

SAFETY DATA SHEET

Based upon Regulation (EC) No 1907/2006, as amended by Regulation (EU) No 2015/830



WP7-201

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

1.1. Product identifier

Product name : WP7-201
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

Sealing compound

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

TEC7*
Industrielaan 5B
B-2250 Olen
☎ +32 14 85 97 37
☎ +32 14 85 97 38
info@tec7.be
*TEC7 is a registered trademark of Novatech International N.V.

Manufacturer of the product

Novatech International N.V.
Industrielaan 5B
B-2250 Olen
☎ +32 14 85 97 37
☎ +32 14 85 97 38
info@novatech.be

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 |
|-----------------|------------|--|
| Aerosol | category 1 | H222: Extremely flammable aerosol. |
| Aerosol | category 1 | H229: Pressurised container: May burst if heated. |
| Skin Irrit. | category 2 | H315: Causes skin irritation. |
| STOT SE | category 3 | H336: May cause drowsiness or dizziness. |
| Aquatic Chronic | category 2 | H411: Toxic to aquatic life with long lasting effects. |

2.2. Label elements



Contains: n-butyl acetate; hydrocarbons, C7, n-alkanes, isoalkanes, cyclics.

Signal word Danger

H-statements

H222 Extremely flammable aerosol.
H229 Pressurised container: May burst if heated.
H315 Causes skin irritation.
H336 May cause drowsiness or dizziness.
H411 Toxic to aquatic life with long lasting effects.

P-statements

P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.

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| | |
|-------------|--|
| P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| P211 | Do not spray on an open flame or other ignition source. |
| P251 | Do not pierce or burn, even after use. |
| P280 | Wear protective gloves, protective clothing and eye protection/face protection. |
| P405 | Store locked up. |
| P410 + P412 | Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122°F. |
| P501 | Dispose of contents/container in accordance with local/regional/national/international regulation. |

2.3. Other hazards

Gas/vapour spreads at floor level: ignition hazard

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 |
|---|-----------------------|-----------|--|------------|-------------|
| dimethyl ether 01-2119472128-37 | 115-10-6 204-065-8 | 25%<C<50% | Flam. Gas 1A; H220 Press. Gas - Liquefied gas; | (1)(2)(10) | Constituent |
| n-butyl acetate 01-2119485493-29 | 123-86-4 204-658-1 | 10%<C<25% | Flam. Liq. 3; H226 STOT SE 3; H336 | (1)(2)(10) | Constituent |
| hydrocarbons, C7, n-alkanes, isoalkanes, cyclics 01-2119475515-33 | | 10%<C<25% | Flam. Liq. 2; H225 Asp. Tox. 1; H304 Skin Irrit. 2; H315 STOT SE 3; H336 Aquatic Chronic 2; H411 | (1)(10) | Constituent |
| hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics 01-2119473851-33 | | 5%<C<10% | Flam. Liq. 2; H225 Asp. Tox. 1; H304 STOT SE 3; H336 Aquatic Chronic 2; H411 | (1)(10) | Constituent |
| hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane 01-2119475514-35 | | 5%<C<10% | Flam. Liq. 2; H225 Asp. Tox. 1; H304 Skin Irrit. 2; H315 STOT SE 3; H336 Aquatic Chronic 2; H411 | (1)(10) | Constituent |
| hydrocarbons, C9, aromatics 01-2119455851-35 | | 3%<C<5% | Flam. Liq. 3; H226 Asp. Tox. 1; H304 STOT SE 3; H335 STOT SE 3; H336 Aquatic Chronic 2; H411 | (1)(10) | Constituent |

(1) For 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:

Observe (own) safety. If possible, approach victim and check vital functions. In case of injury and/or intoxication, call the European emergency number 112. Treat symptoms starting with most life-threatening injuries and disorders. Keep victim under observation, possibility of delayed symptoms.

After inhalation:

Remove victim into fresh air. In case of respiratory problems, consult a doctor/medical service.

After skin contact:

If possible, wipe up/dry remove chemical. Then rinse/shower immediately with (lukewarm) water. If irritation persists, consult a doctor/medical service.

After eye contact:

Rinse immediately with (lukewarm) water. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation persists, consult a doctor/medical service.

After ingestion:

Rinse mouth with water. If you feel unwell, consult a doctor/medical service. Do not wait for symptoms to occur to consult Poison Center.

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

4.2.1 Acute symptoms

After inhalation:

Dizziness. Narcosis.

After skin contact:

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Tingling/irritation of the skin.

After eye contact:

No effects known.

After ingestion:

No effects known.

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

5.1.1 Suitable extinguishing media:

Small fire: Water, Quick-acting ABC powder extinguisher, Quick-acting BC powder extinguisher, Quick-acting CO2 extinguisher.

Major fire: Quantities of water.

5.2. Special hazards arising from the substance or mixture

Upon combustion: CO and CO2 are formed. Pressurised container: May burst if heated.

5.3. Advice for firefighters

5.3.1 Instructions:

If exposed to fire cool the closed containers by spraying with water. Physical explosion risk: extinguish/cool from behind cover. Do not move the load if exposed to heat. After cooling: persistent risk of physical explosion. Take account of environmentally hazardous firefighting water. Use water moderately and if possible collect or contain it.

5.3.2 Special protective equipment for fire-fighters:

Gloves (EN 374). Protective goggles (EN 166). Head/neck protection. Protective clothing (EN 14605 or EN 13034). Heat/fire exposure: compressed air apparatus (EN 136 + EN 137).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Stop engines and no smoking. No naked flames or sparks. Spark- and explosionproof appliances and lighting equipment.

6.1.1 Protective equipment for non-emergency personnel

See heading 8.2

6.1.2 Protective equipment for emergency responders

Gloves (EN 374). Protective goggles (EN 166). Head/neck protection. Protective clothing (EN 14605 or EN 13034).

Suitable protective clothing

See heading 8.2

6.2. Environmental precautions

Dam up the liquid spill.

6.3. Methods and material for containment and cleaning up

Take up liquid spill into absorbent material. Scoop absorbed substance into closing containers. Carefully collect the spill/leftovers. Clean contaminated surfaces with an excess of water. 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

Use spark-/explosionproof appliances and lighting system. Take precautions against electrostatic charges. Keep away from naked flames/heat. Keep away from ignition sources/sparks. Gas/vapour heavier than air at 20°C. Observe normal hygiene standards. Remove contaminated clothing immediately.

7.2. Conditions for safe storage, including any incompatibilities

7.2.1 Safe storage requirements:

Storage temperature: < 50 °C. Keep container in a well-ventilated place. Fireproof storeroom. Keep out of direct sunlight. Meet the legal requirements.

7.2.2 Keep away from:

Heat sources, ignition sources.

7.2.3 Suitable packaging material:

Aerosol.

7.2.4 Non suitable packaging material:

No data available

7.3. Specific end use(s)

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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.

