

Soudal PRO 40 PU Wood adhesive**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier:**

Product name : Soudal PRO 40 PU Wood adhesive
Product type REACH : Mixture

1.2 Relevant identified uses of the substance or mixture and uses advised against:**1.2.1 Relevant identified uses**

Adhesive

1.2.2 Uses advised against

No uses advised against known

1.3 Details of the supplier of the safety data sheet:**Supplier of the safety data sheet**

SOUDAL N.V.
Everdongenlaan 18-20
B-2300 Turnhout
☎ +32 14 42 42 31
☎ +32 14 42 65 14
msds@soudal.com

Manufacturer of the product

SOUDAL N.V.
Everdongenlaan 18-20
B-2300 Turnhout
☎ +32 14 42 42 31
☎ +32 14 42 65 14
msds@soudal.com

1.4 Emergency telephone number:

24h/24h (Telephone advice: English, French, German, Dutch):
+32 14 58 45 45 (BIG)

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture:****2.1.1 Classification according to Regulation EC No 1272/2008**

Classified as dangerous according to the criteria of Regulation (EC) No 1272/2008

| Class | Category | Hazard statements |
|-------------|------------|---|
| Carc. | category 2 | H351: Suspected of causing cancer. |
| Acute Tox. | category 4 | H332: Harmful if inhaled. |
| STOT RE | category 2 | H373: May cause damage to organs through prolonged or repeated exposure if inhaled. |
| Eye Irrit. | category 2 | H319: Causes serious eye irritation. |
| STOT SE | category 3 | H335: May cause respiratory irritation. |
| Skin Irrit. | category 2 | H315: Causes skin irritation. |
| Resp. Sens. | category 1 | H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| Skin Sens. | category 1 | H317: May cause an allergic skin reaction. |

2.1.2 Classification according to Directive 67/548/EEC-1999/45/EC

Classified as dangerous in accordance with the criteria of Directives 67/548/EEC and 1999/45/EC

Carc. Cat. 3; R40 - Limited evidence of a carcinogenic effect

Xn; R20 - 48/20 - Harmful by inhalation. Harmful: danger of serious damage to health by prolonged exposure through inhalation.

Xi; R36/37/38 - Irritating to eyes, respiratory system and skin.

R42/43 - May cause sensitisation by inhalation and skin contact.

2.2 Label elements:**Labelling according to Regulation EC No 1272/2008 (CLP)**

Drawn up according to the criteria of Regulation (EU) No 487/2013, 4th adaptation of Regulation (EC) No 1272/2008

Soudal PRO 40 PU Wood adhesive



Contains: polymethylene polyphenyl isocyanate.

Signal word

Danger

H-statements

- | | |
|------|---|
| H351 | Suspected of causing cancer. |
| H332 | Harmful if inhaled. |
| H373 | May cause damage to organs through prolonged or repeated exposure if inhaled. |
| 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. |

P-statements

- | | |
|-------------|--|
| P101 | If medical advice is needed, have product container or label at hand. |
| P102 | Keep out of reach of children. |
| P280 | Wear protective gloves and eye protection/face protection. |
| P284 | Wear respiratory protection. |
| P260 | Do not breathe vapours/mist. |
| P304 + P340 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. |
| P302 + P352 | IF ON SKIN: Wash with plenty of water and soap. |
| P362 + P364 | Take off contaminated clothing and wash it before reuse. |
| P501 | Dispose of contents/container in accordance with local/regional/national/international regulation. |

Supplemental information

- Persons already sensitised to diisocyanates may develop allergic reactions when using this product.
- Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product.
- This product should not be used under conditions of poor ventilation unless a protective mask with an appropriate gas filter (i.e. type A1 according to standard EN 14387) is used.

Labelling according to Directive 67/548/EEC-1999/45/EC (DSD/DPD)

Labels



Harmful

Contains: polymethylene polyphenyl isocyanate.

R-phrases

- | | |
|----------|--|
| 20 | Harmful by inhalation |
| 36/37/38 | Irritating to eyes, respiratory system and skin |
| 40 | Limited evidence of a carcinogenic effect |
| 42/43 | May cause sensitisation by inhalation and skin contact |
| 48/20 | Harmful: danger of serious damage to health by prolonged exposure through inhalation |

S-phrases

- | | |
|-------|--|
| (02) | (Keep out of the reach of children) |
| 23 | Do not breathe vapour |
| 36/37 | Wear suitable protective clothing and gloves |
| 45 | In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible) |
| (63) | (In case of accident by inhalation: remove casualty to fresh air and keep at rest) |

Additional recommendations

- Contains isocyanates. See information supplied by the manufacturer.
- Persons already sensitised to diisocyanates may develop allergic reactions when using this product.
 - Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product.
 - This product should not be used under conditions of poor ventilation unless a protective mask with an appropriate gas filter (i.e. type A1 according to standard EN 14387) is used.

