## Alu Guard 500ml

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

### 1.1. Product identifier

**Trade name/designation:**

Alu Guard 500ml

**Article No.:**
T112003

**UFI:**
8ATC-R5VV-T30S-9THD

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

**Use of the substance/mixture:**
Aerosol coating

### 1.3. Details of the supplier of the safety data sheet

**Supplier:**


**KANDO Service GmbH**
Hartleitnerstraße 3
4653 Eberstalzell
Austria
**Telephone:** +43 (0) 7241 213 79
**Email:** msds@kando.eu


### 1.4. Emergency telephone number

Vergiftungsinformationszentrale (VIZ), Stubenring 6, 1010 Wien, 24h: 01 406 43 43, Montag - Freitag: 8 bis 16 Uhr, Tel.: 01 406 68 98 (keine medizinische Auskunft) (Only available during office hours.)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

**Classification according to Regulation (EC) No 1272/2008 [CLP]**

| Hazard classes and hazard categories | Hazard statements | Classification procedure |
|---|---|---|
| aerosol dispensers and lighters *(Aerosol 1)* | H222; H229: Extremely flammable aerosol. Pressurised container: May burst if heated. | |
| Serious eye damage/eye irritation *(Eye Irrit. 2)* | H319: Causes serious eye irritation. | |
| STOT-single exposure *(STOT SE 3)* | H336: May cause drowsiness or dizziness. | |
| Aspiration hazard *(Asp. Tox. 1)* | H304: May be fatal if swallowed and enters airways. | |
| Hazardous to the aquatic environment *(Aquatic Chronic 3)* | H412: Harmful to aquatic life with long lasting effects. | |

### 2.2. Label elements

#### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

**Hazard pictograms:**



**GHS02**
Flame



**GHS07**
Exclamation mark

**Signal word:** Danger

**Hazard components for labelling:**
acetone; Hydrocarbons, C9, aromatics; Xylene; Reaction mass of ethylbenzene and xylene

| **Hazard statements for physical hazards** | |
|---|---|
| H222 | Extremely flammable aerosol. |
| H229 | Pressurised container: May burst if heated. |

| **Hazard statements for health hazards** | |
|---|---|
| H319 | Causes serious eye irritation. |
| H336 | May cause drowsiness or dizziness. |

| **Hazard statements for environmental hazards** | |
|---|---|
| H412 | Harmful to aquatic life with long lasting effects. |

| **Supplemental hazard information** | |
|---|---|
| EUH066 | Repeated exposure may cause skin dryness or cracking. |

| **Precautionary statements Prevention** | |
|---|---|
| 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. |
| P260 | Do not breathe mist/vapours/spray. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves/protective clothing and eye protection/face protection. |

| **Precautionary statements Response** | |
|---|---|
| P304 + P340 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P312 | Call a POISON CENTER/doctor/ if you feel unwell. |

| **Precautionary statements Storage** | |
|---|---|
| P403 | Store in a well-ventilated place. |
| P410 + P412 | Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. |

| **Precautionary statements Disposal** | |
|---|---|
| P501 | Dispose of contents/container to an appropriate recycling or disposal facility. |

### 2.3. Other hazards

**Other adverse effects:**
The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

## SECTION 3: Composition/information on ingredients

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### 3.2. Mixtures

**Description:**
Active ingredient mixture with propellant gas

**Additional information:**
Aerosols and containers fitted with a solid nebuliser containing substances or mixtures classified as hazardous by aspiration must not be labelled for this hazard.

**Hazardous ingredients / Hazardous impurities / Stabilisers:**

| Product identifiers | Substance name<br>Classification according to Regulation (EC) No 1272/2008 [CLP] | Concentration |
|---|---|---|
| CAS No.: 67-64-1<br>EC No.: 200-662-2<br>Index No.: 606-001-00-8<br>REACH No.:<br>01-2119471330-49 | **acetone**<br>Eye Irrit. 2 (H319), Flam. Liq. 2 (H225), STOT SE 3 (H336)<br>Danger EUH066<br>**Acute Toxicity Estimate**<br>ATE (oral) 5,800 mg/kg<br>ATE (dermal) 20,000 mg/kg<br>ATE (inhalation, gases) 76 ppmV<br>ATE (inhalation, vapour) 76 mg/L<br>ATE (inhalation, dust/mist) 76 mg/L<br>**Additional information:** EUH066 | 25 – < 50<br>% |
| CAS No.: 106-97-8<br>EC No.: 203-448-7<br>Index No.: 601-004-00-0<br>REACH No.:<br>01-2119474691-32 | **Butane (with < 0,1 % butadiene (203-450-8))**<br>Flam. Gas 1A (H220), Press. Gas (Comp.) (H280)<br>Danger<br>**Acute Toxicity Estimate**<br>ATE (inhalation, gases) > 800,000 ppmV<br>ATE (inhalation, vapour) 658 mg/L | 10 – < 25<br>% |
| CAS No.: 74-98-6<br>EC No.: 200-827-9<br>Index No.: 601-003-00-5<br>REACH No.:<br>01-2119486944-21 | **propane**<br>Flam. Gas 1A (H220), Press. Gas (Comp.) (H280)<br>Danger<br>**Acute Toxicity Estimate**<br>ATE (oral) 5,840 mg/kg<br>ATE (dermal) 13,900 mg/kg<br>ATE (inhalation, gases) > 25 ppmV<br>ATE (inhalation, vapour) ≥ 50 mg/L | 10 – < 25<br>% |
| CAS No.: 128601-23-0<br>EC No.: 918-668-5<br>REACH No.:<br>01-2119455851-35 | **Hydrocarbons, C9, aromatics**<br>Aquatic Chronic 2 (H411), Asp. Tox. 1 (H304), Flam. Liq. 3 (H226), STOT SE 3 (H335, H336)<br>Danger<br>**Acute Toxicity Estimate**<br>ATE (oral) 3,492 mg/kg<br>ATE (dermal) > 3,160 mg/kg<br>ATE (inhalation, gases) > 6,193 ppmV<br>ATE (inhalation, vapour) > 6,193 mg/L<br>**Additional information:** consisting of: 98-82-8 cumene (<0,099%); 71-43-2 Benzene (0,1%) EUH066 | 10 – < 25<br>% |
| CAS No.: 75-28-5<br>EC No.: 200-857-2<br>REACH No.:<br>01-2119485395-27 | **Isobutane (with < 0.1 % butadiene (203-450-8))**<br>Flam. Gas 1A (H220), Press. Gas (Comp.) (H280)<br>Danger<br>**Acute Toxicity Estimate**<br>ATE (inhalation, vapour) 52,000 mg/L | 2.5 – < 10<br>% |
| CAS No.: 7429-90-5<br>EC No.: 231-072-3<br>REACH No.:<br>01-2119529243-45 | **Aluminium powder (stabilised)**<br>The substance is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].<br>**Acute Toxicity Estimate**<br>ATE (oral) > 15,900 mg/kg<br>ATE (inhalation, dust/mist) > 888 mg/L | 2.5 – 10<br>% |

