

Soudaflex 40FC**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

Product name : Soudaflex 40FC
Registration number REACH : Not applicable (mixture)
Product type REACH : Mixture

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

Construction: sealant

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**

SODAL 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

SODAL 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**

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

| Class | Category | Hazard statements |
|-------------|------------|--|
| Resp. Sens. | category 1 | H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled. |

2.2. Label elements

Contains: 4,4'-methylenediphenyl diisocyanate.

Signal word Danger

H-statements

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

P-statements

P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P284 Wear respiratory protection.
P261 Avoid breathing vapours/mist.
P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
P501 Dispose of contents/container in accordance with local/regional/national/international regulation.

Supplemental information

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- 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

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 CLP | Note | Remark |
|---|------------------------|-----------|---|---------------|-------------|
| 4,4'-methylenediphenyl diisocyanate 01-2119457014-47 | 101-68-8 202-966-0 | 0.1%<C<1% | 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)(8)(10) | Constituent |
| xylene 01-2119488216-32 | 1330-20-7 215-535-7 | 1%<C<10% | Flam. Liq. 3; H226 Acute Tox. 4; H332 Acute Tox. 4; H312 Skin Irrit. 2; H315 | (1)(2)(10) | Constituent |
| ethylbenzene 01-2119489370-35 | 100-41-4 202-849-4 | 1%<C<5% | Flam. Liq. 2; H225 Acute Tox. 4; H332 Asp. Tox. 1; H304 STOT RE 2; H373 Aquatic Chronic 3; H412 | (1)(2)(6)(10) | Constituent |

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

(2) Substance with a Community workplace exposure limit

(6) Enumerated in Annex VI of Regulation (EC) No. 1272/2008 but the classification has been adapted after evaluation of available test data

(8) Specific concentration limits, see heading 16

(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 with water. Take victim to an ophthalmologist if irritation persists.

After ingestion:

Rinse mouth with water. 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:

ON CONTINUOUS EXPOSURE/CONTACT: Headache. Nausea. Dizziness. Narcosis.

After skin contact:

No effects known.

After eye contact:

No effects known.

After ingestion:

AFTER INGESTION OF HIGH QUANTITIES: Symptoms similar to those listed under inhalation.

4.2.2 Delayed symptoms

No effects known.

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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

5.1.1 Suitable extinguishing media:

Adapt extinguishing media to the environment.

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 (hydrogen chloride, sulphur oxides, carbon monoxide - carbon dioxide).

5.3. Advice for firefighters

5.3.1 Instructions:

Dilute toxic gases with water spray. Take account of toxic/corrosive precipitation water.

5.3.2 Special protective equipment for fire-fighters:

Gloves. Safety glasses. 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. Safety glasses. Protective clothing.

Suitable protective clothing

See heading 8.2

6.2. Environmental precautions

Contain released product. 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. 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.

7.2. Conditions for safe storage, including any incompatibilities

7.2.1 Safe storage requirements:

Keep out of direct sunlight. Store in a dry area. Store at room temperature. Meet the legal requirements. Max. storage time: 1 year(s).

7.2.2 Keep away from:

Heat sources.

7.2.3 Suitable packaging material:

Aluminium.

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

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| | | |
|----------------------------------|--|------------------------|
| Difenylmethaan-4,4'-diisocyaanat | Time-weighted average exposure limit 8 h (Private occupational exposure limit value) | 0.0048 ppm |
| | Time-weighted average exposure limit 8 h (Private occupational exposure limit value) | 0.05 mg/m ³ |
| | Short time value (Private occupational exposure limit value) | 0.02 ppm |
| | Short time value (Private occupational exposure limit value) | 0.21 mg/m ³ |
| Ethylbenzeen | Time-weighted average exposure limit 8 h (Public occupational exposure limit value) | 49 ppm |
| | Time-weighted average exposure limit 8 h (Public occupational exposure limit value) | 215 mg/m ³ |
| | Short time value (Public occupational exposure limit value) | 97 ppm |
| | Short time value (Public occupational exposure limit value) | 430 mg/m ³ |
| Xyleen (o-,m- en p-isomeren) | Time-weighted average exposure limit 8 h (Public occupational exposure limit value) | 48 ppm |
| | Time-weighted average exposure limit 8 h (Public occupational exposure limit value) | 210 mg/m ³ |
| | Short time value (Public occupational exposure limit value) | 100 ppm |
| | Short time value (Public occupational exposure limit value) | 442 mg/m ³ |

EU

| | | |
|-----------------------------|---|-----------------------|
| Ethylbenzene | Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value) | 100 ppm |
| | Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value) | 442 mg/m ³ |
| | Short time value (Indicative occupational exposure limit value) | 200 ppm |
| | Short time value (Indicative occupational exposure limit value) | 884 mg/m ³ |
| Xylene, mixed isomers, pure | Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value) | 50 ppm |
| | Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value) | 221 mg/m ³ |
| | Short time value (Indicative occupational exposure limit value) | 100 ppm |
| | Short time value (Indicative occupational exposure limit value) | 442 mg/m ³ |