2.3 Other hazards:

CLP

No other hazards known

DSD/DPD

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No other hazards known

SECTION 3: Composition/information on ingredients

3.1 Substances:

Not applicable

3.2 Mixtures:

| Name REACH Registration No | CAS No EC No | Conc. (C) | Classification according to DSD/DPD | Classification according to CLP | Note | Remark |
|---|-------------------------|-----------|---|---|------------|---------|
| aromatic hydrocarbons, C8 01-2119486136-34 | 90989-38-1 292-694-9 | 1%<C<10% | Xn; R20/21 - 65 Xi; R38 R10 | Flam. Liq. 3; H226 Acute Tox. 4; H332 Acute Tox. 4; H312 Asp. Tox. 1; H304 Skin Irrit. 2; H315 | (1)(2)(10) | UVCB |
| polymethylene polyphenyl isocyanate | 9016-87-9 | C>25 % | Carc. Cat. 3; R40 Xn; R20 - 48/20 Xi; R36/37/38 R42/43 | Carc. 2; H351 Acute Tox. 4; H332 STOT RE 2; H373 Eye Irrit. 2; H319 STOT SE 3; H335 Skin Irrit. 2; H315 Resp. Sens. 1; H334 Skin Sens. 1; H317 | (1)(2)(10) | Polymer |

(1) For R-phrases and H-statements in full: see heading 16

(2) Substance with a Community workplace exposure limit

(10) Subject to restrictions of Annex XVII of Regulation (EC) No. 1907/2006

SECTION 4: First aid measures

4.1 Description of first aid measures:

General:

Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with laboured breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital.

After inhalation:

Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service.

After skin contact:

Wash immediately with lots of water. Soap may be used. Take victim to a doctor if irritation persists.

After eye contact:

Rinse immediately with plenty of water. Do not apply neutralizing agents. Take victim to an ophthalmologist if irritation persists.

After ingestion:

Rinse mouth with water. Do not induce vomiting. Consult a doctor/medical service if you feel unwell.

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

4.2.1 Acute symptoms

After inhalation:

Coughing. Irritation of the respiratory tract. Irritation of the nasal mucous membranes. Runny nose. EXPOSURE TO HIGH CONCENTRATIONS: Central nervous system depression. Dizziness. Narcosis. Headache. Disturbances of consciousness.

After skin contact:

Tingling/irritation of the skin.

After eye contact:

Irritation of the eye tissue.

After ingestion:

AFTER ABSORPTION OF HIGH QUANTITIES: Central nervous system depression. Enlargement/affection of the liver. Symptoms similar to those listed under inhalation.

4.2.2 Delayed symptoms

No effects known.

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

If applicable and available it will be listed below.

SECTION 5: Firefighting measures

5.1 Extinguishing media:

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5.1.1 Suitable extinguishing media:

Water spray. Polyvalent foam. BC powder. Carbon dioxide.

5.1.2 Unsuitable extinguishing media:

No unsuitable extinguishing media known.

5.2 Special hazards arising from the substance or mixture:

On burning: release of toxic and corrosive gases/vapours (nitrous vapours, carbon monoxide - carbon dioxide). On heating: release of toxic/combustible gases/vapours (hydrogen cyanide).

5.3 Advice for firefighters:

5.3.1 Instructions:

If exposed to fire cool the closed containers by spraying with water. Do not move the load if exposed to heat. Dilute toxic gases with water spray. Take account of toxic/corrosive precipitation water.

5.3.2 Special protective equipment for fire-fighters:

Gloves. Face-shield. Protective clothing. Heat/fire exposure: compressed air/oxygen apparatus.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

No naked flames.

6.1.1 Protective equipment for non-emergency personnel

See heading 8.2

6.1.2 Protective equipment for emergency responders

Gloves. Face-shield. Protective clothing.

Suitable protective clothing

See heading 8.2

6.2 Environmental precautions:

Contain leaking substance. Dam up the liquid spill. Prevent spreading in sewers. Use appropriate containment to avoid environmental contamination.

6.3 Methods and material for containment and cleaning up:

Allow product to solidify and remove it by mechanical means. Clean (treat) contaminated surfaces with acetone. Take collected spill to manufacturer/competent authority. Wash clothing and equipment after handling.

6.4 Reference to other sections:

See heading 13.

SECTION 7: Handling and storage

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

7.1 Precautions for safe handling:

Keep away from naked flames/heat. Gas/vapour heavier than air at 20°C. Observe very strict hygiene - avoid contact. Keep container tightly closed. Remove contaminated clothing immediately. Do not discharge the waste into the drain.

7.2 Conditions for safe storage, including any incompatibilities:

7.2.1 Safe storage requirements:

Store at room temperature. Meet the legal requirements. Max. storage time: 1 year(s).

7.2.2 Keep away from:

Heat sources, (strong) acids, (strong) bases.

7.2.3 Suitable packaging material:

Synthetic material.

7.2.4 Non suitable packaging material:

No data available

7.3 Specific end use(s):

If applicable and available, exposure scenarios are attached in annex. See information supplied by the manufacturer.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters:

8.1.1 Occupational exposure

a) Occupational exposure limit values

If limit values are applicable and available these will be listed below.

The Netherlands

| | | | |
|------------------------------|--|--------|--|
| Xyleen (o-,m- en p-isomeren) | Time-weighted average exposure limit 8 h | 48 ppm | Public occupational exposure limit value |
|------------------------------|--|--------|--|

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| | | | |
|------------------------------|--|-----------------------|--|
| Xyleen (o-,m- en p-isomeren) | Time-weighted average exposure limit 8 h | 210 mg/m ³ | Public occupational exposure limit value |
| | Short time value | 100 ppm | Public occupational exposure limit value |
| | Short time value | 442 mg/m ³ | Public occupational exposure limit value |