| Product identifiers | Substance name<br>Classification according to Regulation (EC) No 1272/2008 [CLP] | Concentration |
|---|---|---|
| CAS No.: 1330-20-7<br>EC No.: 215-535-7<br>REACH No.:<br>01-2119488216-32 | **Xylene**<br>Acute Tox. 4 (H312, H332), Asp. Tox. 1 (H304), Eye Irrit. 2 (H319), Flam. Liq. 3 (H226), STOT RE 2 (H373), STOT SE 3 (H335), Skin Irrit. 2 (H315)<br> Danger<br>**Acute Toxicity Estimate**<br>ATE (oral) 2,100 mg/kg<br>ATE (dermal) 1,100 mg/kg<br>ATE (inhalation, dust/mist) > 20 mg/L | 1 – < 2.5 % |
| CAS No.: 64742-48-9<br>EC No.: 918-481-9<br>REACH No.:<br>01-2119457273-39 | **Kohlenwasserstoffe,C10-C13,n-Alkane,cyclische,<2% Aromaten**<br>**Benzol <0.1%**<br>Asp. Tox. 1 (H304)<br> Danger<br>**Acute Toxicity Estimate**<br>ATE (oral) > 8,000 mg/kg<br>ATE (dermal) > 3,160 mg/kg<br>ATE (inhalation, vapour) 4,951 mg/L<br>**Additional information:** EUH066 | 1 – < 2.5 % |
| EC No.: 905-588-0<br>REACH No.:<br>01-2119488216-32 | **Reaction mass of ethylbenzene and xylene**<br>Acute Tox. 4 (H312, H332), Aquatic Chronic 3 (H412), Asp. Tox. 1 (H304), Eye Irrit. 2 (H319), Flam. Liq. 3 (H226), STOT RE 2 (H373), STOT SE 3 (H335), Skin Irrit. 2 (H315)<br> Danger<br>**Acute Toxicity Estimate**<br>ATE (oral) > 3,523 mg/kg<br>ATE (dermal) 1,100 mg/kg<br>ATE (inhalation, gases) 27.571 ppmV<br>ATE (inhalation, vapour) 11 mg/L<br>**Additional information:** consisting of: 98-82-8 cumene (<0,1%); 108-88-3 toluene (≤2%) | 1 – < 2.5 % |
| CAS No.: 100-41-4<br>EC No.: 202-849-4<br>Index No.: 601-023-00-4<br>REACH No.:<br>01-2119489370-35 | **ethylbenzene**<br>Acute Tox. 4 (H332), Aquatic Chronic 3 (H412), Asp. Tox. 1 (H304), Flam. Liq. 2 (H225), STOT RE 2 (H373)<br> Danger<br>**Acute Toxicity Estimate**<br>ATE (oral) 3,500 mg/kg<br>ATE (dermal) 15,354 mg/kg<br>ATE (inhalation, gases) 17.2 ppmV<br>ATE (inhalation, dust/mist) 17.2 mg/L | 0.1 – < 1 % |

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

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

**Following inhalation:**
Fresh air supply, consult a doctor in case of complaints.

**In case of skin contact:**
In general, the product is not irritating to skin.

**After eye contact:**
Rinse opened eye for several minutes under running water. Consult a doctor if symptoms persist

**Following ingestion:**
Do not induce vomiting, seek medical help immediately.

### 4.2. Most important symptoms and effects, both acute and delayed
No data available

### 4.3. Indication of any immediate medical attention and special treatment needed
No data available

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

**Suitable extinguishing media:**
Water mist, Extinguishing powder, Carbon dioxide, alcohol resistant foam

**Unsuitable extinguishing media:**
Water in full jet

### 5.2. Special hazards arising from the substance or mixture
No further relevant information available.

### 5.3. Advice for firefighters
Special protective equipment: Put on breathing apparatus.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

### 6.1.1. For non-emergency personnel

**Personal precautions:**
Wear protective equipment. Keep unprotected persons away.

### 6.1.2. For emergency responders
No data available

### 6.2. Environmental precautions
Do not allow to enter into surface water or drains. In case of spillage into water or sewage system, inform the competent authorities.

### 6.3. Methods and material for containment and cleaning up

**Other information:**
Provide adequate ventilation. Do not wash away with water or aqueous detergents.

### 6.4. Reference to other sections
See section 7 for further information on safe handling.
For further information on personal protective equipment: see section 8.
For further information on disposal: see section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

### Protective measures

**Advices on safe handling:**
Ensure good ventilation/extraction at the workplace.

**Fire prevent measures:**
Do not spray on naked flames or any incandescent material. Keep away from sources of ignition - No smoking. Take precautionary measures against static discharge. Container is under pressure. Protect from sunlight and temperatures above 50°C (e.g. from incandescent lamps). Do not open by force or burn even after use.

### 7.2. Conditions for safe storage, including any incompatibilities

**Requirements for storage rooms and vessels:**
Store in a cool place. The official regulations for the storage of pressurised gas packages must be observed.

**Hints on storage assembly:**
The official regulations for the storage of pressurised gas packages must be observed.

**Storage class (TRGS 510, Germany):** 2B – Aerosol dispensers and lighters

**Further information on storage conditions:**
Store in a cool, dry place in well-sealed containers. Protect from heat and direct sunlight.