Belgium

| | | |
|--|--|-------------------------|
| 4,4'-Diisocyanate de diphénylméthane (MDI) | Time-weighted average exposure limit 8 h | 0.005 ppm |
| | Time-weighted average exposure limit 8 h | 0.052 mg/m ³ |
| Ethylbenzène | Time-weighted average exposure limit 8 h | 100 ppm |
| | Time-weighted average exposure limit 8 h | 442 mg/m ³ |
| | Short time value | 125 ppm |
| | Short time value | 551 mg/m ³ |
| 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)

| | | |
|--------------------------------------|--|-----------|
| Ethyl benzene | Time-weighted average exposure limit 8 h (TLV - Adopted Value) | 20 ppm |
| Methylene bisphenyl isocyanate (MDI) | Time-weighted average exposure limit 8 h (TLV - Adopted Value) | 0.005 ppm |

Germany

| | | |
|----------------------------------|---|------------------------|
| 4,4'-Methylendiphenyldiisocyanat | Time-weighted average exposure limit 8 h (TRGS 900) | 0.05 mg/m ³ |
| Ethylbenzol | Time-weighted average exposure limit 8 h (TRGS 900) | 20 ppm |
| | Time-weighted average exposure limit 8 h (TRGS 900) | 88 mg/m ³ |

France

| | | |
|--------------------------------------|--|------------------------|
| 4,4'-Diisocyanate de diphénylméthane | Time-weighted average exposure limit 8 h (VL: Valeur non réglementaire indicative) | 0.01 ppm |
| | Time-weighted average exposure limit 8 h (VL: Valeur non réglementaire indicative) | 0.1 mg/m ³ |
| | Short time value (VL: Valeur non réglementaire indicative) | 0.02 ppm |
| | Short time value (VL: Valeur non réglementaire indicative) | 0.2 mg/m ³ |
| Ethylbenzène | Time-weighted average exposure limit 8 h (VRC: Valeur réglementaire contraignante) | 20 ppm |
| | Time-weighted average exposure limit 8 h (VRC: Valeur réglementaire contraignante) | 88.4 mg/m ³ |
| | Short time value (VRC: Valeur réglementaire contraignante) | 100 ppm |
| | Short time value (VRC: Valeur réglementaire contraignante) | 442 mg/m ³ |
| Xylènes, isomères mixtes, purs | Time-weighted average exposure limit 8 h (VRC: Valeur réglementaire contraignante) | 50 ppm |
| | Time-weighted average exposure limit 8 h (VRC: Valeur réglementaire contraignante) | 221 mg/m ³ |

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| | | |
|--------------------------------|--|-----------------------|
| Xylènes, isomères mixtes, purs | Short time value (VRC: Valeur réglementaire contraignante) | 100 ppm |
| | Short time value (VRC: Valeur réglementaire contraignante) | 442 mg/m ³ |

UK

| | | |
|---|---|------------------------|
| Ethylbenzene | Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005)) | 100 ppm |
| | Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005)) | 441 mg/m ³ |
| | Short time value (Workplace exposure limit (EH40/2005)) | 125 ppm |
| | Short time value (Workplace exposure limit (EH40/2005)) | 552 mg/m ³ |
| Isocyanates, all (as -NCO) Except methyl isocyanate | Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005)) | 0.02 mg/m ³ |
| | Short time value (Workplace exposure limit (EH40/2005)) | 0.07 mg/m ³ |

b) National biological limit values

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

Germany

| | | | |
|--|---|----------|--|
| Ethylbenzol (Mandelsäure + Phenylglyoxylsäure) | Urin: expositionsende, bzw. schichtende | 300 mg/l | 11/2012 Ständige Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe der DFG |
|--|---|----------|--|

USA (BEI-ACGIH)

| | | | |
|---|---------------------|----------------------|--------------------------------|
| Ethyl benzene (Sum of mandelic acid and phenylglyoxylic acid) | Urine: end of shift | 0,15 g/g creatinine | Nonspecific - Intended changes |
| Ethyl benzene (Sum of mandelic acid and phenylglyoxylic acid) | Urine: end of shift | 0,15 mg/g creatinine | |

8.1.2 Sampling methods

If applicable and available it will be listed below.

| | | |
|--|-------|------|
| 4,4-Methylene Bisphenyl Isocyanate (MDI) (Isocyanates) | NIOSH | 5521 |
| 4,4'-Methylenebis(phenylisocyanate) | NIOSH | 5525 |
| Ethyl Benzene (Hydrocarbons, Aromatic) | NIOSH | 1501 |
| Ethyl Benzene | OSHA | 1002 |
| Ethyl Benzene | OSHA | 7 |
| Methylene Bisphenyl Isocyanate - (MDI) | OSHA | 18 |
| Methylene Bisphenyl Isocyanate (MDI) | OSHA | 47 |
| Methylene Bisphenyl Isocyanate | OSHA | 33 |
| Xylene (Volatile Organic compounds) | NIOSH | 2549 |

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/DMEL - Workers

4,4'-methylenediphenyl diisocyanate

| Effect level (DNEL/DMEL) | Type | Value | Remark |
|--------------------------|------------------------------------|------------------------|--------|
| DNEL | Long-term local effects inhalation | 0.05 mg/m ³ | |
| | Acute local effects inhalation | 0.1 mg/m ³ | |

xylene

| 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 | |
| | Acute local effects inhalation | 289 mg/m ³ | |
| | Long-term systemic effects dermal | 180 mg/kg bw/day | |

ethylbenzene

| Effect level (DNEL/DMEL) | Type | Value | Remark |
|--------------------------|---------------------------------------|-----------------------|--------|
| DNEL | Long-term systemic effects inhalation | 77 mg/m ³ | |
| | Acute local effects inhalation | 293 mg/m ³ | |
| | Long-term systemic effects dermal | 180 mg/kg bw/day | |