EU

| | | |
|-----------------|---|------------------------|
| Dimethylether | Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value) | 1000 ppm |
| | Time-weighted average exposure limit 8 h (Indicative occupational exposure limit value) | 1920 mg/m ³ |
| n-Butyl acetate | 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) | 241 mg/m ³ |
| | Short time value (Indicative occupational exposure limit value) | 150 ppm |
| | Short time value (Indicative occupational exposure limit value) | 723 mg/m ³ |

Belgium

| | | |
|---------------------|--|------------------------|
| Acétate de n-butyle | Time-weighted average exposure limit 8 h | 50 ppm |
| | Time-weighted average exposure limit 8 h | 238 mg/m ³ |
| | Short time value | 150 ppm |
| | Short time value | 712 mg/m ³ |
| Oxyde de diméthyle | Time-weighted average exposure limit 8 h | 1000 ppm |
| | Time-weighted average exposure limit 8 h | 1920 mg/m ³ |

The Netherlands

| | | |
|---------------|---|------------------------|
| Dimethylether | Time-weighted average exposure limit 8 h (Public occupational exposure limit value) | 496 ppm |
| | Time-weighted average exposure limit 8 h (Public occupational exposure limit value) | 950 mg/m ³ |
| | Short time value (Public occupational exposure limit value) | 783 ppm |
| | Short time value (Public occupational exposure limit value) | 1500 mg/m ³ |

France

| | | |
|---------------------|--|------------------------|
| Acétate de n-butyle | Time-weighted average exposure limit 8 h (VL: Valeur non réglementaire indicative) | 150 ppm |
| | Time-weighted average exposure limit 8 h (VL: Valeur non réglementaire indicative) | 710 mg/m ³ |
| | Short time value (VL: Valeur non réglementaire indicative) | 200 ppm |
| | Short time value (VL: Valeur non réglementaire indicative) | 940 mg/m ³ |
| Oxyde de diméthyle | Time-weighted average exposure limit 8 h (VRI: Valeur réglementaire indicative) | 1000 ppm |
| | Time-weighted average exposure limit 8 h (VRI: Valeur réglementaire indicative) | 1920 mg/m ³ |

Germany

| | | |
|---------------|---|------------------------|
| Dimethylether | Time-weighted average exposure limit 8 h (TRGS 900) | 1000 ppm |
| | Time-weighted average exposure limit 8 h (TRGS 900) | 1900 mg/m ³ |
| n-Butylacetat | Time-weighted average exposure limit 8 h (TRGS 900) | 62 ppm |
| | Time-weighted average exposure limit 8 h (TRGS 900) | 300 mg/m ³ |

UK

| | | |
|----------------|---|-----------------------|
| Butyl acetate | Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005)) | 150 ppm |
| | Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005)) | 724 mg/m ³ |
| | Short time value (Workplace exposure limit (EH40/2005)) | 200 ppm |
| | Short time value (Workplace exposure limit (EH40/2005)) | 966 mg/m ³ |
| Dimethyl ether | Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005)) | 400 ppm |
| | Time-weighted average exposure limit 8 h (Workplace exposure limit (EH40/2005)) | 766 mg/m ³ |
| | Short time value (Workplace exposure limit (EH40/2005)) | 500 ppm |
| | Short time value (Workplace exposure limit (EH40/2005)) | 958 mg/m ³ |

USA (TLV-ACGIH)

| | | |
|-----------------------------|--|---------|
| Butyl acetates, all isomers | Time-weighted average exposure limit 8 h (TLV - Adopted Value) | 50 ppm |
| | Short time value (TLV - Adopted Value) | 150 ppm |

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b) National biological limit values

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

8.1.2 Sampling methods

| Product name | Test | Number |
|--|-------|--------|
| Butyl acetate (Volatile Organic compounds) | NIOSH | 2549 |
| n-Butyl Acetate (Esters I) | NIOSH | 1450 |
| n-Butyl Acetate | OSHA | 1009 |

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 Threshold values

DNEL/DMEL - Workers

dimethyl ether

| Effect level (DNEL/DMEL) | Type | Value | Remark |
|--------------------------|---------------------------------------|------------------------|--------|
| DNEL | Long-term systemic effects inhalation | 1894 mg/m ³ | |

n-butyl acetate

| Effect level (DNEL/DMEL) | Type | Value | Remark |
|--------------------------|---------------------------------------|-----------------------|--------|
| DNEL | Long-term systemic effects inhalation | 300 mg/m ³ | |
| | Acute systemic effects inhalation | 600 mg/m ³ | |
| | Long-term local effects inhalation | 300 mg/m ³ | |
| | Acute local effects inhalation | 600 mg/m ³ | |
| | Long-term systemic effects dermal | 11 mg/kg bw/day | |
| | Acute systemic effects dermal | 11 mg/kg bw/day | |

hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

| Effect level (DNEL/DMEL) | Type | Value | Remark |
|--------------------------|---------------------------------------|------------------------|--------|
| DNEL | Long-term systemic effects inhalation | 2085 mg/m ³ | |
| | Long-term systemic effects dermal | 300 mg/kg bw/day | |

hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics

| Effect level (DNEL/DMEL) | Type | Value | Remark |
|--------------------------|---------------------------------------|------------------------|--------|
| DNEL | Long-term systemic effects inhalation | 2035 mg/m ³ | |
| | Long-term systemic effects dermal | 773 mg/kg bw/day | |

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

| Effect level (DNEL/DMEL) | Type | Value | Remark |
|--------------------------|---------------------------------------|------------------------|--------|
| DNEL | Long-term systemic effects inhalation | 2035 mg/m ³ | |
| | Long-term systemic effects dermal | 773 mg/kg bw/day | |

hydrocarbons, C9, aromatics

| Effect level (DNEL/DMEL) | Type | Value | Remark |
|--------------------------|---------------------------------------|-----------------------|--------|
| DNEL | Long-term systemic effects inhalation | 150 mg/m ³ | |
| | Long-term systemic effects dermal | 25 mg/kg bw/day | |

DNEL/DMEL - General population

dimethyl ether

| Effect level (DNEL/DMEL) | Type | Value | Remark |
|--------------------------|---------------------------------------|-----------------------|--------|
| DNEL | Long-term systemic effects inhalation | 471 mg/m ³ | |

n-butyl acetate

| Effect level (DNEL/DMEL) | Type | Value | Remark |
|--------------------------|---------------------------------------|------------------------|--------|
| DNEL | Long-term systemic effects inhalation | 35.7 mg/m ³ | |
| | Acute systemic effects inhalation | 300 mg/m ³ | |
| | Long-term local effects inhalation | 35.7 mg/m ³ | |
| | Acute local effects inhalation | 300 mg/m ³ | |
| | Long-term systemic effects dermal | 6 mg/kg bw/day | |
| | Acute systemic effects dermal | 6 mg/kg bw/day | |
| | Long-term systemic effects oral | 2 mg/kg bw/day | |
| | Acute systemic effects oral | 2 mg/kg bw/day | |

hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

| Effect level (DNEL/DMEL) | Type | Value | Remark |
|--------------------------|---------------------------------------|-----------------------|--------|
| DNEL | Long-term systemic effects inhalation | 447 mg/m ³ | |
| | Long-term systemic effects dermal | 149 mg/kg bw/day | |
| | Long-term systemic effects oral | 149 mg/kg bw/day | |

hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics

| Effect level (DNEL/DMEL) | Type | Value | Remark |
|--------------------------|---------------------------------------|-----------------------|--------|
| DNEL | Long-term systemic effects inhalation | 608 mg/m ³ | |
| | Long-term systemic effects dermal | 699 mg/kg bw/day | |
| | Long-term systemic effects oral | 699 mg/kg bw/day | |

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

| Effect level (DNEL/DMEL) | Type | Value | Remark |
|--------------------------|------------------------------------|-----------------------|--------|
| DNEL | Long-term local effects inhalation | 608 mg/m ³ | |
| | Long-term systemic effects dermal | 699 mg/kg bw/day | |
| | Long-term systemic effects oral | 699 mg/kg bw/day | |

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hydrocarbons, C9, aromatics

| Effect level (DNEL/DMEL) | Type | Value | Remark |
|--------------------------|---------------------------------------|----------------------|--------|
| DNEL | Long-term systemic effects inhalation | 32 mg/m ³ | |
| | Long-term systemic effects dermal | 11 mg/kg bw/day | |
| | Long-term systemic effects oral | 11 mg/kg bw/day | |

PNEC

dimethyl ether

| Compartments | Value | Remark |
|-------------------------------------|-------------------------|--------|
| Fresh water | 0.155 mg/l | |
| Fresh water (intermittent releases) | 1.549 mg/l | |
| Marine water | 0.016 mg/l | |
| STP | 160 mg/l | |
| Fresh water sediment | 0.681 mg/kg sediment dw | |
| Marine water sediment | 0.069 mg/kg sediment dw | |
| Soil | 0.045 mg/kg soil dw | |

n-butyl acetate

| Compartments | Value | Remark |
|-------------------------------------|-------------------------|--------|
| Fresh water | 0.18 mg/l | |
| Fresh water (intermittent releases) | 0.36 mg/l | |
| Marine water | 0.018 mg/l | |
| STP | 35.6 mg/l | |
| Fresh water sediment | 0.981 mg/kg sediment dw | |
| Marine water sediment | 0.098 mg/kg sediment dw | |
| Soil | 0.09 mg/kg soil dw | |

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

Use spark-/explosionproof appliances and lighting system. Take precautions against electrostatic charges. Keep away from naked flames/heat. Keep away from ignition sources/sparks. Measure the concentration in the air regularly.