EU

| | | | |
|-----------------------------|--|-----------------------|--|
| Xylene, mixed isomers, pure | Time-weighted average exposure limit 8 h | 50 ppm | Indicative occupational exposure limit value |
| | Time-weighted average exposure limit 8 h | 221 mg/m ³ | Indicative occupational exposure limit value |
| | Short time value | 100 ppm | Indicative occupational exposure limit value |
| | Short time value | 442 mg/m ³ | Indicative occupational exposure limit value |

Belgium

| | | | |
|-------------------------------|--|-----------------------|--|
| Xylène, isomères mixtes, purs | Time-weighted average exposure limit 8 h | 50 ppm | |
| | Time-weighted average exposure limit 8 h | 221 mg/m ³ | |
| | Short time value | 100 ppm | |
| | Short time value | 442 mg/m ³ | |

USA (TLV-ACGIH)

| | | | |
|----------------------|--|---------|---------------------|
| Xylene (all isomers) | Time-weighted average exposure limit 8 h | 100 ppm | TLV - Adopted Value |
| | Short time value | 150 ppm | TLV - Adopted Value |

Germany

| | | | |
|--------------------------|--|------------------------|----------|
| pMDI (als MDI berechnet) | Time-weighted average exposure limit 8 h | 0.05 mg/m ³ | TRGS 900 |
| Xylol (alle Isomeren) | Time-weighted average exposure limit 8 h | 100 ppm | TRGS 900 |
| | Time-weighted average exposure limit 8 h | 440 mg/m ³ | TRGS 900 |

France

| | | | |
|--------------------------------|--|-----------------------|---|
| Xylènes, isomères mixtes, purs | Time-weighted average exposure limit 8 h | 50 ppm | VRC: Valeur réglementaire contraignante |
| | Time-weighted average exposure limit 8 h | 221 mg/m ³ | VRC: Valeur réglementaire contraignante |
| | Short time value | 100 ppm | VRC: Valeur réglementaire contraignante |
| | Short time value | 442 mg/m ³ | VRC: Valeur réglementaire contraignante |

UK

| | | | |
|---|--|------------------------|--------------------------------------|
| Isocyanates, all (as -NCO) Except methyl isocyanate | Time-weighted average exposure limit 8 h | 0.02 mg/m ³ | Workplace exposure limit (EH40/2005) |
| | Short time value | 0.07 mg/m ³ | Workplace exposure limit (EH40/2005) |
| Xylene, o-,m-,p- or mixed isomers | Time-weighted average exposure limit 8 h | 50 ppm | Workplace exposure limit (EH40/2005) |
| | Time-weighted average exposure limit 8 h | 220 mg/m ³ | Workplace exposure limit (EH40/2005) |
| | Short time value | 100 ppm | Workplace exposure limit (EH40/2005) |
| | Short time value | 441 mg/m ³ | Workplace exposure limit (EH40/2005) |

b) National biological limit values

If limit values are applicable and available these will be listed below.

8.1.2 Sampling methods

If applicable and available it will be listed below.

8.1.3 Applicable limit values when using the substance or mixture as intended

If limit values are applicable and available these will be listed below.

8.1.4 DNEL/PNEC values

DNEL - Workers

aromatic hydrocarbons, C8

| Effect level (DNEL/DMEL) | Type | Value | Remark |
|--------------------------|---------------------------------------|-----------------------|--------|
| DNEL | Long-term systemic effects inhalation | 77 mg/m ³ | |
| | Acute systemic effects inhalation | 289 mg/m ³ | |
| | Long-term local effects inhalation | 870 mg/m ³ | |
| | Long-term systemic effects dermal | 180 mg/kg bw/day | |

DNEL - General population

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aromatic hydrocarbons, C8

| Effect level (DNEL/DMEL) | Type | Value | Remark |
|--------------------------|---------------------------------------|------------------------|--------|
| DNEL | Long-term systemic effects inhalation | 14.8 mg/m ³ | |
| | Acute systemic effects inhalation | 174 mg/m ³ | |
| | Long-term local effects inhalation | 870 mg/m ³ | |
| | Long-term systemic effects dermal | 108 mg/kg bw/day | |
| | Long-term systemic effects oral | 1.6 mg/kg bw/day | |

8.1.5 Control banding

If applicable and available it will be listed below.

8.2 Exposure controls:

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

8.2.1 Appropriate engineering controls

Keep away from naked flames/heat. Measure the concentration in the air regularly. Carry operations in the open/under local exhaust/ventilation or with respiratory protection.

8.2.2 Individual protection measures, such as personal protective equipment

Observe very strict hygiene - avoid contact. Keep container tightly closed. Do not eat, drink or smoke during work.

a) Respiratory protection:

Wear gas mask with filter type A if conc. in air > exposure limit.

b) Hand protection:

Gloves.

c) Eye protection:

Face shield.

d) Skin protection:

Protective clothing.

8.2.3 Environmental exposure controls:

See headings 6.2, 6.3 and 13

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties:

| | |
|---------------------------|--|
| Physical form | Liquid |
| Odour | Solvent-like odour |
| Odour threshold | No data available |
| Colour | Brown |
| Particle size | Not applicable (liquid) |
| Explosion limits | No data available |
| Flammability | Non-flammable |
| Log Kow | Not applicable (mixture) |
| Dynamic viscosity | No data available |
| Kinematic viscosity | No data available |
| Melting point | No data available |
| Boiling point | No data available |
| Flash point | Not applicable |
| Evaporation rate | No data available |
| Relative vapour density | > 2 |
| Vapour pressure | No data available |
| Solubility | water ; insoluble |
| Relative density | 1.1 ; 20 °C |
| Decomposition temperature | No data available |
| Auto-ignition temperature | No data available |
| Explosive properties | No chemical group associated with explosive properties |
| Oxidising properties | No chemical group associated with oxidising properties |
| pH | No data available |

Physical hazards

No physical hazard class

9.2 Other information:

| | |
|------------------|--------------------------------|
| Absolute density | 1100 kg/m ³ ; 20 °C |
|------------------|--------------------------------|

SECTION 10: Stability and reactivity

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10.1 Reactivity:

Heating increases the fire hazard. No data available.