DNEL/DMEL - General population

4,4'-methylenediphenyl diisocyanate

| Effect level (DNEL/DMEL) | Type | Value | Remark |
|--------------------------|------------------------------------|-------------------------|--------|
| DNEL | Long-term local effects inhalation | 0.025 mg/m ³ | |
| | Acute systemic effects inhalation | 0.05 mg/m ³ | |

xylene

| 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 | |
| | Acute local effects inhalation | 174 mg/m ³ | |
| | Long-term systemic effects dermal | 108 mg/kg bw/day | |
| | Long-term systemic effects oral | 1.6 mg/kg bw/day | |

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| Effect level (DNEL/DMEL) | Type | Value | Remark |
|--------------------------|---------------------------------------|----------------------|--------|
| DNEL | Long-term systemic effects inhalation | 15 mg/m ³ | |
| | Long-term systemic effects oral | 1.6 mg/kg bw/day | |

PNEC

4,4'-methylenediphenyl diisocyanate

| Compartments | Value | Remark |
|------------------------------|-----------------|--------|
| Fresh water | 1 mg/l | |
| Marine water | 0.1 mg/l | |
| Aqua (intermittent releases) | 10 mg/l | |
| STP | 1 mg/l | |
| Soil | 1 mg/kg soil dw | |

xylene

| Compartments | Value | Remark |
|------------------------------|-------------------------|--------|
| Fresh water | 0.327 mg/l | |
| Marine water | 0.327 mg/l | |
| Aqua (intermittent releases) | 0.327 mg/l | |
| STP | 6.58 mg/l | |
| Fresh water sediment | 12.46 mg/kg sediment dw | |
| Marine water sediment | 12.46 mg/kg sediment dw | |
| Soil | 2.31 mg/kg soil dw | |

ethylbenzene

| Compartments | Value | Remark |
|------------------------------|------------------------|--------|
| Fresh water | 0.1 mg/l | |
| Marine water | 0.01 mg/l | |
| Aqua (intermittent releases) | 0.1 mg/l | |
| STP | 9.6 mg/l | |
| Fresh water sediment | 13.7 mg/kg sediment dw | |
| Marine water sediment | 1.37 mg/kg sediment dw | |
| Soil | 2.68 mg/kg soil dw | |
| Oral | 0.02 g/kg food | |

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:

Safety glasses.

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 | Viscous |
| Odour | Solvent-like odour |
| Odour threshold | No data available |
| Colour | Variable in colour, depending on the composition |
| Particle size | No data available |
| Explosion limits | Not applicable |
| Flammability | Non combustible |
| 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 |

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| | |
|---------------------------|--|
| Flash point | Not applicable |
| Evaporation rate | No data available |
| Relative vapour density | > 1 |
| Vapour pressure | No data available |
| Solubility | water ; insoluble organic solvents ; soluble |
| Relative density | 1.3 ; 20 °C |
| Decomposition temperature | No data available |
| Auto-ignition temperature | Not applicable |
| Explosive properties | No chemical group associated with explosive properties |
| Oxidising properties | No chemical group associated with oxidising properties |
| pH | No data available |

9.2. Other information

| | |
|------------------|--------------------------------|
| Absolute density | 1300 kg/m ³ ; 20 °C |
|------------------|--------------------------------|

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Keep away from naked flames/heat.

10.5. Incompatible materials

No data available.

10.6. Hazardous decomposition products

On burning: release of toxic and corrosive gases/vapours (hydrogen chloride, sulphur oxides, carbon monoxide - carbon dioxide).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

11.1.1 Test results

Acute toxicity

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No (test) data on the mixture available

4,4'-methylenediphenyl diisocyanate

| Route of exposure | Parameter | Method | Value | Exposure time | Species | Value determination | Remark |
|----------------------|------------------------------|------------------------|-----------------|---------------|----------------------|---------------------|--------|
| Oral | LD50 | Equivalent to OECD 401 | > 7616 mg/kg | | Rat (female) | Read-across | |
| Dermal | LD50 | Equivalent to OECD 402 | > 9400 mg/kg bw | 24 h | Rabbit (male/female) | Read-across | |
| Dermal | Percutaneous absorption rate | EPA OPPTS 870.7600 | 0.9 % | 8 h | Rat (male) | Experimental value | |
| Inhalation (aerosol) | LC50 | Equivalent to OECD 403 | 0.49 mg/l air | 4 h | Rat (male/female) | Read-across | |
| | | | category 4 | | | Annex VI | |

xylene

| Route of exposure | Parameter | Method | Value | Exposure time | Species | Value determination | Remark |
|----------------------|-----------|----------|-----------------|---------------|---------------|---------------------|--------|
| Oral | LD50 | OECD 401 | 3523 mg/kg bw | | Rat (male) | Experimental value | |
| Oral | LD50 | OECD 401 | > 4000 mg/kg bw | | Rat (female) | Experimental value | |
| Dermal | LD50 | | > 4200 mg/kg bw | 4 h | Rabbit (male) | Weight of evidence | |
| Dermal | | | category 4 | | | Annex VI | |
| Inhalation (vapours) | LC50 | | 29.09 mg/l | 4 h | Rat (male) | Experimental value | |
| Inhalation | | | category 4 | | | Annex VI | |

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| Route of exposure | Parameter | Method | Value | Exposure time | Species | Value determination | Remark |
|-------------------|-----------|--------|-------------|---------------|-------------------|---------------------|--------|
| Oral | LD50 | | 3500 mg/kg | | Rat (male/female) | Experimental value | |
| Dermal | LD50 | | 15432 mg/kg | 24 h | Rabbit (male) | Experimental value | |
| Inhalation | LC50 | | 1432 ppm | 4 h | Mouse (male) | Experimental value | |

