus) | =0.107 mg/L (Rattus) 4 h (Vapour) |

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation Classification based on data available for ingredients. May cause skin irritation.

| Component Information | | | | | |
|--|---------|----------------|----------------|---------------|--------------|
| Titanium dioxide (13463-67-7) | | | | | |
| Method | Species | Exposure route | Effective dose | Exposure time | Results |
| OECD Test No. 404: Acute Dermal Irritation/Corrosion | | | | | Non-irritant |

Serious eye damage/eye irritation Based on available data, the classification criteria are not met.

| Component Information | | | | | |
|---|---------|----------------|----------------|---------------|--------------|
| 4,4'-Methylenediphenyl diisocyanate (101-68-8) | | | | | |
| Method | Species | Exposure route | Effective dose | Exposure time | Results |
| OECD Test No. 405: Acute Eye Irritation/Corrosion | Rabbit | Eye | 0.1 mL | 24 hours | Non-irritant |

Respiratory or skin sensitisation Based on available data, the classification criteria are not met.

| Component Information | | | |
|--|---------|----------------|-------------|
| Titanium dioxide (13463-67-7) | | | |
| 4,4'-Methylenediphenyl diisocyanate (101-68-8) | | | |
| Method | Species | Exposure route | Results |
| OECD GD 39 | Rat | Inhalation | Sensitizing |

| Toluene diisocyanate (26471-62-5) | | | |
|---|---------|----------------|-------------|
| Method | Species | Exposure route | Results |
| OECD Test No. 429: Skin Sensitisation: Local Lymph Node Assay | Mouse | Dermal | sensitising |

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

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

| Chemical name | European Union |
|------------------|----------------|
| Titanium dioxide | Carc. 2 |

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| | |
|---|---------|
| 13463-67-7 | |
| 4,4'-Methylenediphenyl diisocyanate 101-68-8 | Carc. 2 |
| Toluene diisocyanate 26471-62-5 | Carc. 2 |

The table below indicates whether each agency has listed any ingredient as a carcinogen.

| Component Information | | |
|--|---------|---|
| Titanium dioxide (13463-67-7) | | |
| Method | Species | Results |
| Oral | Rat | Not Carcinogenic |
| Inhalation Xu et al (2010), carcinogenic activity of nanoscale TiO ₂ administered by an intrapulmonary spraying (IPS) - initiation-promotion protocol in rat lung | Rat | Carcinogenic |
| 4,4'-Methylenediphenyl diisocyanate (101-68-8) | | |
| Method | Species | Results |
| OECD Test No. 453: Combined Chronic Toxicity/Carcinogenicity Studies | Rat | Limited evidence of a carcinogenic effect |

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

STOT - single exposure Based on available data, the classification criteria are not met.

STOT - repeated exposure Based on available data, the classification criteria are not met.

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

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity

| Chemical name | Algae/aquatic plants | Fish | Toxicity to microorganisms | Crustacea | M-Factor | M-Factor (long-term) |
|--|---|--|----------------------------|---|----------|----------------------|
| Xylene (reaction mass of ethylbenzene and xylene) RR-45541-4 | EC50 (72hr) 2.2 mg/l (Selenastrum capricornutum) | LC50(96h) 2.6 mg/l (Oncorhynchus mykiss-OECD 203) | EC50 = 0.0084 mg/L 24 h | LC50(24h) 1 mg/l (Daphnia magna-OECD 202) | | |
| Titanium dioxide 13463-67-7 | LC50 (96h) >10000 mg/l (Cyprinodon variegatus) OECD 203 | - | - | - | | |
| Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate 1065336-91-5 | - | LC50 (96h) =0.9 mg/L | - | - | | |
| 4,4'-Methylenediphenyl | ErC50 (72h) | >1000 mg/l | - | EC50 (24H) | | |

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|--------------------------|---|---------------|--|-----------------------------|--|--|
| diisocyanate 101-68-8 | >1640 mg/L Algae (scenedesmus subspicatus) (OECD 201) | (Danio rerio) | | >1000 mg/L Daphnia magna | | |
|--------------------------|---|---------------|--|-----------------------------|--|--|

12.2. Persistence and degradability

Persistence and degradability No information available.

| Component Information | | | |
|---|---------------|----------------|--------------------------------|
| Aromatic Polyisocyanate (53317-61-6) | | | |
| Method | Exposure time | Value | Results |
| OECD Test No. 301F: Ready Biodegradability: Manometric Respirometry Test (TG 301 F) | | biodegradation | 34 % Not readily biodegradable |

| 4,4'-Methylenediphenyl diisocyanate (101-68-8) | | | |
|--|---------------|-------------------|---------------------------|
| Method | Exposure time | Value | Results |
| OECD Test No. 302C: Inherent Biodegradability: Modified MITI Test (II) | 28 days | 0% biodegradation | Not readily biodegradable |

12.3. Bioaccumulative potential

Bioaccumulation There is no data for this product.