### 7.3. Specific end use(s)
No data available

## SECTION 8: Exposure controls/personal protection

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### 8.1. Control parameters

#### 8.1.1. Occupational exposure limit values

| Limit value type (country of origin) | Substance name | ① Long-term occupational exposure limit value<br>② Short-term occupational exposure limit value<br>③ Instantaneous value<br>④ Monitoring and observation processes<br>⑤ Remark |
|---|---|---|
| MAK (AT) | **acetone**<br>CAS No.: 67-64-1<br>EC No.: 200-662-2 | ② 2,000 ppm (4,800 mg/m³)<br>⑤ (max. 4x15 min./Schicht) 15(Miw); 4x |
| IOELV (EU) | **acetone**<br>CAS No.: 67-64-1<br>EC No.: 200-662-2 | ① 500 ppm (1,210 mg/m³) |
| MAK (AT) | **acetone**<br>CAS No.: 67-64-1<br>EC No.: 200-662-2 | ① 500 ppm (1,200 mg/m³) |
| MAK (AT) | **Butane (with < 0,1 % butadiene (203-450-8))**<br>CAS No.: 106-97-8<br>EC No.: 203-448-7 | ① 800 ppm (1,900 mg/m³) |
| MAK (AT) | **Butane (with < 0,1 % butadiene (203-450-8))**<br>CAS No.: 106-97-8<br>EC No.: 203-448-7 | ② 1,600 ppm (3,800 mg/m³)<br>⑤ (max. 3x60 min./Schicht, Momentanwert) 60(Mow); 3x |
| MAK (AT) | **propane**<br>CAS No.: 74-98-6<br>EC No.: 200-827-9 | ② 2,000 ppm (3,600 mg/m³)<br>⑤ (max. 3x60 min./Schicht, Momentanwert) 60(Mow); 3x |
| MAK (AT) | **propane**<br>CAS No.: 74-98-6<br>EC No.: 200-827-9 | ① 1,000 ppm (1,800 mg/m³) |
| MAK (AT) | **Isobutane (with < 0.1 % butadiene (203-450-8))**<br>CAS No.: 75-28-5<br>EC No.: 200-857-2 | ② 1,600 ppm (3,800 mg/m³)<br>⑤ (max. 3x60 min./SchichtMomentanwert) 60(Mow); 3x |
| MAK (AT) | **Isobutane (with < 0.1 % butadiene (203-450-8))**<br>CAS No.: 75-28-5<br>EC No.: 200-857-2 | ① 800 ppm (1,900 mg/m³) |
| MAK (AT)<br>from 11 Sept 2007 | **Aluminium powder (stabilised)**<br>CAS No.: 7429-90-5<br>EC No.: 231-072-3 | ① 10 mg/m³<br>⑤ (einatembare Fraktion) E |
| MAK (AT)<br>from 11 Sept 2007 | **Aluminium powder (stabilised)**<br>CAS No.: 7429-90-5<br>EC No.: 231-072-3 | ② 20 mg/m³<br>⑤ (einatembare Fraktion, max. 2x60 min./Schicht) E; 60(Miw); 2x |
| MAK (AT)<br>from 11 Sept 2007 | **Aluminium powder (stabilised)**<br>CAS No.: 7429-90-5<br>EC No.: 231-072-3 | ① 5 mg/m³<br>⑤ (alveolengängige Fraktion) A |
| MAK (AT)<br>from 11 Sept 2007 | **Aluminium powder (stabilised)**<br>CAS No.: 7429-90-5<br>EC No.: 231-072-3 | ② 10 mg/m³<br>⑤ (alveolengängige Fraktion, max. 2x60 min./Schicht) A; 60(Miw); 2x |
| MAK (AT)<br>from 1 Jan 2026 | **Xylene**<br>CAS No.: 1330-20-7<br>EC No.: 215-535-7 | ① 50 ppm (221 mg/m³) |

| Limit value type (country of origin) | Substance name | ① Long-term occupational exposure limit value<br>② Short-term occupational exposure limit value<br>③ Instantaneous value<br>④ Monitoring and observation processes<br>⑤ Remark |
|---|---|---|
| IOELV (EU) | **Xylene**<br>CAS No.: 1330-20-7<br>EC No.: 215-535-7 | ① 50 ppm (221 mg/m³)<br>② 100 ppm (442 mg/m³)<br>⑤ (may be absorbed through the skin) |
| MAK (AT)<br>from 1 Jan 2026 | **Xylene**<br>CAS No.: 1330-20-7<br>EC No.: 215-535-7 | ② 100 ppm (442 mg/m³)<br>⑤ (max. 4x15 min./Schicht) 15(Miw); 4x |
| MAK (AT) | **Kohlenwasserstoffe,C10-C13,n-Alkane,cyclische,<2% Aromaten Benzol <0.1%**<br>CAS No.: 64742-48-9<br>EC No.: 918-481-9 | ① 200 mL/m³<br>② 400 mL/m³<br>⑤ (für Kohlenwasserstoffgemische mit einem Gehalt an aromatischen Kohlenwasserstoffen von weniger als 1 %, an n-Hexan von weniger als 5 % und an Cyclo-/Isohexanen von weniger als 25 %) |
| MAK (AT) | **Kohlenwasserstoffe,C10-C13,n-Alkane,cyclische,<2% Aromaten Benzol <0.1%**<br>CAS No.: 64742-48-9<br>EC No.: 918-481-9 | ① 170 mL/m³<br>② 340 mL/m³<br>⑤ (für Kohlenwasserstoffgemische mit einem Gehalt an aromatischen Kohlenwasserstoffen von weniger als 1 %, an n-Hexan von weniger als 5 % und an Cyclo-/Isohexanen von 25 % oder mehr) |
| MAK (AT)<br>from 25 Sept 2018 | **Reaction mass of ethylbenzene and xylene**<br>EC No.: 905-588-0 | ② 100 ppm (442 mg/m³)<br>⑤ (max. 4x15 min./Schicht) 15(Miw); 4x |
| IOELV (EU) | **Reaction mass of ethylbenzene and xylene**<br>EC No.: 905-588-0 | ① 50 ppm (221 mg/m³)<br>② 100 ppm (442 mg/m³)<br>⑤ (may be absorbed through the skin) |
| MAK (AT)<br>from 25 Sept 2018 | **Reaction mass of ethylbenzene and xylene**<br>EC No.: 905-588-0 | ① 50 ppm (221 mg/m³) |
| MAK (AT) | **ethylbenzene**<br>CAS No.: 100-41-4<br>EC No.: 202-849-4 | ① 100 ppm (440 mg/m³)<br>⑤ (kann über die Haut aufgenommen werden) H |
| MAK (AT) | **ethylbenzene**<br>CAS No.: 100-41-4<br>EC No.: 202-849-4 | ② 200 ppm (880 mg/m³)<br>⑤ (max. 8x5 min./Schicht, Momentanwert, kann über die Haut aufgenommen werden) 5(Mow); 8x; H |
| IOELV (EU) | **ethylbenzene**<br>CAS No.: 100-41-4<br>EC No.: 202-849-4 | ① 100 ppm (442 mg/m³)<br>② 200 ppm (884 mg/m³)<br>⑤ (may be absorbed through the skin) |