Judgement is based on the relevant ingredients

Conclusion

Not classified for acute toxicity

Corrosion/irritation

Soudaflex 40FC

No (test) data on the mixture available

4,4'-methylenediphenyl diisocyanate

| Route of exposure | Result | Method | Exposure time | Time point | Species | Value determination | Remark |
|-------------------|---------------------|----------|---------------|------------------|---------|---------------------|--------|
| Eye | Slightly irritating | | | | Rabbit | Experimental value | |
| Eye | Irritating | | | | Human | Weight of evidence | |
| Skin | Irritating | OECD 404 | 4 h | 24; 48; 72 hours | Rabbit | Read-across | |
| Skin | Irritating | | | | Human | Weight of evidence | |
| Inhalation | Irritating | | | | Human | Weight of evidence | |

xylene

| Route of exposure | Result | Method | Exposure time | Time point | Species | Value determination | Remark |
|----------------------|-----------------------|----------|---------------|------------------|---------|---------------------|--------|
| Eye | Moderately irritating | OECD 405 | | 24; 48; 72 hours | Rabbit | Experimental value | |
| Skin | Moderately irritating | | 4 h | 24; 72 hours | Rabbit | Experimental value | |
| Inhalation (vapours) | Irritating | | 4 h | | Human | | |

ethylbenzene

| Route of exposure | Result | Method | Exposure time | Time point | Species | Value determination | Remark |
|-------------------|-----------------------|--------|---------------|------------|---------|---------------------|--------|
| Eye | Slightly irritating | | | 7 days | Rabbit | Experimental value | |
| Skin | Moderately irritating | | 24 h | | Rabbit | Experimental value | |

Judgement is based on the relevant ingredients

Conclusion

Not classified as irritating to the skin

Not classified as irritating to the eyes

Not classified as irritating to the respiratory system

Respiratory or skin sensitisation

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No (test) data on the mixture available

4,4'-methylenediphenyl diisocyanate

| Route of exposure | Result | Method | Exposure time | Observation time point | Species | Value determination | Remark |
|-------------------|-------------|----------|---------------|------------------------|---------------------|---------------------|--------|
| Skin | Sensitizing | OECD 429 | | | Mouse | Experimental value | |
| Inhalation | Sensitizing | | | | Rat (male) | Experimental value | |
| Inhalation | Sensitizing | | | | Guinea pig (female) | Experimental value | |

xylene

| Route of exposure | Result | Method | Exposure time | Observation time point | Species | Value determination | Remark |
|-------------------|-----------------|----------|---------------|------------------------|---------|---------------------|--------|
| Skin | Not sensitizing | OECD 429 | | | Mouse | Experimental value | |

ethylbenzene

| Route of exposure | Result | Method | Exposure time | Observation time point | Species | Value determination | Remark |
|-------------------|-----------------|--------|---------------|------------------------|---------|---------------------------------|--------|
| Skin | Not sensitizing | Other | | | Human | Inconclusive, insufficient data | |

Classification is based on the relevant ingredients

Conclusion

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Not classified as sensitizing for skin

Specific target organ toxicity

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No (test)data on the mixture available

4,4'-methylenediphenyl diisocyanate

| Route of exposure | Parameter | Method | Value | Organ | Effect | Exposure time | Species | Value determination |
|----------------------|-----------|--------|----------------------------|-------|------------------------------------|------------------------------------|--------------|---------------------|
| Inhalation (aerosol) | LOAEC | Other | 0.23 mg/m ³ air | Lungs | Lung tissue affection/degeneration | ≤ 104 weeks (17h/day, 5 days/week) | Rat (female) | Experimental value |

xylene

| Route of exposure | Parameter | Method | Value | Organ | Effect | Exposure time | Species | Value determination |
|----------------------|-----------|--------------------------|--------------------------|-------|-------------|--------------------------------|-------------------|---------------------|
| Oral | LOAEL | Equivalent to OECD 408 | 150 mg/kg bw/day | Liver | Weight gain | 90 day(s) | Rat (male/female) | Experimental value |
| Inhalation (vapours) | NOAEC | Subchronic toxicity test | ≥ 3515 mg/m ³ | | No effect | 13 weeks (6h/day, 5 days/week) | Rat (male) | Experimental value |

ethylbenzene

| Route of exposure | Parameter | Method | Value | Organ | Effect | Exposure time | Species | Value determination |
|----------------------|-----------|------------------------|------------------|-------|--------------------------------------|---------------------------------|---------------------|---------------------|
| Oral | NOAEL | OECD 407 | 75 mg/kg bw/day | Liver | Enlargement/affectation of the liver | 28 day(s) | Rat (male/female) | Experimental value |
| Oral | NOAEL | OECD 408 | 75 mg/kg bw/day | Liver | Enlargement/affectation of the liver | 13 week(s) | Rat (male/female) | Experimental value |
| Oral | LOAEL | OECD 408 | 250 mg/kg bw/day | Liver | Enlargement/affectation of the liver | 13 week(s) | Rat (male/female) | Experimental value |
| Oral | NOAEL | Equivalent to OECD 424 | 500 mg/kg bw/day | | No effect | 90 day(s) | Rat (male/female) | Experimental value |
| Inhalation (vapours) | LOAEC | Equivalent to OECD 453 | 75 ppm | | No effect | 104 weeks (6h/day, 5 days/week) | Rat (male/female) | Experimental value |
| Inhalation | NOAEL | Equivalent to OECD 413 | 1000 ppm | | No effect | 13 weeks (6h/day, 5 days/week) | Rat (male/female) | Experimental value |
| Inhalation | NOAEC | OECD 412 | 800 ppm | Liver | | 4 weeks (6h/day, 5 days/week) | Mouse (male/female) | Experimental value |
| Inhalation | NOAEC | OECD 412 | 800 ppm | Liver | Enlargement/affectation of the liver | 4 weeks (6h/day, 5 days/week) | Rat (male/female) | Experimental value |