8.2.2 Individual protection measures, such as personal protective equipment

Observe normal hygiene standards. Do not eat, drink or smoke during work.

a) Respiratory protection:

Full face mask with filter type A at conc. in air > exposure limit.

b) Hand protection:

Protective gloves against chemicals (EN 374).

| Materials | Measured breakthrough time | Thickness | Protection index | Remark |
|-----------|----------------------------|-----------|------------------|--------|
| viton | > 240 minutes | 0.12 mm | Class 5 | |

c) Eye protection:

Protective goggles (EN 166).

d) Skin protection:

Head/neck protection. Protective clothing (EN 14605 or EN 13034).

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 | Aerosol |
| Odour | Characteristic odour |
| Odour threshold | No data available in the literature |
| Colour | Colourless |
| Particle size | Not applicable (aerosol) |
| Explosion limits | No data available in the literature |
| Flammability | Extremely flammable aerosol. |
| Log Kow | Not applicable (mixture) |
| Dynamic viscosity | No data available in the literature |
| Kinematic viscosity | No data available in the literature |
| Melting point | No data available in the literature |
| Boiling point | 94 °C - 99 °C ; Liquid |
| Evaporation rate | No data available in the literature |
| Relative vapour density | No data available in the literature |
| Vapour pressure | No data available in the literature |
| Solubility | Water ; insoluble |
| Relative density | 1.04 ; 20 °C ; Liquid |
| Decomposition temperature | No data available in the literature |

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| | |
|---------------------------|--|
| Auto-ignition temperature | Not applicable (aerosol) |
| Flash point | Not applicable (aerosol) |
| Explosive properties | No chemical group associated with explosive properties |
| Oxidising properties | No chemical group associated with oxidising properties |
| pH | No data available in the literature |

9.2. Other information

| | |
|------------------|---|
| Absolute density | 1040 kg/m ³ ; 20 °C ; Liquid |
|------------------|---|

SECTION 10: Stability and reactivity

10.1. Reactivity

May be ignited by sparks. Gas/vapour spreads at floor level: ignition hazard.

10.2. Chemical stability

Unstable on exposure to heat.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Precautionary measures

Use spark-/explosionproof appliances and lighting system. Take precautions against electrostatic charges. Keep away from naked flames/heat. Keep away from ignition sources/sparks.

10.5. Incompatible materials

No data available.

10.6. Hazardous decomposition products

Upon combustion: CO and CO₂ are formed.

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

Judgement is based on the relevant ingredients
dimethyl ether

| Route of exposure | Parameter | Method | Value | Exposure time | Species | Value determination | Remark |
|--------------------|-----------|--------|------------|---------------|------------|---------------------|--------|
| Oral | | | | | | Data waiving | |
| Dermal | | | | | | Data waiving | |
| Inhalation (gases) | LC50 | | 164000 ppm | 4 h | Rat (male) | Experimental value | |

As the substance is a gas, inhalation is the most likely route of exposure

n-butyl acetate

| Route of exposure | Parameter | Method | Value | Exposure time | Species | Value determination | Remark |
|--|-----------|------------------------|------------------------------------|---------------|---------------------------|---------------------|--------|
| Oral | LD50 | Equivalent to OECD 423 | 10760 mg/kg bw - 12789 mg/kg bw | | Rat (male / female) | Experimental value | |
| Dermal | LD50 | Equivalent to OECD 402 | > 14112 mg/kg bw | | Rabbit (male / female) | Experimental value | |
| Inhalation (mixture of vapour and aerosol) | LC50 | OECD 403 | 0.74 mg/l | 4 h | Rat (male / female) | | |

hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

| Route of exposure | Parameter | Method | Value | Exposure time | Species | Value determination | Remark |
|----------------------|-----------|------------------------|-----------------|---------------|------------------------|---------------------|--------|
| Oral | LD50 | | > 5840 mg/kg bw | | Rat (male / female) | Read-across | |
| Dermal | LD50 | | > 2800 mg/kg bw | 24 h | Rat (male / female) | Read-across | |
| Inhalation (vapours) | LC50 | Equivalent to OECD 403 | > 23.3 mg/l air | 4 h | Rat (male / female) | Read-across | |

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hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics

| Route of exposure | Parameter | Method | Value | Exposure time | Species | Value determination | Remark |
|----------------------|-----------|------------------------|-----------------|---------------|---------------------|---------------------|--------|
| Oral | LD50 | Equivalent to OECD 401 | > 5840 mg/kg bw | | Rat (male / female) | Experimental value | |
| Dermal | LD50 | | ≥ 4 ml/kg bw | 24 h | Rat (male / female) | Experimental value | |
| Dermal | LD50 | | > 2920 mg/kg bw | 24 h | Rat (male / female) | Experimental value | |
| Inhalation (vapours) | LC50 | Equivalent to OECD 403 | > 23.3 mg/l air | 4 h | Rat (male / female) | Experimental value | |

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

| Route of exposure | Parameter | Method | Value | Exposure time | Species | Value determination | Remark |
|----------------------|-----------|--------|-----------------|---------------|---------------------|---------------------|--------|
| Oral | LD50 | | > 5840 mg/kg bw | | Rat (male / female) | Read-across | |
| Dermal | LD50 | | > 2800 mg/kg bw | 24 week(s) | Rat (male / female) | Similar product | |
| Inhalation (vapours) | LC50 | | > 25.2 mg/l | 4 h | Rat (male / female) | Experimental value | |

hydrocarbons, C9, aromatics

| Route of exposure | Parameter | Method | Value | Exposure time | Species | Value determination | Remark |
|----------------------|-----------|------------------------|------------------|---------------|------------------------|---------------------|--------|
| Oral | LD50 | | > 6984 mg/kg bw | | Rat (male) | Experimental value | |
| Oral | LD50 | | 3492 mg/kg bw | | Rat (female) | Experimental value | |
| Dermal | LD50 | Equivalent to OECD 402 | > 3160 mg/kg bw | 24 h | Rabbit (male / female) | Experimental value | |
| Inhalation (vapours) | LC50 | Equivalent to OECD 403 | > 6.193 mg/l air | 4 h | Rat (male / female) | Experimental value | |

Conclusion

Not classified for acute toxicity

Corrosion/irritation

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No (test) data on the mixture available

Classification is based on the relevant ingredients

dimethyl ether

| Route of exposure | Result | Method | Exposure time | Time point | Species | Value determination | Remark |
|-------------------|--------|--------|---------------|------------|---------|---------------------|--------|
| Eye | | | | | | Data waiving | |
| Skin | | | | | | Data waiving | |