### 8.1.2. Biological limit values
No data available

### 8.1.3. DNEL-/PNEC-values

| Substance name | DNEL value | ① DNEL type<br>② Exposure route |
|---|---|---|
| **acetone**<br>CAS No.: 67-64-1<br>EC No.: 200-662-2 | 1,210 mg/m³ | ① DNEL worker<br>② Long-term – inhalation, systemic effects |
| **acetone**<br>CAS No.: 67-64-1<br>EC No.: 200-662-2 | 200 mg/m³ | ① DNEL Consumer<br>② Long-term – inhalation, systemic effects |

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| Substance name | DNEL value | ① DNEL type<br>② Exposure route |
|---|---|---|
| **acetone**<br>CAS No.: 67-64-1<br>EC No.: 200-662-2 | 2,420 mg/m³ | ① DNEL worker<br>② Acute - inhalation, local effects |
| **acetone**<br>CAS No.: 67-64-1<br>EC No.: 200-662-2 | 186 mg/kg bw/day | ① DNEL worker<br>② Long-term - dermal, systemic effects |
| **acetone**<br>CAS No.: 67-64-1<br>EC No.: 200-662-2 | 62 mg/kg bw/day | ① DNEL Consumer<br>② Long-term - dermal, systemic effects |
| **acetone**<br>CAS No.: 67-64-1<br>EC No.: 200-662-2 | 62 mg/kg bw/day | ① DNEL Consumer<br>② Long-term - oral, systemic effects |
| **Hydrocarbons, C9, aromatics**<br>CAS No.: 128601-23-0<br>EC No.: 918-668-5 | 100 mg/m³ | ① DNEL worker<br>② Long-term – inhalation, systemic effects |
| **Hydrocarbons, C9, aromatics**<br>CAS No.: 128601-23-0<br>EC No.: 918-668-5 | 32 mg/m³ | ① DNEL Consumer<br>② Long-term – inhalation, systemic effects |
| **Hydrocarbons, C9, aromatics**<br>CAS No.: 128601-23-0<br>EC No.: 918-668-5 | 25 mg/kg bw/day | ① DNEL worker<br>② Long-term - dermal, systemic effects |
| **Hydrocarbons, C9, aromatics**<br>CAS No.: 128601-23-0<br>EC No.: 918-668-5 | 11 mg/kg bw/day | ① DNEL Consumer<br>② Long-term - dermal, systemic effects |
| **Hydrocarbons, C9, aromatics**<br>CAS No.: 128601-23-0<br>EC No.: 918-668-5 | 11 mg/kg bw/day | ① DNEL Consumer<br>② Long-term - oral, systemic effects |
| **Aluminium powder (stabilised)**<br>CAS No.: 7429-90-5<br>EC No.: 231-072-3 | 3.72 mg/m³ | ① DNEL worker<br>② Long-term – inhalation, systemic effects |
| **Aluminium powder (stabilised)**<br>CAS No.: 7429-90-5<br>EC No.: 231-072-3 | 3.72 mg/m³ | ① DNEL worker<br>② Long-term – inhalation, local effects |
| **Aluminium powder (stabilised)**<br>CAS No.: 7429-90-5<br>EC No.: 231-072-3 | 7.9 mg/kg bw/day | ① DNEL worker<br>② Long-term - oral, systemic effects |
| **Xylene**<br>CAS No.: 1330-20-7<br>EC No.: 215-535-7 | 221 mg/m³ | ① DNEL worker<br>② Long-term – inhalation, systemic effects |
| **Xylene**<br>CAS No.: 1330-20-7<br>EC No.: 215-535-7 | 65.3 mg/m³ | ① DNEL Consumer<br>② Long-term – inhalation, systemic effects |
| **Xylene**<br>CAS No.: 1330-20-7<br>EC No.: 215-535-7 | 442 mg/m³ | ① DNEL worker<br>② Acute - inhalation, systemic effects |
| **Xylene**<br>CAS No.: 1330-20-7<br>EC No.: 215-535-7 | 260 mg/m³ | ① DNEL Consumer<br>② Acute - inhalation, systemic effects |
| **Xylene**<br>CAS No.: 1330-20-7<br>EC No.: 215-535-7 | 221 mg/m³ | ① DNEL worker<br>② Long-term – inhalation, local effects |
| **Xylene**<br>CAS No.: 1330-20-7<br>EC No.: 215-535-7 | 65.3 mg/m³ | ① DNEL Consumer<br>② Long-term – inhalation, local effects |
| **Xylene**<br>CAS No.: 1330-20-7<br>EC No.: 215-535-7 | 442 mg/m³ | ① DNEL worker<br>② Acute - inhalation, local effects |

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| Substance name | DNEL value | ① DNEL type<br>② Exposure route |
|---|---|---|
| **Xylene**<br>CAS No.: 1330-20-7<br>EC No.: 215-535-7 | 260 mg/m³ | ① DNEL Consumer<br>② Acute - inhalation, local effects |
| **Xylene**<br>CAS No.: 1330-20-7<br>EC No.: 215-535-7 | 212 mg/kg | ① DNEL worker<br>② Long-term - dermal, systemic effects |
| **Xylene**<br>CAS No.: 1330-20-7<br>EC No.: 215-535-7 | 125 mg/kg | ① DNEL Consumer<br>② Long-term - dermal, systemic effects |
| **Xylene**<br>CAS No.: 1330-20-7<br>EC No.: 215-535-7 | 12.5 mg/kg | ① DNEL Consumer<br>② Long-term - oral, systemic effects |
| **Reaction mass of ethylbenzene and xylene**<br>EC No.: 905-588-0 | 77 mg/m³ | ① DNEL worker<br>② Long-term – inhalation, systemic effects |
| **Reaction mass of ethylbenzene and xylene**<br>EC No.: 905-588-0 | 14.8 mg/m³ | ① DNEL Consumer<br>② Long-term – inhalation, systemic effects |
| **Reaction mass of ethylbenzene and xylene**<br>EC No.: 905-588-0 | 289 mg/m³ | ① DNEL worker<br>② Acute - inhalation, local effects |
| **Reaction mass of ethylbenzene and xylene**<br>EC No.: 905-588-0 | 180 mg/kg bw/day | ① DNEL worker<br>② Long-term - dermal, systemic effects |
| **Reaction mass of ethylbenzene and xylene**<br>EC No.: 905-588-0 | 108 mg/kg bw/day | ① DNEL Consumer<br>② Long-term - dermal, systemic effects |
| **Reaction mass of ethylbenzene and xylene**<br>EC No.: 905-588-0 | 1.6 mg/kg bw/day | ① DNEL Consumer<br>② Long-term - oral, systemic effects |
| **ethylbenzene**<br>CAS No.: 100-41-4<br>EC No.: 202-849-4 | 77 mg/m³ | ① DNEL worker<br>② Long-term – inhalation, systemic effects |
| **ethylbenzene**<br>CAS No.: 100-41-4<br>EC No.: 202-849-4 | 15 mg/m³ | ① DNEL Consumer<br>② Long-term – inhalation, systemic effects |
| **ethylbenzene**<br>CAS No.: 100-41-4<br>EC No.: 202-849-4 | 293 mg/m³ | ① DNEL worker<br>② Acute - inhalation, local effects |
| **ethylbenzene**<br>CAS No.: 100-41-4<br>EC No.: 202-849-4 | 180 mg/kg | ① DNEL worker<br>② Long-term - dermal, systemic effects |
| **ethylbenzene**<br>CAS No.: 100-41-4<br>EC No.: 202-849-4 | 1.6 mg/kg | ① DNEL Consumer<br>② Long-term - oral, systemic effects |