Judgement is based on the relevant ingredients

Conclusion

Not classified for subchronic toxicity

Mutagenicity (in vitro)

Soudaflex 40FC

No (test)data on the mixture available

4,4'-methylenediphenyl diisocyanate

| Result | Method | Test substrate | Effect | Value determination |
|---|------------------------|--------------------------|-----------|---------------------|
| Negative with metabolic activation, negative without metabolic activation | Equivalent to OECD 471 | Bacteria (S.typhimurium) | No effect | Experimental value |

xylene

| Result | Method | Test substrate | Effect | Value determination |
|----------|--------|-----------------------------|-----------|---------------------|
| Negative | Other | Chinese hamster ovary (CHO) | No effect | Experimental value |

ethylbenzene

| Result | Method | Test substrate | Effect | Value determination |
|---|------------------------|-------------------------------|-----------|---------------------|
| Negative with metabolic activation, negative without metabolic activation | OECD 476 | Mouse (lymphoma L5178Y cells) | No effect | Experimental value |
| Negative with metabolic activation, negative without metabolic activation | Equivalent to OECD 473 | Chinese hamster ovary (CHO) | No effect | Experimental value |

Mutagenicity (in vivo)

Soudaflex 40FC

No (test)data on the mixture available

4,4'-methylenediphenyl diisocyanate

| Result | Method | Exposure time | Test substrate | Organ | Value determination |
|----------|----------|------------------------------|----------------|-------|---------------------|
| Negative | OECD 474 | 3 weeks (1h/day, 1 day/week) | Rat (male) | | Experimental value |

Reason for revision: 2,3

Publication date: 2002-04-05

Date of revision: 2016-03-18

Revision number: 0600

Product number: 32947

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Soudaflex 40FC

xylene

| Result | Method | Exposure time | Test substrate | Organ | Value determination |
|----------|------------------------|---------------|---------------------|-------|---------------------|
| Negative | Equivalent to OECD 478 | | Mouse (male/female) | | Experimental value |

ethylbenzene

| Result | Method | Exposure time | Test substrate | Organ | Value determination |
|----------|----------|---------------|---------------------|-------|---------------------|
| Negative | OECD 486 | 6 h | Mouse (male/female) | | Experimental value |
| Negative | OECD 474 | 48 h | Mouse (male) | | Experimental value |

Carcinogenicity

Soudaflex 40FC

No (test) data on the mixture available

4,4'-methylenediphenyl diisocyanate

| Route of exposure | Parameter | Method | Value | Exposure time | Species | Effect | Organ | Value determination |
|----------------------|-----------|--------|---------------------------|----------------------------------|--------------|------------------------|-------|---------------------|
| Inhalation (aerosol) | NOAEC | Other | 0.7 mg/m ³ air | 104 weeks (17h/day, 5 days/week) | Rat (female) | No carcinogenic effect | | Experimental value |

xylene

| Route of exposure | Parameter | Method | Value | Exposure time | Species | Effect | Organ | Value determination |
|-------------------|-----------|--------|--------------------|-------------------------|-------------------|-----------|-------|---------------------|
| Oral | NOAEC | Other | ≥ 500 mg/kg bw/day | 103 weeks (5 days/week) | Rat (male/female) | No effect | | Experimental value |

ethylbenzene

| Route of exposure | Parameter | Method | Value | Exposure time | Species | Effect | Organ | Value determination |
|----------------------|-----------|------------------------|---------|---------------------------------|-------------------|-----------|-------|---------------------|
| Inhalation (vapours) | NOAEC | Equivalent to OECD 453 | 250 ppm | 104 weeks (6h/day, 5 days/week) | Rat (male/female) | No effect | | Experimental value |

Reproductive toxicity

Soudaflex 40FC

No (test) data on the mixture available

4,4'-methylenediphenyl diisocyanate

| | Parameter | Method | Value | Exposure time | Species | Effect | Organ | Value determination |
|------------------------|-----------|----------|-------------------------|------------------|--------------|----------------|-------|---------------------|
| Developmental toxicity | NOAEL | OECD 414 | 3 mg/m ³ air | 10 days (6h/day) | Rat (female) | No effect | | Experimental value |
| | LOAEL | OECD 414 | 9 mg/m ³ air | 10 days (6h/day) | Rat (female) | Embryotoxicity | | Experimental value |
| Maternal toxicity | NOAEL | OECD 414 | 4 mg/kg bw/day | 10 day(s) | Rat (female) | No effect | | Read-across |
| Effects on fertility | | | | | | | | Data waiving |

xylene

| | Parameter | Method | Value | Exposure time | Species | Effect | Organ | Value determination |
|------------------------|------------|------------------------|-----------|------------------|-------------------|-----------|-------|---------------------|
| Developmental toxicity | NOAEC | Equivalent to OECD 414 | 100 ppm | 21 days (6h/day) | Rat (male/female) | No effect | | Experimental value |
| Maternal toxicity | NOAEC | OECD 414 | 500 ppm | | Rat | No effect | | Experimental value |
| Effects on fertility | NOAEC (P) | EPA OPPTS 870.3800 | ≥ 500 ppm | 70 days (6h/day) | Rat (male/female) | No effect | | Experimental value |
| | NOAEC (F1) | EPA OPPTS 870.3800 | ≥ 500 ppm | 70 days (6h/day) | Rat (male/female) | No effect | | Experimental value |