The liquid form can cause frostbites, typical for all liquefied gases

n-butyl acetate

| Route of exposure | Result | Method | Exposure time | Time point | Species | Value determination | Remark |
|-------------------|----------------|------------------------|---------------|------------------|---------|---------------------|----------------------------------|
| Eye | Not irritating | OECD 405 | | 24; 48; 72 hours | Rabbit | Experimental value | Single treatment without rinsing |
| Dermal | Not irritating | Equivalent to OECD 404 | 4 h | 24; 48; 72 hours | Rabbit | Experimental value | |

hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

| Route of exposure | Result | Method | Exposure time | Time point | Species | Value determination | Remark |
|-------------------|----------------|------------------------|---------------|------------------|---------|---------------------|------------------|
| Eye | Not irritating | | | 7 days | Rabbit | Read-across | Single treatment |
| Skin | Irritating | Equivalent to OECD 404 | 4 h | 24; 48; 72 hours | Rabbit | Read-across | |

hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics

| Route of exposure | Result | Method | Exposure time | Time point | Species | Value determination | Remark |
|-------------------|----------------|----------|---------------|------------------|---------|---------------------|------------------|
| Eye | Not irritating | | | | Rabbit | Experimental value | Single treatment |
| Skin | Not irritating | OECD 404 | 4 h | 24; 48; 72 hours | Rabbit | Experimental value | |

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

| Route of exposure | Result | Method | Exposure time | Time point | Species | Value determination | Remark |
|-------------------|----------------|------------------------|---------------|------------------|---------|---------------------|--------|
| Eye | Not irritating | | | | Rabbit | Read-across | |
| Skin | Irritating | Equivalent to OECD 404 | 4 h | 24; 48; 72 hours | Rabbit | Experimental value | |

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hydrocarbons, C9, aromatics

| Route of exposure | Result | Method | Exposure time | Time point | Species | Value determination | Remark |
|-------------------|------------------------------|------------------------|---------------|---------------------|---------|---------------------|--------|
| Eye | Not irritating | Equivalent to OECD 405 | | 1; 24; 48; 72 hours | Rabbit | Experimental value | |
| Skin | Slightly irritating | OECD 404 | 4 h | 24; 48; 72 hours | Rabbit | Experimental value | |
| Inhalation | Irritating; STOT SE cat.3 | | | | | Literature study | |

Conclusion

Causes skin irritation.
Not classified as irritating to the eyes
Not classified as irritating to the respiratory system

Respiratory or skin sensitisation

WP7-201

No (test) data on the mixture available
Judgement is based on the relevant ingredients
dimethyl ether

| Route of exposure | Result | Method | Exposure time | Observation time point | Species | Value determination | Remark |
|-------------------|--------|--------|---------------|------------------------|---------|---------------------|--------|
| Skin | | | | | | Data waiving | |

The study on skin sensitisation does not need to be conducted as the substance is a gas

n-butyl acetate

| Route of exposure | Result | Method | Exposure time | Observation time point | Species | Value determination | Remark |
|-------------------|-----------------|------------------------|---------------|------------------------|------------|---------------------|--------|
| Skin | Not sensitizing | Equivalent to OECD 406 | | | Guinea pig | Experimental value | |

hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

| Route of exposure | Result | Method | Exposure time | Observation time point | Species | Value determination | Remark |
|-------------------|-----------------|------------------------|---------------|------------------------|----------------------------|---------------------|--------|
| Skin | Not sensitizing | Equivalent to OECD 406 | | 24; 48 hours | Guinea pig (male / female) | Read-across | |

hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics

| Route of exposure | Result | Method | Exposure time | Observation time point | Species | Value determination | Remark |
|-------------------|-----------------|------------------------|---------------|------------------------|----------------------------|---------------------|--------|
| Skin | Not sensitizing | Equivalent to OECD 406 | | | Guinea pig (male / female) | Experimental value | |

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

| Route of exposure | Result | Method | Exposure time | Observation time point | Species | Value determination | Remark |
|-------------------|-----------------|------------------------|---------------|------------------------|----------------------------|---------------------|--------|
| Skin | Not sensitizing | Equivalent to OECD 406 | | 24; 48 hours | Guinea pig (male / female) | Read-across | |

hydrocarbons, C9, aromatics

| Route of exposure | Result | Method | Exposure time | Observation time point | Species | Value determination | Remark |
|-------------------|-----------------|----------|---------------|------------------------|---------------------|---------------------|--------|
| Skin | Not sensitizing | OECD 406 | | 24; 48 hours | Guinea pig (female) | Experimental value | |

Conclusion

Not classified as sensitizing for skin
Not classified as sensitizing for inhalation

Specific target organ toxicity

WP7-201

No (test) data on the mixture available
Classification is based on the relevant ingredients
dimethyl ether

| Route of exposure | Parameter | Method | Value | Organ | Effect | Exposure time | Species | Value determination |
|----------------------|------------------------|------------------------|-------------------------|-------|-----------------------------|-------------------------------------|---------------------|---------------------|
| Oral | | | | | | | | Data waiving |
| Dermal | | | | | | | | Data waiving |
| Inhalation (vapours) | NOAEC systemic effects | Equivalent to OECD 452 | 47106 mg/m ³ | | No adverse systemic effects | 2 year(s) (6h / day, 5 days / week) | Rat (male / female) | Experimental value |

As the substance is a gas, inhalation is the most likely route of exposure

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n-butyl acetate

| Route of exposure | Parameter | Method | Value | Organ | Effect | Exposure time | Species | Value determination |
|----------------------|-----------|--------------------------|------------------|------------------------|-----------------------------------|---------------------------------|---------------------|---------------------|
| Oral (stomach tube) | NOAEL | Subchronic toxicity test | 125 mg/kg bw/day | | No effect | 13 week(s) | Rat (male / female) | Read-across |
| Oral (stomach tube) | LOAEL | Subchronic toxicity test | 500 mg/kg bw/day | Central nervous system | Central nervous system depression | 13 day(s) | Rat (male / female) | Read-across |
| Inhalation (vapours) | NOAEC | EPA OTS 798.2450 | 500 ppm | | No adverse systemic effects | 13 weeks (daily, 5 days / week) | Rat (male / female) | Experimental value |

hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

| Route of exposure | Parameter | Method | Value | Organ | Effect | Exposure time | Species | Value determination |
|----------------------|-----------|------------------------|-----------------------------|------------------------|-----------------------------|------------------------------------|---------------------|---------------------|
| Inhalation (vapours) | NOAEL | Equivalent to OECD 413 | 12350 mg/m ³ air | | No adverse systemic effects | 26 weeks (6h / day, 5 days / week) | Rat (male / female) | Read-across |
| Inhalation (vapours) | LOAEL | Equivalent to OECD 413 | 1650 mg/m ³ air | Central nervous system | CNS depression | 26 weeks (6h / day, 5 days / week) | Rat (male / female) | Read-across |

hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics

| Route of exposure | Parameter | Method | Value | Organ | Effect | Exposure time | Species | Value determination |
|----------------------|-----------|------------------------|----------------------------|-------|-----------|------------------------------------|------------|---------------------|
| Inhalation (vapours) | NOAEC | Equivalent to OECD 413 | 5800 mg/m ³ air | Blood | No effect | 13 weeks (6h / day, 5 days / week) | Rat (male) | Experimental value |

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

| Route of exposure | Parameter | Method | Value | Organ | Effect | Exposure time | Species | Value determination |
|----------------------|-----------|--------|----------------------------|-------|-----------------------|-------------------|------------|---------------------|
| Inhalation (vapours) | NOAEC | | 4200 mg/m ³ air | | No effect | 3 days (8h / day) | Rat (male) | Experimental value |
| Inhalation (vapours) | NOAEC | | 14000 mg/m ³ | | no neurotoxic effects | 3 days (8h / day) | Rat (male) | Experimental value |
| | | | STOT SE cat.3 | | Drowsiness, dizziness | | | Annex VI |

hydrocarbons, C9, aromatics

| Route of exposure | Parameter | Method | Value | Organ | Effect | Exposure time | Species | Value determination |
|----------------------|-----------|------------------------|----------------------------|-------|-----------|------------------------------------|---------------------|---------------------|
| Oral (stomach tube) | NOAEL | Equivalent to OECD 408 | 600 mg/kg bw/day | | No effect | 13 weeks (daily) | Rat (male / female) | Read-across |
| Dermal | | | | | | | | Data waiving |
| Inhalation (vapours) | NOAEC | Equivalent to OECD 452 | 1800 mg/m ³ air | | No effect | 52 weeks (6h / day, 5 days / week) | Rat (male) | Read-across |
| Inhalation | | | STOT SE cat.3 | | | | | Literature study |