Component Information

| Chemical name | Partition coefficient | Bioconcentration factor (BCF) |
|---|-----------------------|-------------------------------|
| Xylene (reaction mass of ethylbenzene and xylene) RR-45541-4 | 3.15 | 25.9 |
| 4,4'-Methylenediphenyl diisocyanate 101-68-8 | 4.51 | 200 |
| Toluene diisocyanate 26471-62-5 | - | 5 |

12.4. Mobility in soil

Mobility in soil No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment

| Chemical name | PBT and vPvB assessment |
|--|--|
| Xylene (reaction mass of ethylbenzene and xylene) RR-45541-4 | The substance is not PBT / vPvB |
| Titanium dioxide 13463-67-7 | The substance is not PBT / vPvB PBT assessment does not apply |
| Reaction mass of Bis(1,2,2,6,6-pentamethyl-4-piperidyl) sebacate and Methyl 1,2,2,6,6-pentamethyl-4-piperidyl sebacate 1065336-91-5 | The substance is not PBT / vPvB |
| 4,4'-Methylenediphenyl diisocyanate 101-68-8 | The substance is not PBT / vPvB |
| Toluene diisocyanate 26471-62-5 | The substance is not PBT / vPvB |

12.6. Other adverse effects

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Other adverse effects No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

| | |
|-------------------------------------|--|
| Waste from residues/unused products | Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable. |
| Contaminated packaging | Do not reuse empty containers. Handle contaminated packages in the same way as the product itself. |
| European Waste Catalogue | 08 04 10 waste adhesives and sealants other than those mentioned in 08 04 09 |
| Other information | Waste codes should be assigned by the user based on the application for which the product was used. |

SECTION 14: Transport information

Land transport (ADR/RID)

| | |
|---------------------------------|----------------|
| 14.1 UN number or ID number | Not regulated |
| 14.2 Proper Shipping Name | Not regulated |
| 14.3 Transport hazard class(es) | Not regulated |
| 14.4 Packing group | Not regulated |
| 14.5 Environmental hazards | Not applicable |
| 14.6 Special Provisions | None |

IMDG

| | |
|---|----------------|
| 14.1 UN number or ID number | Not regulated |
| 14.2 Proper Shipping Name | Not regulated |
| 14.3 Transport hazard class(es) | Not regulated |
| 14.4 Packing group | Not regulated |
| 14.5 Marine pollutant | NP |
| 14.6 Special Provisions | None |
| 14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code | Not applicable |

Air transport (ICAO-TI / IATA-DGR)

| | |
|---------------------------------|----------------|
| 14.1 UN number or ID number | Not regulated |
| 14.2 Proper Shipping Name | Not regulated |
| 14.3 Transport hazard class(es) | Not regulated |
| 14.4 Packing group | Not regulated |
| 14.5 Environmental hazards | Not applicable |
| 14.6 Special Provisions | None |

Section 15: REGULATORY INFORMATION

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

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

Check whether measures in accordance with Directive 94/33/EC for the protection of young people at work must be taken.

Take note of Directive 92/85/EC on the protection of pregnant and breastfeeding women at work

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Registration, Evaluation, Authorization, and Restriction of Chemicals (REACH) Regulation (EC 1907/2006)

SVHC: Substances of Very High Concern for Authorisation:

This product does not contain candidate substances of very high concern at a concentration $\geq 0.1\%$ (Regulation (EC) No. 1907/2006 (REACH), Article 59)

EU-REACH (1907/2006) - Annex XVII - Substances subject to Restriction

This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII).

Substance subject to authorisation per REACH Annex XIV

This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV)

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

Persistent Organic Pollutants

Not applicable

National regulations

France

Occupational Illnesses (R-463-3, France)

| Chemical name | French RG number |
|---|------------------|
| Xylene (reaction mass of ethylbenzene and xylene) RR-45541-4 | RG 4bis, RG 84 |
| 4,4'-Methylenediphenyl diisocyanate 101-68-8 | RG 62 |
| Toluene diisocyanate 26471-62-5 | RG 62 |

Germany

Ordinance on Industrial Safety and Health - Germany - BetrSichV

No flammable liquids in accordance with BetrSichV

Water hazard class (WGK) obviously hazardous to water (WGK 2)

Netherlands

List of Carcinogenic, mutagenic and reproductive toxin substances in accordance with Inspectorate SZW (Netherlands)

| Chemical name | Netherlands |
|---|--------------------------|
| Xylene (reaction mass of ethylbenzene and xylene) RR-45541-4 | Development (Category 2) |

Denmark

Norway

15.2. Chemical safety assessment

Chemical Safety Assessments have been carried out by the Reach registrants for substances registered at >10 tpa. No

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Chemical Safety Assessment has been carried out for this mixture

SECTION 16: Other information

Key or legend to abbreviations and acronyms used in the safety data sheet

Full text of H-Statements referred to under section 3

H226 - Flammable liquid and vapour
H304 - May be fatal if swallowed and enters airways
H312 - Harmful in contact with skin
H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation
H330 - Fatal if inhaled
H332 - Harmful if inhaled
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled
H335 - May cause respiratory irritation
H351 - Suspected of causing cancer
H373 - May cause damage to organs through prolonged or repeated exposure
H400 - Very toxic to aquatic life
H410 - Very toxic to aquatic life with long lasting effects
H412 - Harmful to aquatic life with long lasting effects

Legend

| | |
|---------|---|
| TWA | TWA (time-weighted average) |
| STEL | STEL (Short Term Exposure Limit) |
| Ceiling | Ceiling Limit Value |
| * | Skin designation |
| SVHC | Substance(s) of Very High Concern |
| PBT | Persistent, Bioaccumulative, and Toxic (PBT) Chemicals |
| vPvB | Very Persistent and very Bioaccumulative (vPvB) Chemicals |
| STOT RE | Specific target organ toxicity - Repeated exposure |
| STOT SE | Specific target organ toxicity - Single exposure |
| EWC | European Waste Catalogue |

Key literature references and sources for data

No information available

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Indication of changes

Revision note Not applicable.

Training Advice No information available

Further information No information available

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer

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End of Safety Data Sheet