Reason for revision: 2;3

Publication date: 2002-04-05

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Soudaflex 40FC

ethylbenzene

| | Parameter | Method | Value | Exposure time | Species | Effect | Organ | Value determination |
|------------------------|-----------------|------------------------|----------|---------------------------------|---------------------|-----------|-------|---------------------|
| Developmental toxicity | NOAEC | OECD 414 | 500 ppm | 15 days (gestation, daily) | Rat (female) | No effect | | Experimental value |
| | NOAEC | OECD 426 | 500 ppm | 70 days (6h/day) | Rat (male/female) | No effect | | Experimental value |
| Effects on fertility | NOAEC (P/F1/F2) | OECD 416 | 500 ppm | 70 days (6h/day) | Rat (male/female) | No effect | | Experimental value |
| | NOAEC (P) | Equivalent to OECD 415 | 1000 ppm | 2 week(s) | Rat (male/female) | No effect | | Experimental value |
| | NOEC (F1) | Equivalent to OECD 415 | 100 ppm | | Rat (male/female) | No effect | | Experimental value |
| | NOAEL | Other | 750 ppm | 104 weeks (6h/day, 5 days/week) | Mouse (male/female) | No effect | | Experimental value |
| | NOEC | OECD 408 | 750 ppm | 13 week(s) | Rat (male/female) | No effect | | Experimental value |

Judgement is based on the relevant ingredients

Conclusion CMR

Not classified for carcinogenicity

Not classified for mutagenic or genotoxic toxicity

Not classified for reprotoxic or developmental toxicity

Toxicity other effects

Soudaflex 40FC

No (test)data on the mixture available

4,4'-methylenediphenyl diisocyanate

| Parameter | Method | Value | Organ | Effect | Exposure time | Species | Value determination |
|-----------|--------|--------------|-------|--------|---------------|--------------|---------------------|
| LD50 | | 100 mg/kg bw | | | | Mouse (male) | Experimental value |

Chronic effects from short and long-term exposure

Soudaflex 40FC

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

SECTION 12: Ecological information

12.1. Toxicity

Soudaflex 40FC

No (test)data on the mixture available

4,4'-methylenediphenyl diisocyanate

| | Parameter | Method | Value | Duration | Species | Test design | Fresh/salt water | Value determination |
|--|-----------|----------|-------------|-----------|-------------------------|--------------------|------------------|------------------------------------|
| Acute toxicity fishes | LC50 | OECD 203 | > 1000 mg/l | 96 h | Danio rerio | Static system | Fresh water | Read-across; Nominal concentration |
| Acute toxicity invertebrates | EC50 | OECD 202 | 129.7 mg/l | 24 h | Daphnia magna | Static system | Fresh water | Read-across; Locomotor effect |
| Toxicity algae and other aquatic plants | EC50 | OECD 201 | > 1640 mg/l | 72 h | Desmodesmus subspicatus | Static system | Fresh water | Read-across; Growth rate |
| Long-term toxicity aquatic invertebrates | NOEC | OECD 211 | ≥ 10 mg/l | 21 day(s) | Daphnia magna | Semi-static system | Fresh water | Read-across; Reproduction |
| Toxicity aquatic micro-organisms | EC50 | OECD 209 | > 100 mg/l | 3 h | Activated sludge | Static system | Fresh water | Read-across; Nominal concentration |

Reason for revision: 2;3

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Product number: 32947

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Soudaflex 40FC

xylene

| | 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; Lethal |
| 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 | EC50 | OECD 201 | 4.36 mg/l | 73 h | Pseudokirchneriella subcapitata | Static system | Fresh water | Experimental value; Growth rate |
| Long-term toxicity fish | NOEC | | > 1.3 mg/l | 56 day(s) | Oncorhynchus mykiss | Flow-through system | Fresh water | Experimental value; Lethal |
| Long-term toxicity aquatic invertebrates | NOEC | US EPA | 1.17 mg/l | 7 day(s) | Ceriodaphnia dubia | | Fresh water | Read-across; Reproduction |

ethylbenzene

| | Parameter | Method | Value | Duration | Species | Test design | Fresh/salt water | Value determination |
|--|-----------|--------------|---------------------|-----------|---------------------------|--------------------|------------------|----------------------------------|
| Acute toxicity fishes | LC50 | OECD 203 | 4.2 mg/l | 96 h | Salmo gairdneri | Semi-static system | Fresh water | Experimental value |
| Acute toxicity invertebrates | EC50 | US EPA | 1.8 mg/l - 2.4 mg/l | 48 h | Daphnia magna | Static system | Fresh water | Experimental value |
| Toxicity algae and other aquatic plants | EC50 | OECD 201 | 4.6 mg/l | 72 h | Selenastrum capricornutum | | | Experimental value; Growth rate |
| Long-term toxicity fish | ChV | ECOSAR v1.00 | 1.13 mg/l | 30 day(s) | Pisces | | | QSAR |
| Long-term toxicity aquatic invertebrates | NOEC | US EPA | 1 mg/l | 7 day(s) | Ceriodaphnia dubia | Semi-static system | Fresh water | Experimental value; Reproduction |
| Toxicity aquatic micro-organisms | EC50 | | 96 mg/l | 24 h | Nitrosomonas | | | Experimental value |

| | Parameter | Method | Value | Duration | Species | Value determination |
|-------------------------------|-----------|----------|---|----------|----------------|---------------------|
| Toxicity soil macro-organisms | LC50 | OECD 207 | 0.042 mg/cm ² - 0.053 mg/cm ² | 48 h | Eisenia fetida | Experimental value |