10.2 Chemical stability:

Stable under normal conditions.

10.3 Possibility of hazardous reactions:

Reacts violently with (some) acids/bases.

10.4 Conditions to avoid:

Keep away from naked flames/heat.

10.5 Incompatible materials:

(strong) acids, (strong) bases.

10.6 Hazardous decomposition products:

On heating: release of toxic/combustible gases/vapours (hydrogen cyanide). On burning: release of toxic and corrosive gases/vapours (nitrous vapours, carbon monoxide - carbon dioxide).

SECTION 11: Toxicological information

11.1 Information on toxicological effects:

11.1.1 Test results

Acute toxicity

Soudal PRO 40 PU Wood adhesive

No (test) data on the mixture available

aromatic hydrocarbons, C8

| Route of exposure | Parameter | Method | Value | Exposure time | Species | Gender | Value determination |
|----------------------|-----------|------------------------|----------------|---------------|---------|--------|---------------------|
| Oral | LD50 | Equivalent to OECD 401 | 3523 mg/kg bw | | Rat | Male | Experimental value |
| Oral | LD50 | Equivalent to OECD 401 | >4000 mg/kg bw | | Rat | Female | Experimental value |
| Dermal | LD50 | Other | >4200 mg/kg bw | 4 h | Rabbit | Male | Weight of evidence |
| Inhalation (vapours) | LC50 | Equivalent to OECD 403 | 29 mg/l | 4 h | Rat | Male | Experimental value |

polymethylene polyphenyl isocyanate

| Route of exposure | Parameter | Method | Value | Exposure time | Species | Gender | Value determination |
|----------------------|-----------|--------|---------------|---------------|---------|--------|---------------------|
| Oral | LD50 | | > 10000 mg/kg | | Rat | | Literature study |
| Dermal | LD50 | | > 5000 mg/kg | | Rabbit | | Literature study |
| Inhalation (vapours) | LD50 | | 10-20 mg/l | 4 h | Rat | | Literature study |

Classification is based on the relevant ingredients

Conclusion

Harmful if inhaled.

Low acute toxicity by the dermal route

Low acute toxicity by the oral route

Corrosion/irritation

Soudal PRO 40 PU Wood adhesive

No (test) data on the mixture available

aromatic hydrocarbons, C8

| Route of exposure | Result | Method | Exposure time | Time point | Species | Value determination |
|-------------------|-----------------------|--------|---------------|--------------|---------|---------------------|
| Eye | Moderately irritating | Other | | 72 hours | Rabbit | Weight of evidence |
| Skin | Irritating | Other | | 24; 72 hours | Rabbit | Weight of evidence |

polymethylene polyphenyl isocyanate

| Route of exposure | Result | Method | Exposure time | Time point | Species | Value determination |
|-------------------|------------|--------|---------------|------------|---------|---------------------|
| Eye | Irritating | | | | | Literature study |
| Skin | Irritating | | | | | Literature study |
| Inhalation | Irritating | | | | | Literature study |

Classification is based on the relevant ingredients

Conclusion

Causes skin irritation.

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Causes serious eye irritation.
May cause respiratory irritation.
Specific target organ toxicity, single exposure: classified as irritant to respiratory organs

Respiratory or skin sensitisation

Soudal PRO 40 PU Wood adhesive

No (test)data on the mixture available

aromatic hydrocarbons, C8

| Route of exposure | Result | Method | Exposure time | Observation time point | Species | Gender | Value determination |
|-------------------|-----------------|----------|---------------|------------------------|---------|--------|---------------------|
| Skin | Not sensitizing | OECD 429 | | | Mouse | | Weight of evidence |

polymethylene polyphenyl isocyanate

| Route of exposure | Result | Method | Exposure time | Observation time point | Species | Gender | Value determination |
|-------------------|-------------|--------|---------------|------------------------|---------|--------|---------------------|
| Skin | Sensitizing | | | | | | Literature study |
| Inhalation | Sensitizing | | | | | | Literature study |

Classification is based on the relevant ingredients

Conclusion

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

Specific target organ toxicity

Soudal PRO 40 PU Wood adhesive

No (test)data on the mixture available

aromatic hydrocarbons, C8

| Route of exposure | Parameter | Method | Value | Organ | Effect | Exposure time | Species | Gender | Value determination |
|-------------------|-----------|------------------------|------------------|---------------|-------------|---------------|---------|-------------|---------------------|
| Oral | LOAEL | Equivalent to OECD 408 | 150 mg/kg bw/day | Liver; kidney | Weight gain | 90 day(s) | Rat | Male/female | Experimental value |

polymethylene polyphenyl isocyanate

| Route of exposure | Parameter | Method | Value | Organ | Effect | Exposure time | Species | Gender | Value determination |
|-------------------|-----------|--------|---------------|-------|--------|---------------|---------|--------|---------------------|
| Inhalation | | | STOT RE cat.2 | | | | | | Literature study |

Classification is based on the relevant ingredients

Conclusion

May cause damage to organs through prolonged or repeated exposure if inhaled.