| Substance name | PNEC Value | ① PNEC type |
|---|---|---|
| **acetone**<br>CAS No.: 67-64-1<br>EC No.: 200-662-2 | 10.6 mg/L | ① PNEC aquatic, freshwater |
| **acetone**<br>CAS No.: 67-64-1<br>EC No.: 200-662-2 | 1.06 mg/L | ① PNEC aquatic, marine water |
| **acetone**<br>CAS No.: 67-64-1<br>EC No.: 200-662-2 | 100 mg/L | ① PNEC sewage treatment plant |
| **acetone**<br>CAS No.: 67-64-1<br>EC No.: 200-662-2 | 30.4 mg/kg | ① PNEC sediment, freshwater |

| Substance name | PNEC Value | ① PNEC type |
|---|---|---|
| **acetone**<br>CAS No.: 67-64-1<br>EC No.: 200-662-2 | 3.04 mg/kg | ① PNEC sediment, marine water |
| **acetone**<br>CAS No.: 67-64-1<br>EC No.: 200-662-2 | 29.5 mg/kg | ① PNEC soil |
| **acetone**<br>CAS No.: 67-64-1<br>EC No.: 200-662-2 | 21 mg/L | ① PNEC aquatic, intermittent release |
| **Xylene**<br>CAS No.: 1330-20-7<br>EC No.: 215-535-7 | 0.327 mg/L | ① PNEC aquatic, freshwater |
| **Xylene**<br>CAS No.: 1330-20-7<br>EC No.: 215-535-7 | 0.327 mg/L | ① PNEC aquatic, marine water |
| **Xylene**<br>CAS No.: 1330-20-7<br>EC No.: 215-535-7 | 12.46 mg/kg | ① PNEC sediment, freshwater |
| **Xylene**<br>CAS No.: 1330-20-7<br>EC No.: 215-535-7 | 12.46 mg/kg | ① PNEC sediment, marine water |
| **Xylene**<br>CAS No.: 1330-20-7<br>EC No.: 215-535-7 | 2.31 mg/kg | ① PNEC soil |
| **Xylene**<br>CAS No.: 1330-20-7<br>EC No.: 215-535-7 | 0.327 mg/L | ① PNEC aquatic, intermittent release |
| **Reaction mass of ethylbenzene and xylene**<br>EC No.: 905-588-0 | 0.327 mg/L | ① PNEC aquatic, marine water |
| **Reaction mass of ethylbenzene and xylene**<br>EC No.: 905-588-0 | 6.58 mg/L | ① PNEC sewage treatment plant |
| **Reaction mass of ethylbenzene and xylene**<br>EC No.: 905-588-0 | 12.46 mg/L | ① PNEC sediment, freshwater |
| **Reaction mass of ethylbenzene and xylene**<br>EC No.: 905-588-0 | 12.46 mg/L | ① PNEC sediment, marine water |
| **Reaction mass of ethylbenzene and xylene**<br>EC No.: 905-588-0 | 2.31 mg/kg | ① PNEC soil |
| **ethylbenzene**<br>CAS No.: 100-41-4<br>EC No.: 202-849-4 | 0.1 mg/L | ① PNEC aquatic, freshwater |
| **ethylbenzene**<br>CAS No.: 100-41-4<br>EC No.: 202-849-4 | 0.01 mg/L | ① PNEC aquatic, marine water |
| **ethylbenzene**<br>CAS No.: 100-41-4<br>EC No.: 202-849-4 | 13.7 mg/kg | ① PNEC sediment, freshwater |
| **ethylbenzene**<br>CAS No.: 100-41-4<br>EC No.: 202-849-4 | 1.37 mg/kg | ① PNEC sediment, marine water |
| **ethylbenzene**<br>CAS No.: 100-41-4<br>EC No.: 202-849-4 | 2.68 mg/kg | ① PNEC soil |
| **ethylbenzene**<br>CAS No.: 100-41-4<br>EC No.: 202-849-4 | 0.1 mg/L | ① PNEC aquatic, intermittent release |

### 8.2. Exposure controls

#### 8.2.1. Appropriate engineering controls

No further details. See section 7.

#### 8.2.2. Personal protection equipment



**Eye/face protection:**

Safety goggles (EN-166)

**Skin protection:**

Hand protection:
Wear gloves for protection against chemicals according to EN 374.
Gloves / solvent resistant
Selection of glove material considering breakthrough times, permeation rates and degradation.
Glove material:
The selection of a suitable glove depends not only on the material but also on other quality features and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of glove materials cannot be calculated in advance and must therefore be checked before use.
NBR (Nitrile rubber)
Recommended material thickness: ≥ 0,5 mm
Permeation time (maximum wear duration):
For continuous contact we recommend gloves with a breakthrough time of at least 240 minutes, with the preference for a breakthrough time greater than 480 minutes. For short term or splash protection we recommend the same. We are aware that suitable gloves offering this protection are not available. In this case, a shorter breakthrough time is permissible, provided the procedures for maintenance and timely replacement are followed. The thickness of the gloves is not a good measure of the resistance the gloves give against a chemical substance, as this depends on the exact composition of the material of the gloves. The exact breakthrough time should be checked with the glove manufacturer and adhered to.