Conclusion

May cause drowsiness or dizziness.
Not classified for subchronic toxicity

Mutagenicity (in vitro)

WP7-201

No (test) data on the mixture available
Judgement is based on the relevant ingredients
dimethyl ether

| Result | Method | Test substrate | Effect | Value determination | Remark |
|---|----------|--------------------------|-----------|---------------------|--------|
| Negative with metabolic activation, negative without metabolic activation | OECD 471 | Bacteria (S.typhimurium) | No effect | Experimental value | |
| Negative with metabolic activation, negative without metabolic activation | OECD 473 | Human lymphocytes | No effect | Experimental value | |

n-butyl acetate

| Result | Method | Test substrate | Effect | Value determination | Remark |
|---|------------------------|--------------------------|--------|---------------------|--------|
| Negative with metabolic activation, negative without metabolic activation | Equivalent to OECD 471 | Bacteria (S.typhimurium) | | Experimental value | |

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hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

| Result | Method | Test substrate | Effect | Value determination | Remark |
|---|----------|-------------------|-----------|---------------------|--------|
| Negative with metabolic activation, negative without metabolic activation | OECD 476 | Human lymphocytes | No effect | Read-across | |

hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics

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

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

| Result | Method | Test substrate | Effect | Value determination | Remark |
|----------|----------|----------------|-----------|---------------------|--------|
| Negative | OECD 476 | | No effect | Read-across | |

hydrocarbons, C9, aromatics

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

Mutagenicity (in vivo)

WP7-201

No (test)data on the mixture available

Judgement is based on the relevant ingredients

dimethyl ether

| Result | Method | Exposure time | Test substrate | Organ | Value determination |
|-------------------------------|------------------------|----------------------|--------------------------------|-------|---------------------|
| Negative (Inhalation (gases)) | Equivalent to OECD 477 | 3 day(s) - 14 day(s) | Drosophila melanogaster (male) | | Experimental value |

n-butyl acetate

| Result | Method | Exposure time | Test substrate | Organ | Value determination |
|--------------------------------|----------|---------------|-----------------------|-------|---------------------|
| Negative (Oral (stomach tube)) | OECD 474 | | Mouse (male / female) | | Read-across |

hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics

| Result | Method | Exposure time | Test substrate | Organ | Value determination |
|----------|------------------------|---------------|----------------|-------------|---------------------|
| Negative | Equivalent to OECD 474 | | Mouse (male) | Bone marrow | Experimental value |

hydrocarbons, C9, aromatics

| Result | Method | Exposure time | Test substrate | Organ | Value determination |
|----------|------------------------|---------------|----------------|-------------|---------------------|
| Negative | Equivalent to OECD 475 | 5 day(s) | Rat (male) | Bone marrow | Experimental value |

Conclusion

Not classified for mutagenic or genotoxic toxicity

Carcinogenicity

WP7-201

No (test)data on the mixture available

Judgement is based on the relevant ingredients

dimethyl ether

| Route of exposure | Parameter | Method | Value | Exposure time | Species | Effect | Organ | Value determination |
|----------------------|-----------|------------------------|-------|-------------------------------------|---------------------|------------------------|-------|---------------------|
| Inhalation (vapours) | NOAEL | Equivalent to OECD 453 | 2.5 % | 2 year(s) (6h / day, 5 days / week) | Rat (male / female) | No carcinogenic effect | | Experimental value |

hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

| Route of exposure | Parameter | Method | Value | Exposure time | Species | Effect | Organ | Value determination |
|-------------------|-----------|--------|-------|---------------|---------|--------|-------|---------------------|
| Inhalation | | | | | | | | Data waiving |
| Dermal | | | | | | | | Data waiving |
| Oral | | | | | | | | Data waiving |

hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics

| Route of exposure | Parameter | Method | Value | Exposure time | Species | Effect | Organ | Value determination |
|-------------------|-----------|--------|-------|---------------|---------|--------|-------|---------------------|
| Unknown | | | | | | | | Data waiving |

hydrocarbons, C9, aromatics

| Route of exposure | Parameter | Method | Value | Exposure time | Species | Effect | Organ | Value determination |
|-------------------|-----------|--------|-------|---------------|---------|--------|-------|---------------------|
| Unknown | | | | | | | | Data waiving |

Conclusion

Not classified for carcinogenicity

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Reproductive toxicity

WP7-201

No (test) data on the mixture available

Judgement is based on the relevant ingredients
dimethyl ether

| | Parameter | Method | Value | Exposure time | Species | Effect | Organ | Value determination |
|---|-----------|-------------------------------------|-----------|-------------------------------------|---------------------|-----------|-------|---------------------|
| Developmental toxicity (Inhalation (vapours)) | NOAEL | Equivalent to OECD 414 | 40000 ppm | 10 days (6h / day) | Rat | No effect | | Experimental value |
| Maternal toxicity (Inhalation (vapours)) | NOAEL | Equivalent to OECD 414 | 5000 ppm | 10 days (6h / day) | Rat | No effect | | Experimental value |
| Effects on fertility (Inhalation (vapours)) | NOAEL | Investigation reproductive capacity | 2.5 % | 2 year(s) (6h / day, 5 days / week) | Rat (male / female) | No effect | | Experimental value |

n-butyl acetate

| | Parameter | Method | Value | Exposure time | Species | Effect | Organ | Value determination |
|---|-----------|------------------------|----------|---------------|---------------------|-------------------|-------|---------------------|
| Developmental toxicity (Inhalation (vapours)) | LOAEC | Equivalent to OECD 414 | 1500 ppm | | Rat | Fetotoxicity | | Experimental value |
| Maternal toxicity (Inhalation (vapours)) | LOAEC | Equivalent to OECD 414 | 1500 ppm | | Rat | Maternal toxicity | | Experimental value |
| Effects on fertility (Inhalation (vapours)) | NOAEC | OECD 416 | 2000 ppm | > 90 day(s) | Rat (male / female) | No effect | | Experimental value |

hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

| | Parameter | Method | Value | Exposure time | Species | Effect | Organ | Value determination |
|------------------------|--------------|------------------------|-----------------------------|--------------------|---------------------|------------------------------------|-------|---------------------|
| Developmental toxicity | NOAEL | Equivalent to OECD 414 | 31680 mg/m ³ air | 10 days (6h / day) | Mouse | No effect | | Read-across |
| Maternal toxicity | NOAEL | Equivalent to OECD 414 | 10560 mg/m ³ air | 10 days (6h / day) | Rat (female) | No effect | | Read-across |
| | LOAEL | Equivalent to OECD 414 | 31680 mg/m ³ air | 10 days (6h / day) | Rat (female) | Lung tissue affection/degeneration | Lungs | Read-across |
| Effects on fertility | NOAEL (P/F1) | Equivalent to OECD 416 | 31680 mg/m ³ air | | Rat (male / female) | No effect | | Read-across |

hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics

| | Parameter | Method | Value | Exposure time | Species | Effect | Organ | Value determination |
|------------------------|-----------|------------------------|-----------------------------|------------------------------------|---------------------|----------------|--------|---------------------|
| Developmental toxicity | NOAEL | Equivalent to OECD 414 | 31680 mg/m ³ air | 10 day(s) | Rat | No effect | Foetus | Read-across |
| Maternal toxicity | NOAEL | Equivalent to OECD 414 | 3168 mg/m ³ air | 10 day(s) | Rat | No effect | | Read-across |
| | LOAEL | Equivalent to OECD 414 | 10560 mg/m ³ air | 10 day(s) | Rat | Discolouration | Lungs | Read-across |
| Effects on fertility | NOAEL | Equivalent to OECD 416 | 31680 mg/m ³ air | 13 weeks (6h / day, 5 days / week) | Rat (male / female) | No effect | | Read-across |