Mutagenicity (in vitro)

Soudal PRO 40 PU Wood adhesive

No (test)data on the mixture available

aromatic hydrocarbons, C8

| Result | Method | Test substrate | Effect | Value determination |
|---|------------------------|-----------------------------|--------|---------------------|
| Negative with metabolic activation, negative without metabolic activation | Equivalent to OECD 473 | Chinese hamster ovary (CHO) | | Experimental value |
| Negative with metabolic activation, negative without metabolic activation | Equivalent to OECD 479 | Chinese hamster ovary (CHO) | | Experimental value |

Mutagenicity (in vivo)

Soudal PRO 40 PU Wood adhesive

No (test)data on the mixture available

aromatic hydrocarbons, C8

| Result | Method | Exposure time | Test substrate | Gender | Organ | Value determination |
|----------|------------------------|---------------|----------------|-------------|-------|---------------------|
| Negative | Equivalent to OECD 473 | | Rat | Male/female | | Experimental value |

Carcinogenicity

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No (test)data on the mixture available

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aromatic hydrocarbons, C8

| Route of exposure | Parameter | Method | Value | Exposure time | Species | Gender | Value determination | Organ | Effect |
|-------------------|-----------|------------------------|--------------------|--------------------------------|---------|-------------|---------------------|-------|--------|
| Oral | NOAEL | Equivalent to OECD 451 | >1000 mg/kg bw/day | 103 weeks (daily, 5 days/week) | Mouse | Male/female | Experimental value | | |

polymethylene polyphenyl isocyanate

| Route of exposure | Parameter | Method | Value | Exposure time | Species | Gender | Value determination | Organ | Effect |
|----------------------|-----------|--------|------------|---------------|---------|--------|---------------------|-------|--------------------|
| Inhalation (aerosol) | | | category 2 | | Rat | | Literature study | | Neoplastic effects |

Reproductive toxicity

Soudal PRO 40 PU Wood adhesive

No (test)data on the mixture available

aromatic hydrocarbons, C8

| | Parameter | Method | Value | Exposure time | Species | Gender | Effect | Organ | Value determination |
|------------------------|-----------|------------------------|-----------|---------------|---------|-------------|-------------------|--------|---------------------|
| Developmental toxicity | NOAEC | Equivalent to OECD 414 | 100 ppm | | Rat | | Fetotoxicity | Foetus | Experimental value |
| | NOAEC | Equivalent to OECD 414 | >2000 ppm | | Rat | | Teratogenicity | | Experimental value |
| Maternal toxicity | NOAEC | Equivalent to OECD 414 | 500 ppm | | | | Maternal toxicity | | Experimental value |
| Effects on fertility | NOAEC (P) | Equivalent to OECD 416 | >500 | | Rat | Male/female | No effect | | Experimental value |

Classification is based on the relevant ingredients

Conclusion CMR

Suspected of causing cancer.

Not classified for mutagenic or genotoxic toxicity

Not classified for reprotoxic or developmental toxicity

Toxicity other effects

Soudal PRO 40 PU Wood adhesive

No (test)data on the mixture available

Chronic effects from short and long-term exposure

Soudal PRO 40 PU Wood adhesive

ON CONTINUOUS/REPEATED EXPOSURE/CONTACT: Dry skin. Itching. Skin rash/inflammation. Respiratory difficulties.

SECTION 12: Ecological information

12.1 Toxicity:

Soudal PRO 40 PU Wood adhesive

No (test)data on the mixture available

aromatic hydrocarbons, C8

| | Parameter | Method | Value | Duration | Species | Test design | Fresh/salt water | Value determination |
|--|-----------|----------|------------|-----------|---------------------------------|---------------------|------------------|---------------------|
| Acute toxicity fishes | LC50 | OECD 203 | 2.6 mg/l | 96 h | Oncorhynchus mykiss | Static system | Fresh water | Read-across |
| Acute toxicity invertebrates | EC50 | | 3.82 mg/l | 48 h | Daphnia magna | Flow-through system | Fresh water | Read-across |
| Toxicity algae and other aquatic plants | ErC50 | OECD 201 | 4.36 mg/l | 73 h | Pseudokirchneriella subcapitata | Static system | Fresh water | Read-across; GLP |
| Long-term toxicity fish | NOEC | | > 1.3 mg/l | 56 day(s) | Oncorhynchus mykiss | Flow-through system | Fresh water | Experimental value |
| Long-term toxicity aquatic invertebrates | NOEC | OECD 211 | 1.57 mg/l | 21 day(s) | Daphnia magna | Static system | Fresh water | Read-across; GLP |

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polymethylene polyphenyl isocyanate

| | Parameter | Method | Value | Duration | Species | Test design | Fresh/salt water | Value determination |
|--|-----------|----------|------------|----------|------------------|-------------|------------------|---------------------|
| Acute toxicity other aquatic organisms | LC50 | | >1000 mg/l | 96 h | | | | Literature study |
| Toxicity aquatic micro-organisms | EC50 | OECD 209 | >100 mg/l | | Activated sludge | | | Literature study |

Judgement is based on the relevant ingredients of the mixture

Conclusion

Not classified as dangerous for the environment according to the criteria of Regulation (EC) No 1272/2008

Not classified as dangerous for the environment according to the criteria of Directive 1999/45/EC