Body protection:
Use protective suit. (EN-13034/6)
Antistatic, chemical and oil resistant clothing and safety shoes are recommended. (EN1149 EN340&EN ISO 13688 EN13034-6).

**Respiratory protection:**

In case of inadequate ventilation wear respiratory protection. Filter A2/P2

**Other protection measures:**

General protective and hygienic measures: Keep away from food, drink and animal feed. Remove contaminated, saturated clothing immediately. Wash hands before breaks and after work. Do not inhale gases/vapours/aerosols. Avoid contact with eyes and skin. General ventilation.

#### 8.2.3. Environmental exposure controls

Use a suitable container to prevent environmental pollution.

## SECTION 9: Physical and chemical properties

* 

### 9.1. Information on basic physical and chemical properties

**Appearance**

**Form:** Aerosol
**Colour:** According to product designation
**Odour:** characteristic
**flammability:** No data available

**Safety relevant basis data**

| Parameter | Value | at °C | ① Method<br>② Remark |
|---|---|---|---|
| pH | *not applicable* | | ② Mixture is not polar/aprotic. |
| Initial boiling point and boiling range | -44.5 °C | | |
| Flash point | -97 °C | | |

| Parameter | Value | at °C | ① Method<br>② Remark |
|---|---|---|---|
| Evaporation rate | *No data available* | | |
| Auto-ignition temperature | 365 °C | | |
| Upper/lower flammability or explosive limits | 0.7 – 13 Vol-% | | |
| Vapour pressure | 8,300 hPa | 20 °C | |
| Density | 0.72 g/cm³ | 20 °C | |
| Water solubility | Immiscible | | |
| Dynamic viscosity | | | ② 7.500 - 10.500 Brookfield sp3 6 rpm 4.000 - 6000 Brookfield sp3 12 rpm |
| Kinematic viscosity | ≤ 20.5 mm²/s | 40 °C | |

### 9.2. Other information
The product is not self-igniting. The product is not explosive, but the formation of explosive vapour/air mixtures is possible. formation of explosive vapour/air mixtures is possible.
Organic solvents: 94,4%
Solid content: 5,7%

### 9.2.1. Information with regard to physical hazard classes
**Aerosols:**
Extremely flammable aerosol. Pressurized container: May burst if heated.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity
No further relevant information available.

### 10.2. Chemical stability
Thermal decomposition / Conditions to avoid: No decomposition when used as directed.

### 10.3. Possibility of hazardous reactions
No dangerous reactions known.

### 10.4. Conditions to avoid
No further relevant information available.

### 10.5. Incompatible materials
No further relevant information available.

### 10.6. Hazardous decomposition products
No dangerous decomposition products known.

## SECTION 11: Toxicological information

* 
### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

| **acetone** CAS No.: 67-64-1 EC No.: 200-662-2 |
|---|
| **ATE (oral):** 5,800 mg/kg |
| **ATE (dermal):** 20,000 mg/kg |
| **ATE (inhalation, vapour):** 76 mg/L |
| **ATE (inhalation, dust/mist):** 76 mg/L |
| **$LD_{50}$ oral:** 5,800 mg/kg (Rat) |
| **$LD_{50}$ dermal:** >15,800 mg/kg (Rabbit) |
| **$LC_{50}$ Acute inhalation toxicity (gas):** 76 ppmV 4 h (Rat) |
| **$LC_{50}$ Acute inhalation toxicity (vapour):** 5,540 mg/L 4 d (Oncorhynchus mykiss (Rainbow trout)) |
| **$LC_{50}$ Acute inhalation toxicity (dust/mist):** 76 mg/L 4 h (Rat) |

| |
|---|
| **Butane (with < 0,1 % butadiene (203-450-8))** CAS No.: 106-97-8 EC No.: 203-448-7 |
| **$LC_{50}$ Acute inhalation toxicity (gas):** >800,000 ppmV (Rat) |
| **$LC_{50}$ Acute inhalation toxicity (vapour):** 658 mg/L 4 h (Rat) |
| **propane** CAS No.: 74-98-6 EC No.: 200-827-9 |
| **$LD_{50}$ oral:** 5,840 mg/kg (Rat) |
| **$LD_{50}$ dermal:** 13,900 mg/kg (Rabbit) |
| **$LC_{50}$ Acute inhalation toxicity (gas):** >25 ppmV 4 h (Rat) |
| **$LC_{50}$ Acute inhalation toxicity (vapour):** ≥50 mg/L 4 h (Rat) |
| **Hydrocarbons, C9, aromatics** CAS No.: 128601-23-0 EC No.: 918-668-5 |
| **$LD_{50}$ oral:** 3,492 mg/kg (Rat) |
| **$LD_{50}$ dermal:** >3,160 mg/kg (Rabbit) |
| **$LC_{50}$ Acute inhalation toxicity (gas):** >6,193 ppmV 4 h (Rat) |
| **$LC_{50}$ Acute inhalation toxicity (vapour):** >6,193 mg/L 4 h (Rat) |
| **Isobutane (with < 0.1 % butadiene (203-450-8))** CAS No.: 75-28-5 EC No.: 200-857-2 |
| **$LC_{50}$ Acute inhalation toxicity (vapour):** 52,000 mg/L 2 h (Rat) |
| **Xylene** CAS No.: 1330-20-7 EC No.: 215-535-7 |
| **$LD_{50}$ oral:** 2,100 mg/kg (Rat) |
| **$LD_{50}$ dermal:** 1,100 mg/kg (Rat) |
| **$LC_{50}$ Acute inhalation toxicity (dust/mist):** >20 mg/L |
| **Kohlenwasserstoffe,C10-C13,n-Alkane,cyclische,<2% Aromaten Benzol <0.1%** CAS No.: 64742-48-9 EC No.: 918-481-9 |
| **$LD_{50}$ oral:** >8,000 mg/kg (Rat) |
| **$LD_{50}$ dermal:** >3,160 mg/kg (Rabbit) |
| **$LC_{50}$ Acute inhalation toxicity (vapour):** 4,951 mg/L 4 h (Rat) |
| **Reaction mass of ethylbenzene and xylene** EC No.: 905-588-0 |
| **ATE (dermal):** 1,100 mg/kg |
| **ATE (inhalation, vapour):** 11 mg/L |
| **$LD_{50}$ oral:** >3,523 mg/kg (Rat) |
| **$LD_{50}$ dermal:** >2,000 mg/kg (Rabbit) |
| **$LC_{50}$ Acute inhalation toxicity (gas):** 27.571 ppmV 4 h (Rat) |
| **$LC_{50}$ Acute inhalation toxicity (vapour):** 29,000 mg/L 4 h (Rat) |
| **ethylbenzene** CAS No.: 100-41-4 EC No.: 202-849-4 |
| **$LD_{50}$ oral:** 3,500 mg/kg (Rat) |
| **$LD_{50}$ dermal:** 15,354 mg/kg (Rabbit) |
| **$LC_{50}$ Acute inhalation toxicity (gas):** 17.2 ppmV 4 h (Rat) |
| **$LC_{50}$ Acute inhalation toxicity (dust/mist):** 17.2 mg/L (Rat) |
| **Aluminium powder (stabilised)** CAS No.: 7429-90-5 EC No.: 231-072-3 |
| **$LD_{50}$ oral:** >15,900 mg/kg (Rat) |
| **$LC_{50}$ Acute inhalation toxicity (dust/mist):** >888 mg/L 4 h (Rat) |