Judgement of the mixture is based on the relevant ingredients

Conclusion

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

12.2. Persistence and degradability

4,4'-methylenediphenyl diisocyanate

Biodegradation water

| Method | Value | Duration | Value determination |
|---|-------|-----------|---------------------|
| OECD 302C: Inherent Biodegradability: Modified MITI Test (II) | 0 % | 28 day(s) | Read-across |

Phototransformation air (DT50 air)

| Method | Value | Conc. OH-radicals | Value determination |
|--------------|-------------|-------------------|---------------------|
| AOPWIN v1.92 | 0.92 day(s) | | QSAR |

Half-life water (t1/2 water)

| Method | Value | Primary degradation/mineralisation | Value determination |
|--------|-------|------------------------------------|---------------------|
| | 20 h | | Read-across |

xylene

Biodegradation water

| Method | Value | Duration | Value determination |
|---|-------------|-----------|---------------------|
| OECD 301: Ready Biodegradability | 100 % | 12 day(s) | Experimental value |
| OECD 301F: Manometric Respirometry Test | 87.8 %; GLP | 28 day(s) | Read-across |

ethylbenzene

Biodegradation water

| Method | Value | Duration | Value determination |
|-----------|------------------|-----------|---------------------|
| ISO 14593 | 70 % - 80 %; GLP | 28 day(s) | Experimental value |

Phototransformation air (DT50 air)

| Method | Value | Conc. OH-radicals | Value determination |
|--------|-------|-------------------------|---------------------|
| | | 500000 /cm ³ | |

Half-life soil (t1/2 soil)

| Method | Value | Primary degradation/mineralisation | Value determination |
|--------|----------------------|------------------------------------|---------------------|
| | 3 day(s) - 10 day(s) | | Literature study |

Half-life air (t1/2 air)

| Method | Value | Primary degradation/mineralisation | Value determination |
|--------|------------|------------------------------------|---------------------|
| | 2.3 day(s) | | |

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Conclusion

Contains non readily biodegradable component(s)

12.3. Bioaccumulative potential

Soudaflex 40FC

Log Kow

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

4,4'-methylenediphenyl diisocyanate

BCF fishes

| Parameter | Method | Value | Duration | Species | Value determination |
|-----------|----------|----------|-----------|-----------------|---------------------|
| BCF | OECD 305 | 92 - 200 | 4 week(s) | Cyprinus carpio | Experimental value |

Log Kow

| Method | Remark | Value | Temperature | Value determination |
|----------|--------|-------|-------------|---------------------|
| | | 5.22 | | Estimated value |
| OECD 117 | | 4.51 | 22 °C | Experimental value |

xylene

BCF fishes

| Parameter | Method | Value | Duration | Species | Value determination |
|-----------|--------|--------|-----------|---------------------|---------------------|
| BCF | | 7 - 26 | 8 week(s) | Oncorhynchus mykiss | Experimental value |

Log Kow

| Method | Remark | Value | Temperature | Value determination |
|--------|--------|-------|-------------|-----------------------|
| | | 3.2 | 20 °C | Conclusion by analogy |

ethylbenzene

BCF fishes

| Parameter | Method | Value | Duration | Species | Value determination |
|-----------|--------|---------|-----------|----------------------|---------------------|
| BCF | Other | 1 | 6 week(s) | Oncorhynchus kisutch | Literature study |
| | | 15 - 79 | | Carassius auratus | Literature study |

BCF other aquatic organisms

| Parameter | Method | Value | Duration | Species | Value determination |
|-----------|--------|-------|----------|-------------------|---------------------|
| BCF | | 4.68 | | Lamellibranchiata | Literature study |

Log Kow

| Method | Remark | Value | Temperature | Value determination |
|---------------|--------|-------|-------------|---------------------|
| EU Method A.8 | | 3.6 | 20 °C | Experimental value |

Conclusion

Does not contain bioaccumulative component(s)

12.4. Mobility in soil

4,4'-methylenediphenyl diisocyanate

Volatility (Henry's Law constant H)

| Value | Method | Temperature | Remark | Value determination |
|---------------------------------|--------|-------------|--------|---------------------|
| 8.95E-7 atm m ³ /mol | | 25 °C | | Estimated value |

ethylbenzene

(log) Koc

| Parameter | Method | Value | Value determination |
|-----------|----------------|-------|---------------------|
| log Koc | PCKOCWIN v1.66 | 2.71 | Calculated value |

Volatility (Henry's Law constant H)

| Value | Method | Temperature | Remark | Value determination |
|---------------------------------|--------|-------------|--------|---------------------|
| 0.00843 atm m ³ /mol | | 25 °C | | Experimental value |

Percent distribution

| Method | Fraction air | Fraction biota | Fraction sediment | Fraction soil | Fraction water | Value determination |
|----------------|--------------|----------------|-------------------|---------------|----------------|---------------------|
| Mackay level I | 99.45 % | | 0.05 % | 0.05 % | 0.45 % | QSAR |

Conclusion

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

12.5. Results of PBT and vPvB assessment

Due to insufficient data no statement can be made whether the component(s) fulfil(s) the criteria of PBT and vPvB according to Annex XIII of Regulation (EC) No 1907/2006.