12.2 Persistence and degradability:

aromatic hydrocarbons, C8

Biodegradation water

| Method | Value | Duration | Value determination |
|---|--------|-----------|---------------------|
| OECD 301F: Manometric Respirometry Test | 87.8 % | 28 day(s) | Read-across |

polymethylene polyphenyl isocyanate

Biodegradation water

| Method | Value | Duration | Value determination |
|---|--------|----------|---------------------|
| OECD 302C: Inherent Biodegradability: Modified MITI Test (II) | < 60 % | | Experimental value |

Conclusion

Contains non readily biodegradable component(s)

12.3 Bioaccumulative potential:

Soudal PRO 40 PU Wood adhesive

Log Kow

| Method | Remark | Value | Temperature | Value determination |
|--------|--------------------------|-------|-------------|---------------------|
| | Not applicable (mixture) | | | |

aromatic hydrocarbons, C8

BCF fishes

| Parameter | Method | Value | Duration | Species | Value determination |
|-----------|--------|-------|-----------|---------------------|---------------------|
| BCF | | 25.9 | 56 day(s) | Oncorhynchus mykiss | Similar product |

Log Kow

| Method | Remark | Value | Temperature | Value determination |
|--------|--------|-------|-------------|-----------------------|
| Other | | 3.15 | 20 °C | Conclusion by analogy |

polymethylene polyphenyl isocyanate

BCF fishes

| Parameter | Method | Value | Duration | Species | Value determination |
|-----------|--------|-------|----------|---------|---------------------|
| BCF | | 1 | | Pisces | Literature study |

Log Kow

| Method | Remark | Value | Temperature | Value determination |
|--------|-------------------|-------|-------------|---------------------|
| | No data available | | | |

Conclusion

Does not contain bioaccumulative component(s)

12.4 Mobility in soil:

aromatic hydrocarbons, C8

(log) Koc

| Parameter | Method | Value | Value determination |
|-----------|----------|-------|---------------------|
| log Koc | OECD 121 | 2.73 | Read-across |

Conclusion

Contains component(s) with potential for mobility in the soil

12.5 Results of PBT and vPvB assessment:

Does not contain component(s) that meet(s) the criteria of PBT and/or vPvB as listed in Annex XIII of Regulation (EC) No 1907/2006.

12.6 Other adverse effects:

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Global warming potential (GWP)

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None of the known components is included in the list of fluorinated greenhouse gases (Regulation (EC) No 842/2006)

Ozone-depleting potential (ODP)

Not classified as dangerous for the ozone layer (Regulation (EC) No 1005/2009)

aromatic hydrocarbons, C8

Ground water

Ground water pollutant

SECTION 13: Disposal considerations

The information in this section is a general description. If applicable and available, exposure scenarios are attached in annex. Always use the relevant exposure scenarios that correspond to your identified use.

13.1 Waste treatment methods:

13.1.1 Provisions relating to waste

Waste material code (Directive 2008/98/EC, Decision 2000/0532/EC).

08 04 09* (wastes from MFSU of adhesives and sealants (including waterproofing products): waste adhesives and sealants containing organic solvents or other dangerous substances). Depending on branch of industry and production process, also other waste codes may be applicable. Hazardous waste according to Directive 2008/98/EC.

13.1.2 Disposal methods

Incinerate under surveillance with energy recovery. Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Do not discharge into drains or the environment.

13.1.3 Packaging/Container

Waste material code packaging (Directive 2008/98/EC).

15 01 10* (packaging containing residues of or contaminated by dangerous substances).

SECTION 14: Transport information

Road (ADR)

14.1 UN number:

| | |
|-----------|-------------|
| Transport | Not subject |
|-----------|-------------|

14.2 UN proper shipping name:

14.3 Transport hazard class(es):

| | |
|------------------------------|--|
| Hazard identification number | |
| Class | |
| Classification code | |

14.4 Packing group:

| | |
|---------------|--|
| Packing group | |
| Labels | |

14.5 Environmental hazards:

| | |
|--|----|
| Environmentally hazardous substance mark | no |
|--|----|

14.6 Special precautions for user:

| | |
|--------------------|--|
| Special provisions | |
| Limited quantities | |

Rail (RID)

14.1 UN number:

| | |
|-----------|-------------|
| Transport | Not subject |
|-----------|-------------|

14.2 UN proper shipping name:

14.3 Transport hazard class(es):

| | |
|------------------------------|--|
| Hazard identification number | |
| Class | |
| Classification code | |

14.4 Packing group:

| | |
|---------------|--|
| Packing group | |
| Labels | |

14.5 Environmental hazards:

| | |
|--|----|
| Environmentally hazardous substance mark | no |
|--|----|

14.6 Special precautions for user:

| | |
|--------------------|--|
| Special provisions | |
| Limited quantities | |

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Inland waterways (ADN)

14.1 UN number:

| | |
|-----------|-------------|
| Transport | Not subject |
|-----------|-------------|

14.2 UN proper shipping name:

14.3 Transport hazard class(es):

| | |
|---------------------|--|
| Class | |
| Classification code | |

14.4 Packing group:

| | |
|---------------|--|
| Packing group | |
| Labels | |

14.5 Environmental hazards:

| | |
|--|----|
| Environmentally hazardous substance mark | no |
|--|----|

14.6 Special precautions for user:

| | |
|--------------------|--|
| Special provisions | |
| Limited quantities | |

Sea (IMDG/IMSBC)

14.1 UN number:

| | |
|-----------|-------------|
| Transport | Not subject |
|-----------|-------------|