**Acute oral toxicity:**
Based on available data, the classification criteria are not met.

**Acute dermal toxicity:**
Based on available data, the classification criteria are not met.

**Acute inhalation toxicity:**
Based on available data, the classification criteria are not met.

**Skin corrosion/irritation:**
Based on available data, the classification criteria are not met.

**Serious eye damage/irritation:**
Causes serious eye irritation.

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

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

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

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

**STOT-single exposure:**
May cause drowsiness or dizziness.

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

**Aspiration hazard:**
May be fatal if swallowed and enters airways.

### 11.2. Information on other hazards

**Endocrine disrupting properties:**
octamethylcyclotetrasiloxane (556-67-2) List II

## SECTION 12: Ecological information

* 

### 12.1. Toxicity

| |
|---|
| **acetone** CAS No.: 67-64-1 EC No.: 200-662-2 |
| **$LC_{50}$:** 8,300 mg/L 4 d (fish) |
| **$LC_{50}$:** 8,450 mg/L 2 d (crustaceans, water flea) |
| **$LC_{50}$:** 8,300 mg/L 4 d (fish) |
| **$EC_{50}$:** 7,200 mg/L 4 d (Algae/water plant) |
| **$EC_{50}$:** 7,200 mg/L 4 d (Alge) |
| **$EC_{50}$:** 8,800 mg/L 21 d (Daphnia magna) |
| **NOEC:** 2,212 mg/L (crustaceans, Daphnia magna) |
| **NOEC:** 2,212 mg/L (crustaceans, Daphnia pulex) |
| **Butane (with < 0,1 % butadiene (203-450-8))** CAS No.: 106-97-8 EC No.: 203-448-7 |
| **$LC_{50}$:** 24.11 mg/L 4 d (fish) QSAR |
| **$LC_{50}$:** 14.22 mg/L 2 d (crustaceans) QSAR |
| **$LC_{50}$:** 24 mg/L 4 d (Pisces (generic)) ECOSAR QSAR |
| **$EC_{50}$:** 7.7 mg/L 4 d (Algae (generic)) ECOSAR v1.00 QSAR |
| **propane** CAS No.: 74-98-6 EC No.: 200-827-9 |
| **$LC_{50}$:** 9,640 mg/L 4 d (fish, Pimephales promelas) |
| **$LC_{50}$:** 0.41 mg/L 4 d (fish, Oncorhynchus mykiss) |
| **$LC_{50}$:** 49.9 mg/L 4 d (fish) |
| **$EC_{50}$:** >100 mg/L (Algae/water plant, Bacteria) |
| **$EC_{50}$:** 0.17 mg/L 3 d (Algae/water plant, Selenastrum capricornutum) |
| **$EC_{50}$:** 69.43 mg/L 2 d (crustaceans, Daphnia) Calculation with the ECOSAR programme v1.00. |
| **NOEC:** 0.017 mg/L 3 d (Algae/water plant, Pseudokirchneriella subcapitata) |
| **$ErC_{50}$:** 19.37 mg/L 4 d (Algae/water plant, Algae) Calculation with the ECOSAR programme v1.00. |
| **LOEC:** 1,000 mg/L (Algae/water plant, Algae) |
| **LOEC:** 1,000 mg/L (Algae/water plant, Alge) |
| **$IC_{50}$:** 11.3 mg/L 3 d (Algae/water plant) |
| **LOEC:** 1,000 mg/L |

| |
|---|
| **Hydrocarbons, C9, aromatics** CAS No.: 128601-23-0 EC No.: 918-668-5 |
| **$EC_{50}$:** 3.2 mg/L 2 d (crustaceans, Daphnia magna) |
| **$EC_{50}$:** 2.75 mg/L 3 d (Algae/water plant, Pseudokirchneriella Subcapitata) |
| **$EC_{50}$:** 9.2 mg/L 4 d (fish) |
| **Xylene** CAS No.: 1330-20-7 EC No.: 215-535-7 |
| **$LC_{50}$:** >10 – 100 mg/L 4 d (fish) |
| **$EC_{50}$:** >10 – 100 mg/L 2 d (crustaceans) |
| **$EC_{50}$:** >10 – 100 mg/L 3 d (Algae/water plant) |
| **NOEC:** 1.3 mg/L (fish, Oncorhynchus mykiss) |
| **NOEC:** 1.17 mg/L (crustaceans, Ceriodaphnia dubia) |
| **Kohlenwasserstoffe,C10-C13,n-Alkane,cyclische,<2% Aromaten Benzol <0.1%** CAS No.: 64742-48-9 EC No.: 918-481-9 |
| **$LC_{50}$:** >1,000 mg/L 4 d (fish, Oncorhynchus mykiss (Rainbow trout)) |
| **$EC_{50}$:** >1,000 mg/L 2 d (crustaceans, Daphnia magna (Big water flea)) |
| **$ErC_{50}$:** >1,000 mg/L 4 d (Algae/water plant, Scenedesmus subspicatus) |
| **Reaction mass of ethylbenzene and xylene** EC No.: 905-588-0 |
| **$LC_{50}$:** 8.9 – 16.4 mg/L 4 d (fish, Pimephales promelas) |
| **$EC_{50}$:** 3.2 – 9.5 mg/L 2 d (crustaceans, Daphnia magna) |
| **NOEC:** 0.44 mg/L 3 d (Algae/water plant) |
| **$LC_{50}$:** 2.6 mg/L 4 d (fish, Oncorhynchus mykiss) |
| **$EC_{50}$:** 2.2 mg/L 3 d (Algae/water plant, Chlorella vulgaris) |
| **NOEC:** >1.39 mg/L (fish, Oncorhynchus kisutch) |
| **NOEC:** 0.74 mg/L (crustaceans, Ceriodaphnia dubia) |
| **$LC_{50}$:** 8.9 – 16.4 mg/L 4 d (Pimephales promelas) |
| **$EC_{50}$:** 3.2 – 9.5 mg/L 2 d (Daphnia magna) |
| **ethylbenzene** CAS No.: 100-41-4 EC No.: 202-849-4 |
| **$LC_{50}$:** 42.3 mg/L 4 d (fish, Pimephales promelas) |
| **$EC_{50}$:** 75 mg/L 2 d (crustaceans, Daphnia magna) |
| **$EC_{50}$:** 63 mg/L (Algae/water plant, Chlorella vulgaris) |
| **NOEC:** 0.96 mg/L (crustaceans, Ceriodaphnia dubia) |
| **$EC_{50}$:** 63 mg/L (Algae/water plant, Chlorella vulgaris) |
| **Aluminium powder (stabilised)** CAS No.: 7429-90-5 EC No.: 231-072-3 |
| **$EC_{50}$:** 40.4 mg/L 2 d (crustaceans, Ceriodaphnia sp.) |