12.6. Other adverse effects

Soudaflex 40FC

fluorinated greenhouse gases (Regulation (EU) No 517/2014)

None of the known components is included in the list of fluorinated greenhouse gases (Regulation (EU) No 517/2014)

Ozone-depleting potential (ODP)

Soudaflex 40FC

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

xylene

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

Hazardous waste according to Regulation (EU) No 1357/2014.

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 hazardous substances). Depending on branch of industry and production process, also other waste codes may be applicable.

13.1.2 Disposal methods

In authorized incinerator equipped with flue gas scrubber 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 | |

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

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| | |
|--|----|
| 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 and the IBC Code | |
| Annex II of MARPOL 73/78 | |

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 | Remark |
|-------------|--------|
| 13 % | |
| 167 g/l | |

Indicative occupational exposure limit values (Directive 98/24/EC, 2000/39/EC and 2009/161/EU)

| Product name | Skin resorption |
|-----------------------------|-----------------|
| Ethylbenzene | Skin |
| Xylene, mixed isomers, pure | Skin |

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.

| | | |
|--------------|--|--|
| ethylbenzene | 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 | 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 |
|--------------|--|--|

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| | | |
|-------------------------------------|---|--|
| | 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. | 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.' |
| xylene ethylbenzene | 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, — "whoopee" 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. |
| 4,4'-methylenediphenyl diisocyanate | 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. |

National legislation The Netherlands

Soudaflex 40FC

| | |
|--|---|
| Waste identification (the Netherlands) | LWCA (the Netherlands): KGA category 04 |
| Waterbezwaarlijkheid | 1 |

xylene

| | |
|---|---|
| SZW - List of reprotoxic substances (development) | Suspected of damaging the unborn child. |
|---|---|

National legislation Germany

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| | |
|-----|---|
| WGK | 2; Classification water polluting based on the components in compliance with Verwaltungsvorschrift wassergefährdender Stoffe (VwVwS) of 27 July 2005 (Anhang 4) |
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4,4'-methylenediphenyl diisocyanate

| | |
|--|--|
| MAK - Krebserzeugend Kategorie | 4 |
| Schwangerschaft Gruppe | C |
| MAK 8-Stunden-Mittelwert mg/m ³ | Diphenylmethan-4,4'-diisocyanat (MDI) (eintembare Fraktion); 0.05 mg/m ³ ; gemessen als eintembare Fraktion (vgl. Abschn. Vd) S. 191) |
| TA-Luft | 5.2.5; I 5.2.5 |

xylene

| | |
|---------|----------|
| TA-Luft | 5.2.5; I |
|---------|----------|

ethylbenzene

| | |
|--|-----------------------------------|
| MAK - Krebserzeugend Kategorie | 4 |
| Schwangerschaft Gruppe | C |
| MAK 8-Stunden-Mittelwert ppm | Ethylbenzol; 20 ppm |
| MAK 8-Stunden-Mittelwert mg/m ³ | Ethylbenzol; 88 mg/m ³ |
| TA-Luft | 5.2.5; I |

National legislation France

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No data available

4,4'-methylenediphenyl diisocyanate

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|-----------------------|----|
| Catégorie cancérogène | C2 |
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National legislation Belgium

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No data available

Other relevant data

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No data available

4,4'-methylenediphenyl diisocyanate

| | |
|-----------------------|--|
| IARC - classification | 3; 4,4'-methylenediphenyl diisocyanate and polymeric 4,4'-methylenediphenyl diisocyanate |
|-----------------------|--|

xylene

| | |
|-----------------------|------------|
| IARC - classification | 3; Xylenes |
|-----------------------|------------|

ethylbenzene

| | |
|-----------------------|-------------------|
| IARC - classification | 2B; Ethylbenzene |
| TLV - Carcinogen | Ethyl benzene; A3 |

15.2. Chemical safety assessment

No chemical safety assessment is required.

SECTION 16: Other information

Full text of any H-statements referred to under headings 2 and 3:

- H225 Highly flammable liquid and vapour.
- 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.
- H335 May cause respiratory irritation.
- H351 Suspected of causing cancer.
- H373 May cause damage to organs (ears (hearing damage)) through prolonged or repeated exposure.
- H373 May cause damage to organs (lungs) through prolonged or repeated exposure if inhaled.
- H412 Harmful to aquatic life with long lasting effects.

(*) = INTERNAL CLASSIFICATION BY BIG

PBT-substances = persistent, bioaccumulative and toxic substances

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

Specific concentration limits CLP

| | | | |
|-------------------------------------|-----------|---------------------|----------------------|
| 4,4'-methylenediphenyl diisocyanate | C ≥ 5 % | Eye Irrit. 2; H319 | CLP Annex VI (ATP 1) |
| | C ≥ 5 % | Skin Irrit. 2; H315 | CLP Annex VI (ATP 1) |
| | C ≥ 0.1 % | Resp. Sens. 1; H334 | CLP Annex VI (ATP 1) |
| | C ≥ 5 % | STOT SE 3; H335 | CLP Annex VI (ATP 1) |

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