14.2 UN proper shipping name:

14.3 Transport hazard class(es):

| | |
|-------|--|
| Class | |
|-------|--|

14.4 Packing group:

| | |
|---------------|--|
| Packing group | |
| Labels | |

14.5 Environmental hazards:

| | |
|--|----|
| Marine pollutant | - |
| Environmentally hazardous substance mark | no |

14.6 Special precautions for user:

| | |
|--------------------|--|
| Special provisions | |
| Limited quantities | |

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:

| | |
|--------------------------|---|
| Annex II of MARPOL 73/78 | Not applicable, based on available data |
|--------------------------|---|

Air (ICAO-TI/IATA-DGR)

14.1 UN number:

| | |
|-----------|-------------|
| Transport | Not subject |
|-----------|-------------|

14.2 UN proper shipping name:

14.3 Transport hazard class(es):

| | |
|-------|--|
| Class | |
|-------|--|

14.4 Packing group:

| | |
|---------------|--|
| Packing group | |
| Labels | |

14.5 Environmental hazards:

| | |
|--|----|
| Environmentally hazardous substance mark | no |
|--|----|

14.6 Special precautions for user:

| | |
|---|--|
| Special provisions | |
| Passenger and cargo transport: limited quantities: maximum net quantity per packaging | |

SECTION 15: Regulatory information

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

European legislation:

VOC content Directive 2010/75/EU

| VOC content | remarks |
|-------------|---------|
| 7 % | |

VOC content Directive 2004/42/EC

| | | | | |
|--------|--|--|--|--|
| 77 g/l | | | | |
|--------|--|--|--|--|

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REACH Annex XVII - Restriction

Contains component(s) subject to restrictions of Annex XVII of Regulation (EC) No 1907/2006: restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles.

| | Designation of the substance, of the group of substances or of the mixture | Conditions of restriction |
|---|---|--|
| #500345# polymethylene polyphenyl isocyanate | Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: (a) hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2, 2.14 categories 1 and 2, 2.15 types A to F; (b) hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10; (c) hazard class 4.1; (d) hazard class 5.1. | 1. Shall not be used in: — ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays, — tricks and jokes, — games for one or more participants, or any article intended to be used as such, even with ornamental aspects. 2. Articles not complying with paragraph 1 shall not be placed on the market. 3. Shall not be placed on the market if they contain a colouring agent, unless required for fiscal reasons, or perfume, or both, if they: — can be used as fuel in decorative oil lamps for supply to the general public, and, — present an aspiration hazard and are labelled with R65 or H304. 4. Decorative oil lamps for supply to the general public shall not be placed on the market unless they conform to the European Standard on Decorative oil lamps (EN 14059) adopted by the European Committee for Standardisation (CEN). 5. Without prejudice to the implementation of other Community provisions relating to the classification, packaging and labelling of dangerous substances and mixtures, suppliers shall ensure, before the placing on the market, that the following requirements are met: a) lamp oils, labelled with R65 or H304, intended for supply to the general public are visibly, legibly and indelibly marked as follows: "Keep lamps filled with this liquid out of the reach of children"; and, by 1 December 2010, "Just a sip of lamp oil — or even sucking the wick of lamps — may lead to life-threatening lung damage"; b) grill lighter fluids, labelled with R65 or H304, intended for supply to the general public are legibly and indelibly marked by 1 December 2010 as follows: "Just a sip of grill lighter may lead to life threatening lung damage"; c) lamp oils and grill lighters, labelled with R65 or H304, intended for supply to the general public are packaged in black opaque containers not exceeding 1 litre by 1 December 2010. 6. No later than 1 June 2014, the Commission shall request the European Chemicals Agency to prepare a dossier, in accordance with Article 69 of the present Regulation with a view to ban, if appropriate, grill lighter fluids and fuel for decorative lamps, labelled R65 or H304, intended for supply to the general public. 7. Natural or legal persons placing on the market for the first time lamp oils and grill lighter fluids, labelled with R65 or H304, shall by 1 December 2011, and annually thereafter, provide data on alternatives to lamp oils and grill lighter fluids labelled R65 or H304 to the competent authority in the Member State concerned. Member States shall make those data available to the Commission.' |
| #500345# | Substances classified as flammable gases category 1 or 2, flammable liquids categories 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 1, 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to that Regulation or not. | 1. Shall not be used, as substance or as mixtures in aerosol dispensers where these aerosol dispensers are intended for supply to the general public for entertainment and decorative purposes such as the following: — metallic glitter intended mainly for decoration, — artificial snow and frost, — "whoopie" cushions, — silly string aerosols, — imitation excrement, — horns for parties, — decorative flakes and foams, — artificial cobwebs, — stink bombs. 2. Without prejudice to the application of other Community provisions on the classification, packaging and labelling of substances, suppliers shall ensure before the placing on the market that the packaging of aerosol dispensers referred to above is marked visibly, legibly and indelibly with: "For professional users only". 3. By way of derogation, paragraphs 1 and 2 shall not apply to the aerosol dispensers referred to Article 8 (1a) of Council Directive 75/ 324/EEC. 4. The aerosol dispensers referred to in paragraphs 1 and 2 shall not be placed on the market unless they conform to the requirements indicated. |
| polymethylene polyphenyl isocyanate | Methylenediphenyl diisocyanate (MDI) including the following specific isomers: 4,4'-Methylenediphenyl diisocyanate; 2,4'-Methylenediphenyl diisocyanate; 2,2'-Methylenediphenyl diisocyanate | 1. Shall not be placed on the market after 27 December 2010, as a constituent of mixtures in concentrations equal to or greater than 0,1 % by weight of MDI for supply to the general public, unless suppliers shall ensure before the placing on the market that the packaging: (a) contains protective gloves which comply with the requirements of Council Directive 89/686/EEC; (b) is marked visibly, legibly and indelibly as follows, and without prejudice to other Community legislation concerning the classification, packaging and labelling of substances and mixtures: "— Persons already sensitised to diisocyanates may develop allergic reactions when using this product. — Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product. — This product should not be used under conditions of poor ventilation unless a protective mask with an appropriate gas filter (i.e. type A1 according to standard EN 14387) is used. 2. By way of derogation, paragraph 1(a) shall not apply to hot melt adhesives. |