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

| | Parameter | Method | Value | Exposure time | Species | Effect | Organ | Value determination |
|------------------------|--------------|------------------------|------------|--------------------|---------------------|-----------|-------|---------------------|
| Developmental toxicity | NOAEC | | ≥ 1200 ppm | 10 days (6h / day) | Rat | No effect | | Read-across |
| Maternal toxicity | NOAEL | Equivalent to OECD 414 | 900 ppm | 10 days (6h / day) | Rat (female) | No effect | | Read-across |
| Effects on fertility | NOAEL (P/F1) | Equivalent to OECD 416 | 9000 ppm | | Rat (male / female) | No effect | | Read-across |

hydrocarbons, C9, aromatics

| | Parameter | Method | Value | Exposure time | Species | Effect | Organ | Value determination |
|------------------------|-----------|--------------------|------------------------|---------------|---------------------|----------------------------|---------|---------------------|
| Developmental toxicity | NOAEC | | 100 ppm | 10 day(s) | Mouse | No effect | | Experimental value |
| | LOAEC | | 500 ppm | 10 day(s) | Mouse | Reduced foetal bodyweights | Foetus | Experimental value |
| Maternal toxicity | NOAEC | | 100 ppm | 10 day(s) | Mouse | No effect | | Experimental value |
| | LOAEC | | 500 ppm | 10 day(s) | Mouse | Body weight reduction | General | Experimental value |
| Effects on fertility | NOAEC | 3 generation study | 7500 mg/m ³ | | Rat (male / female) | No effect | | Experimental value |

Conclusion

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Not classified for reprotoxic or developmental toxicity

Toxicity other effects

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n-butyl acetate

| Parameter | Method | Value | Organ | Effect | Exposure time | Species | Value determination |
|-----------|------------------|----------|-------|-----------------------|---------------|---------------------|---------------------|
| NOEC | EPA OTS 798.6050 | 1500 ppm | | Hypoactivity | 6 h | Rat (male / female) | Experimental value |
| NOAEC | EPA OTS 798.6050 | 500 ppm | | no neurotoxic effects | 13 week(s) | Rat (male / female) | Experimental value |

hydrocarbons, C9, aromatics

| Parameter | Method | Value | Organ | Effect | Exposure time | Species | Value determination |
|-----------|--------|-------|-------|--------------------------|---------------|---------|---------------------|
| | | | Skin | Skin dryness or cracking | | | Literature study |

Chronic effects from short and long-term exposure

WP7-201

No effects known.

SECTION 12: Ecological information

12.1. Toxicity

WP7-201

No (test)data on the mixture available

Judgement of the mixture is based on the relevant ingredients

dimethyl ether

| | Parameter | Method | Value | Duration | Species | Test design | Fresh/salt water | Value determination |
|---|-----------|--------------|-------------|----------|---------------------|--------------------|------------------|-------------------------------|
| Acute toxicity fishes | LC50 | NEN 6504 | > 4100 mg/l | 96 h | Poecilia reticulata | Semi-static system | Fresh water | Experimental value; Lethal |
| Acute toxicity crustacea | EC50 | NEN 6501 | > 4400 mg/l | 48 h | Daphnia magna | Static system | Fresh water | Experimental value; Lethal |
| Toxicity algae and other aquatic plants | EC50 | ECOSAR v1.00 | 154.9 mg/l | 96 h | Algae | | | QSAR |
| Toxicity aquatic micro-organisms | EC10 | | > 1600 mg/l | | Pseudomonas putida | Static system | Fresh water | Literature study; Respiration |

n-butyl acetate

| | Parameter | Method | Value | Duration | Species | Test design | Fresh/salt water | Value determination |
|---|-----------|------------------------|-----------|-----------|---------------------------------|---------------------|------------------|--------------------------------------|
| Acute toxicity fishes | LC50 | Equivalent to OECD 203 | 18 mg/l | 96 h | Pimephales promelas | Flow-through system | Fresh water | Experimental value; Lethal |
| Acute toxicity crustacea | EC50 | Equivalent to OECD 202 | 44 mg/l | 48 h | Daphnia sp. | Static system | Fresh water | Experimental value; Locomotor effect |
| Toxicity algae and other aquatic plants | ErC50 | OECD 201 | 397 mg/l | 72 h | Pseudokirchneriella subcapitata | Static system | Fresh water | Read-across; GLP |
| | NOEC | OECD 201 | 196 mg/l | 72 h | Pseudokirchneriella subcapitata | Static system | Fresh water | Read-across; Growth rate |
| Long-term toxicity aquatic crustacea | NOEC | OECD 211 | 23.2 mg/l | 21 day(s) | Daphnia magna | Semi-static system | Fresh water | Read-across; Reproduction |
| Toxicity aquatic micro-organisms | | | | | | | | Growth |

| | Parameter | Method | Value | Duration | Species | Value determination |
|-----------------------------|-----------|------------------------|----------------------|-----------|----------------|---------------------|
| Toxicity terrestrial plants | EC50 | Equivalent to OECD 208 | > 1000 mg/kg soil dw | 14 day(s) | Lactuca sativa | Experimental value |

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hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

| | Parameter | Method | Value | Duration | Species | Test design | Fresh/salt water | Value determination |
|---|-----------|----------|-----------------|----------|---------------------------------|--------------------|------------------|---|
| Acute toxicity fishes | LL50 | OECD 203 | > 13.4 mg/l WAF | 96 h | Oncorhynchus mykiss | Semi-static system | Fresh water | Experimental value; Nominal concentration |
| Acute toxicity crustacea | EL50 | OECD 202 | 3.0 mg/l WAF | 48 h | Daphnia magna | Static system | Fresh water | Experimental value; GLP |
| Toxicity algae and other aquatic plants | EL50 | OECD 201 | 13 mg/l WAF | 96 h | Pseudokirchneriella subcapitata | Static system | Fresh water | Read-across; GLP |
| Long-term toxicity fish | NOELR | | 1.534 mg/l | 28 | Oncorhynchus mykiss | | Fresh water | QSAR; Nominal concentration |
| Toxicity aquatic micro-organisms | EL50 | | 26.81 mg/l | 48 h | Tetrahymena pyriformis | | Fresh water | QSAR; Growth rate |

hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics

| | Parameter | Method | Value | Duration | Species | Test design | Fresh/salt water | Value determination |
|---|-----------|----------|----------------------|-----------|---------------------------------|--------------------|------------------|-------------------------|
| Acute toxicity fishes | LC50 | OECD 203 | 3 mg/l - 10 mg/l | 96 h | Oncorhynchus mykiss | Semi-static system | Fresh water | Experimental value; GLP |
| Acute toxicity crustacea | EC50 | OECD 202 | 4.6 mg/l - 10.0 mg/l | 48 h | Daphnia magna | Static system | Fresh water | Experimental value; GLP |
| Toxicity algae and other aquatic plants | EL50 | OECD 201 | 10 mg/l - 30 mg/l | 72 h | Pseudokirchneriella subcapitata | Static system | Fresh water | Experimental value; GLP |
| | NOELR | OECD 201 | 10 mg/l | 72 h | Pseudokirchneriella subcapitata | Static system | Fresh water | Experimental value; GLP |
| Long-term toxicity fish | NOELR | | 0.574 mg/l | 28 day(s) | Oncorhynchus mykiss | | Fresh water | QSAR; Growth rate |
| Long-term toxicity aquatic crustacea | NOEC | OECD 211 | 0.17 mg/l | 21 day(s) | Daphnia magna | Static system | Fresh water | Experimental value; GLP |