Reference legislation

- See column 1: 3.
- See column 1: 40.
- See column 1: 56.

Recommandations REACH annex XVII

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

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National legislation The Netherlands

Soudal PRO 40 PU Wood adhesive

| | |
|--|---|
| Waste identification (the Netherlands) | LWCA (the Netherlands): KGA category 03 |
| Waterbezwaarlijkheid | 1 |

aromatic hydrocarbons, C8

| | |
|---|---|
| SZW - List of carcinogenic substances | Listed in SZW-list of carcinogenic substances |
| SZW - List of mutagenic substances | Listed in SZW-list of mutagenic substances |
| SZW - List of reprotoxic substances (development) | Possibly hazardous to the foetus |

National legislation Germany

Soudal PRO 40 PU Wood adhesive

| | |
|-----|---|
| WGK | 1; Classification water polluting based on the components in compliance with Verwaltungsvorschrift wassergefährdender Stoffe (VwVwS) of 27 July 2005 (Anhang 4) |
|-----|---|

aromatic hydrocarbons, C8

| | |
|--|--|
| TA-Luft | TA-Luft Klasse 5.2.5/1 |
| Schwangerschaft Gruppe | D |
| MAK 8-Stunden-Mittelwert ppm | Xylol (alle Isomeren); 100 ppm |
| MAK 8-Stunden-Mittelwert mg/m ³ | Xylol (alle Isomeren); 440 mg/m ³ |

polymethylene polyphenyl isocyanate

| | |
|--|---|
| TRGS905 - Krebszeugend | 3 |
| TRGS905 - Erbgutverändernd | - |
| TRGS905 - Fruchtbarkeitsgefährdend | - |
| TRGS905 - Fruchtschädigend | - |
| MAK - Krebszeugend Kategorie | 4 |
| Schwangerschaft Gruppe | C |
| MAK 8-Stunden-Mittelwert mg/m ³ | polymeres MDI* (einatembare Fraktion); 0.05 mg/m ³ ; gemessen als einatembare Fraktion (vgl. Abschn. Vd) S. 191) |

National legislation France

Soudal PRO 40 PU Wood adhesive

No data available

National legislation Belgium

Soudal PRO 40 PU Wood adhesive

No data available

15.2 Chemical safety assessment:

No chemical safety assessment is required.

SECTION 16: Other information

Full text of any R-phrases referred to under headings 2 and 3:

R10 Flammable
R20 Harmful by inhalation
R20/21 Harmful by inhalation and in contact with skin
R36/37/38 Irritating to eyes, respiratory system and skin
R38 Irritating to skin
R40 Limited evidence of a carcinogenic effect
R42/43 May cause sensitisation by inhalation and skin contact
R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation
R65 Harmful: may cause lung damage if swallowed

Full text of any H-statements referred to under headings 2 and 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.
H332 Harmful if inhaled.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

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H335 May cause respiratory irritation.

H351 Suspected of causing cancer.

H373 May cause damage to organs through prolonged or repeated exposure if inhaled.

(*) = INTERNAL CLASSIFICATION BY BIG

PBT-substances = persistent, bioaccumulative and toxic substances

DSD Dangerous Substance Directive

DPD Dangerous Preparation Directive

CLP (EU-GHS) Classification, labelling and packaging (Globally Harmonised System in Europe)

The information in this safety data sheet is based on data and samples provided to BIG. The sheet was written to the best of our ability and according to the state of knowledge at that time. The safety data sheet only constitutes a guideline for the safe handling, use, consumption, storage, transport and disposal of the substances/preparations/mixtures mentioned under point 1. New safety data sheets are written from time to time. Only the most recent versions may be used. Old versions must be destroyed. Unless indicated otherwise word for word on the safety data sheet, the information does not apply to substances/preparations/mixtures in purer form, mixed with other substances or in processes. The safety data sheet offers no quality specification for the substances/preparations/mixtures in question. Compliance with the instructions in this safety data sheet does not release the user from the obligation to take all measures dictated by common sense, regulations and recommendations or which are necessary and/or useful based on the real applicable circumstances. BIG does not guarantee the accuracy or exhaustiveness of the information provided and cannot be held liable for any changes by third parties. This safety data sheet is only to be used within the European Union, Switzerland, Iceland, Norway and Liechtenstein. Any use outside of this area is at your own risk. Use of this safety data sheet is subject to the licence and liability limiting conditions as stated in your BIG licence agreement or when this is failing the general conditions of BIG. All intellectual property rights to this sheet are the property of BIG and its distribution and reproduction are limited. Consult the mentioned agreement/conditions for details.

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