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

| | Parameter | Method | Value | Duration | Species | Test design | Fresh/salt water | Value determination |
|---|-----------|----------|----------------------------|-----------|---------------------------------|--------------------|------------------|---------------------------------|
| Acute toxicity fishes | LL50 | OECD 203 | 11.4 mg/l WAF | 96 h | Oncorhynchus mykiss | Semi-static system | Fresh water | Experimental value; GLP |
| Acute toxicity crustacea | EL50 | OECD 202 | 3.0 mg/l WAF | 48 h | Daphnia magna | Static system | Fresh water | Experimental value; GLP |
| Toxicity algae and other aquatic plants | EL50 | OECD 201 | 30 mg/l WAF - 100 mg/l WAF | 72 h | Pseudokirchneriella subcapitata | Static system | Fresh water | Experimental value; Growth rate |
| Long-term toxicity fish | NOELR | | 2.045 mg/l | 28 | Oncorhynchus mykiss | | Fresh water | QSAR |
| Long-term toxicity aquatic crustacea | NOEC | OECD 211 | 0.17 mg/l WAF | 21 day(s) | Daphnia magna | Static system | Fresh water | Read-across |
| Toxicity aquatic micro-organisms | EL50 | | 35.57 mg/l | 48 h | Tetrahymena pyriformis | | Fresh water | QSAR; Growth inhibition |

hydrocarbons, C9, aromatics

| | Parameter | Method | Value | Duration | Species | Test design | Fresh/salt water | Value determination |
|---|-----------|----------|------------|-----------|---------------------------------|--------------------|------------------|---------------------------------|
| Acute toxicity fishes | LL50 | OECD 203 | 10 mg/l | 96 h | Oncorhynchus mykiss | Semi-static system | Fresh water | Experimental value; GLP |
| Acute toxicity crustacea | EL50 | OECD 202 | 3.2 mg/l | 48 h | Daphnia magna | Static system | Fresh water | Experimental value; GLP |
| Toxicity algae and other aquatic plants | EL50 | OECD 201 | 2.9 mg/l | 72 h | Pseudokirchneriella subcapitata | Static system | Fresh water | Experimental value; Growth rate |
| | NOELR | OECD 201 | 1 mg/l | 72 h | Pseudokirchneriella subcapitata | Static system | Fresh water | QSAR; GLP |
| Long-term toxicity fish | NOELR | | 1.228 mg/l | 28 day(s) | Oncorhynchus mykiss | | Fresh water | QSAR |
| Long-term toxicity aquatic crustacea | NOELR | | 2.144 mg/l | 21 day(s) | Daphnia magna | | Fresh water | QSAR |

Conclusion

Toxic to aquatic life with long lasting effects.

12.2. Persistence and degradability

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dimethyl ether

Biodegradation water

| Method | Value | Duration | Value determination |
|-----------|-------------------------|-----------|---------------------|
| OECD 301D | 5 %; Oxygen consumption | 28 day(s) | Experimental value |

Half-life soil (t1/2 soil)

| Method | Value | Primary degradation/mineralisation | Value determination |
|--------|-------|------------------------------------|----------------------|
| | | | Not applicable (gas) |

n-butyl acetate

Biodegradation water

| Method | Value | Duration | Value determination |
|-----------|--------------------------|-----------|---------------------|
| OECD 301D | 83 %; Oxygen consumption | 28 day(s) | Experimental value |

hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

Biodegradation water

| Method | Value | Duration | Value determination |
|-----------|-----------|-----------|---------------------|
| OECD 301F | 98 %; GLP | 28 day(s) | Experimental value |

hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics

Biodegradation water

| Method | Value | Duration | Value determination |
|-----------|-----------|-----------|---------------------|
| OECD 301F | 98 %; GLP | 28 day(s) | Read-across |

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

Biodegradation water

| Method | Value | Duration | Value determination |
|-----------|-----------|-----------|---------------------|
| OECD 301F | 98 %; GLP | 28 day(s) | Experimental value |

hydrocarbons, C9, aromatics

Biodegradation water

| Method | Value | Duration | Value determination |
|-----------|-------|-----------|---------------------|
| OECD 301F | 78 % | 28 day(s) | Experimental value |

Conclusion

Water

Contains non readily biodegradable component(s)

12.3. Bioaccumulative potential

WP7-201

Log Kow

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

dimethyl ether

Log Kow

| Method | Remark | Value | Temperature | Value determination |
|--------|--------|-------|-------------|---------------------|
| | | 0.10 | | Experimental value |

n-butyl acetate

Log Kow

| Method | Remark | Value | Temperature | Value determination |
|----------|--------|-------|-------------|---------------------|
| OECD 117 | | 2.3 | 25 °C | Experimental value |

hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

Log Kow

| Method | Remark | Value | Temperature | Value determination |
|--------|--------|-------|-------------|---------------------|
| | | > 3 | | |

hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics

Log Kow

| Method | Remark | Value | Temperature | Value determination |
|--------|--------|---------|-------------|---------------------|
| | | 4 - 5.7 | | |

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

Log Kow

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

hydrocarbons, C9, aromatics

Log Kow

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

Conclusion

Contains bioaccumulative component(s)

12.4. Mobility in soil

Publication date: 2020-06-16

WP7-201

dimethyl ether

Percent distribution

| Method | Fraction air | Fraction biota | Fraction sediment | Fraction soil | Fraction water | Value determination |
|------------------|--------------|----------------|-------------------|---------------|----------------|---------------------|
| Mackay level III | 99.5 % | | 0 % | 0.04 % | 0.43 % | Calculated value |

n-butyl acetate

(log) Koc

| Parameter | Method | Value | Value determination |
|-----------|-------------------|---------------|---------------------|
| log Koc | SRC PCKOCWIN v2.0 | 1.268 - 1.844 | Calculated value |

Volatility (Henry's Law constant H)

| Value | Method | Temperature | Remark | Value determination |
|-----------------------------|--------|-------------|--------|---------------------|
| 28.5 Pa.m ³ /mol | | 25 °C | | Experimental value |

hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics

Percent distribution

| Method | Fraction air | Fraction biota | Fraction sediment | Fraction soil | Fraction water | Value determination |
|------------------|--------------|----------------|-------------------|---------------|----------------|---------------------|
| Mackay level III | 14.6 % | 0 % | 55.6 % | 26.4 % | 3.4 % | Calculated value |

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

Percent distribution

| Method | Fraction air | Fraction biota | Fraction sediment | Fraction soil | Fraction water | Value determination |
|------------------|--------------|----------------|-------------------|---------------|----------------|---------------------|
| Mackay level III | 98 % | 0 % | 0.9 % | 0 % | 1.3 % | Calculated value |

Conclusion

Contains component(s) that adsorb(s) into the soil

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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Greenhouse gases

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

Ozone-depleting potential (ODP)

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

n-butyl acetate

Groundwater

Groundwater pollutant

hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics

Groundwater

Groundwater pollutant

hydrocarbons, C9, aromatics

Groundwater

Groundwater 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

European Union

Hazardous waste according to Directive 2008/98/EC, as amended by Regulation (EU) No 1357/2014 and Regulation (EU) No 2017/997.

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

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. Dispose of at authorized waste collection point.

13.1.3 Packaging/Container

European Union

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

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

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SECTION 14: Transport information

Road (ADR)

| | |
|--|--|
| 14.1. UN number | |
| UN number | 1950 |
| 14.2. UN proper shipping name | |
| Proper shipping name | Aerosols |
| 14.3. Transport hazard class(es) | |
| Hazard identification number | |
| Class | 2 |
| Classification code | 5F |
| 14.4. Packing group | |
| Packing group | |
| Labels | 2.1 |
| 14.5. Environmental hazards | |
| Environmentally hazardous substance mark | yes |
| 14.6. Special precautions for user | |
| Special provisions | 190 |
| Special provisions | 327 |
| Special provisions | 344 |
| Special provisions | 625 |
| Limited quantities | Combination packagings: not more than 1 liter per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass) |

Rail (RID)

| | |
|--|--|
| 14.1. UN number | |
| UN number | 1950 |
| 14.2. UN proper shipping name | |
| Proper shipping name | Aerosols |
| 14.3. Transport hazard class(es) | |
| Hazard identification number | 23 |
| Class | 2 |
| Classification code | 5F |
| 14.4. Packing group | |
| Packing group | |
| Labels | 2.1 |
| 14.5. Environmental hazards | |
| Environmentally hazardous substance mark | yes |
| 14.6. Special precautions for user | |
| Special provisions | 190 |
| Special provisions | 327 |
| Special provisions | 344 |
| Special provisions | 625 |
| Limited quantities | Combination packagings: not more than 1 liter per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass) |

Inland waterways (ADN)

| | |
|--|--|
| 14.1. UN number | |
| UN number | 1950 |
| 14.2. UN proper shipping name | |
| Proper shipping name | Aerosols |
| 14.3. Transport hazard class(es) | |
| Class | 2 |
| Classification code | 5F |
| 14.4. Packing group | |
| Packing group | |
| Labels | 2.1 |
| 14.5. Environmental hazards | |
| Environmentally hazardous substance mark | yes |
| 14.6. Special precautions for user | |
| Special provisions | 190 |
| Special provisions | 327 |
| Special provisions | 344 |
| Special provisions | 625 |
| Limited quantities | Combination packagings: not more than 1 liter per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass) |

Sea (IMDG/IMSBC)

| | |
|-----------------|------|
| 14.1. UN number | |
| UN number | 1950 |

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| | |
|--|--|
| 14.2. UN proper shipping name | |
| Proper shipping name | aerosols |
| 14.3. Transport hazard class(es) | |
| Class | 2.1 |
| 14.4. Packing group | |
| Packing group | |
| Labels | 2.1 |
| 14.5. Environmental hazards | |
| Marine pollutant | P |
| Environmentally hazardous substance mark | yes |
| 14.6. Special precautions for user | |
| Special provisions | 190 |
| Special provisions | 277 |
| Special provisions | 327 |
| Special provisions | 344 |
| Special provisions | 381 |
| Special provisions | 63 |
| Special provisions | 959 |
| Limited quantities | Combination packagings: not more than 1 liter per inner packaging for liquids. A package shall not weigh more than 30 kg. (gross mass) |
| 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code | |
| Annex II of MARPOL 73/78 | Not applicable |

Air (ICAO-TI/IATA-DGR)

| | |
|--|---------------------|
| 14.1. UN number | |
| UN number | 1950 |
| 14.2. UN proper shipping name | |
| Proper shipping name | Aerosols, flammable |
| 14.3. Transport hazard class(es) | |
| Class | 2.1 |
| 14.4. Packing group | |
| Packing group | |
| Labels | 2.1 |
| 14.5. Environmental hazards | |
| Environmentally hazardous substance mark | yes |
| 14.6. Special precautions for user | |
| Special provisions | A145 |
| Special provisions | A167 |
| Special provisions | A802 |
| Passenger and cargo transport | |
| Limited quantities: maximum net quantity per packaging | 30 kg G |

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 |
|----------------------|--------|
| 58 % - 100 % | |
| 603.2 g/l - 1040 g/l | |

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 |
|--|--|---|
| <ul style="list-style-type: none"> · n-butyl acetate · hydrocarbons, C7, n-alkanes, isoalkanes, cyclics · hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics · hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane · hydrocarbons, C9, aromatics | Liquid substances or mixtures 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 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: |

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| | | |
|--|--|---|
| | | <p>a) lamp oils, labelled with 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";</p> <p>b) grill lighter fluids, labelled with 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";</p> <p>c) lamp oils and grill lighters, labelled with H304, intended for supply to the general public are packaged in black opaque containers not exceeding 1 litre by 1 December 2010.</p> <p>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 H304, intended for supply to the general public.</p> <p>7. Natural or legal persons placing on the market for the first time lamp oils and grill lighter fluids, labelled with H304, shall by 1 December 2011, and annually thereafter, provide data on alternatives to lamp oils and grill lighter fluids labelled H304 to the competent authority in the Member State concerned. Member States shall make those data available to the Commission.'</p> |
| <ul style="list-style-type: none"> · dimethyl ether · n-butyl acetate · hydrocarbons, C7, n-alkanes, isoalkanes, cyclics · hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics · hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane · hydrocarbons, C9, aromatics | <p>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.</p> | <p>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:</p> <ul style="list-style-type: none"> — 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. <p>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:</p> <p>"For professional users only".</p> <p>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.</p> <p>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.</p> |

National legislation Belgium

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No data available

National legislation The Netherlands

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| | |
|----------------------|---|
| Waterbezwaarlijkheid | A (2); Algemene Beoordelingsmethodiek (ABM) |
|----------------------|---|

National legislation France

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No data available

National legislation Germany

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| | |
|--|--|
| WGK | 3; Verordnung über Anlagen zum Umgang mit wassergefährdenden Stoffen (AwSV) - 18. April 2017 |
| dimethyl ether | |
| TA-Luft | 5.2.5 |
| n-butyl acetate | |
| TA-Luft | 5.2.5/I |
| TRGS900 - Risiko der Fruchtschädigung | n-Butylacetat; Y; Risiko der Fruchtschädigung braucht bei Einhaltung des Arbeitsplatzgrenzwertes und des biologischen Grenzwertes nicht befürchtet zu werden |
| hydrocarbons, C7, n-alkanes, isoalkanes, cyclics | |
| TA-Luft | 5.2.5/I |
| hydrocarbons, C7-C9, n-alkanes, isoalkanes, cyclics | |
| TA-Luft | 5.2.5/I |
| hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, < 5% n-hexane | |
| TA-Luft | 5.2.5/I |

National legislation United Kingdom

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No data available

Other relevant data

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No data available

15.2. Chemical safety assessment

No chemical safety assessment has been conducted for the mixture.

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SECTION 16: Other information

Full text of any H-statements referred to under heading 3:

- H220 Extremely flammable gas.
- H222 Extremely flammable aerosol.
- H225 Highly flammable liquid and vapour.
- H226 Flammable liquid and vapour.
- H229 Pressurised container: May burst if heated.
- H280 Contains gas under pressure; may explode if heated.
- H304 May be fatal if swallowed and enters airways.
- H315 Causes skin irritation.
- H335 May cause respiratory irritation.
- H336 May cause drowsiness or dizziness.
- H411 Toxic to aquatic life with long lasting effects.

| | |
|--------------|--|
| (*) | INTERNAL CLASSIFICATION BY BIG |
| ADI | Acceptable daily intake |
| AOEL | Acceptable operator exposure level |
| CLP (EU-GHS) | Classification, labelling and packaging (Globally Harmonised System in Europe) |
| DMEL | Derived Minimal Effect Level |
| DNEL | Derived No Effect Level |
| EC50 | Effect Concentration 50 % |
| ErC50 | EC50 in terms of reduction of growth rate |
| LC50 | Lethal Concentration 50 % |
| LD50 | Lethal Dose 50 % |
| NOAEL | No Observed Adverse Effect Level |
| NOEC | No Observed Effect Concentration |
| OECD | Organisation for Economic Co-operation and Development |
| PBT | Persistent, Bioaccumulative & Toxic |
| PNEC | Predicted No Effect Concentration |
| STP | Sludge Treatment Process |
| vPvB | very Persistent & very Bioaccumulative |

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. 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.