## 12.2. Persistence and degradability

| |
|---|
| **acetone** CAS No.: 67-64-1 EC No.: 200-662-2 |
| **Biodegradation:** Yes, rapidly |
| **Butane (with < 0,1 % butadiene (203-450-8))** CAS No.: 106-97-8 EC No.: 203-448-7 |
| **Biodegradation:** Yes, rapidly |
| **propane** CAS No.: 74-98-6 EC No.: 200-827-9 |
| **Biodegradation:** Yes, rapidly |

**Biodegradation:**
Not readily biodegradable.

## 12.3. Bioaccumulative potential

| |
|---|
| **acetone** CAS No.: 67-64-1 EC No.: 200-662-2 |
| **Log $K_{OW}$:** -0.24 |
| **Butane (with < 0,1 % butadiene (203-450-8))** CAS No.: 106-97-8 EC No.: 203-448-7 |
| **Log $K_{OW}$:** 2.89 |

| | |
|---|---|
| **propane** CAS No.: 74-98-6 EC No.: 200-827-9 | |
| **Log $K_{OW}$:** 1.09 | |
| **Reaction mass of ethylbenzene and xylene** EC No.: 905-588-0 | |
| **Log $K_{OW}$:** 3.16 | |
| **Bioconcentration factor (BCF):** 29 | |
| **ethylbenzene** CAS No.: 100-41-4 EC No.: 202-849-4 | |
| **Log $K_{OW}$:** 3.15 | |

### 12.4. Mobility in soil
No data available

### 12.5. Results of PBT and vPvB assessment

| |
|---|
| **acetone** CAS No.: 67-64-1 EC No.: 200-662-2 |
| **Results of PBT and vPvB assessment:** — |
| **Butane (with < 0,1 % butadiene (203-450-8))** CAS No.: 106-97-8 EC No.: 203-448-7 |
| **Results of PBT and vPvB assessment:** — |
| **propane** CAS No.: 74-98-6 EC No.: 200-827-9 |
| **Results of PBT and vPvB assessment:** — |
| **Hydrocarbons, C9, aromatics** CAS No.: 128601-23-0 EC No.: 918-668-5 |
| **Results of PBT and vPvB assessment:** — |
| **Isobutane (with < 0.1 % butadiene (203-450-8))** CAS No.: 75-28-5 EC No.: 200-857-2 |
| **Results of PBT and vPvB assessment:** — |
| **Xylene** CAS No.: 1330-20-7 EC No.: 215-535-7 |
| **Results of PBT and vPvB assessment:** — |
| **Kohlenwasserstoffe,C10-C13,n-Alkane,cyclische,<2% Aromaten Benzol <0.1%** CAS No.: 64742-48-9 EC No.: 918-481-9 |
| **Results of PBT and vPvB assessment:** — |
| **Reaction mass of ethylbenzene and xylene** EC No.: 905-588-0 |
| **Results of PBT and vPvB assessment:** — |
| **ethylbenzene** CAS No.: 100-41-4 EC No.: 202-849-4 |
| **Results of PBT and vPvB assessment:** — |
| **Aluminium powder (stabilised)** CAS No.: 7429-90-5 EC No.: 231-072-3 |
| **Results of PBT and vPvB assessment:** — |

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

### 12.6. Endocrine disrupting properties
For information on endocrine disrupting properties see section 11.

### * 12.7. Other adverse effects
water hazard class 2: obviously hazardous to water
Do not allow to enter into surface water or drains.
Drinking water hazard even when small quantities leak into the subsoil.
Harmful to aquatic life. Harmful to fish.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods
Must not be disposed of together with household waste. Do not allow to enter into surface water or drains.

### 13.1.1. Product/Packaging disposal

### Waste codes/waste designations according to EWC/AVV
**Directive 2008/98/EC (Waste Framework Directive)**

| | |
|---|---|
| HP 3 | Flammable |
| HP 4 | Irritant — skin irritation and eye damage |
| HP 5 | Specific Target Organ Toxicity (STOT)/Aspiration Toxicity |

| | |
|---|---|
| HP 14 | Ecotoxic |

### Waste treatment options

**Appropriate disposal / Package:**

Uncleaned packaging: Dispose of waste according to applicable legislation.

## SECTION 14: Transport information

| Land transport (ADR/RID) | Inland waterway craft (ADN) | Sea transport (IMDG) | Air transport (ICAO-TI / IATA-DGR) |
|---|---|---|---|
| **14.1. UN number or ID number** | | | |
| 1950 | 1950 | 1950 | 1950 |
| **14.2. UN proper shipping name** | | | |
| AEROSOLS | AEROSOLS | AEROSOLS | AEROSOLS, flammable |
| **14.3. Transport hazard class(es)** | | | |
|  2.1 |  2.1 |  2.1 |  2.1 |
| **14.4. Packing group** | | | |
| | | - | |
| **14.5. Environmental hazards** | | | |
| No | No | No | No |
| * **14.6. Special precautions for user** | | | |
| **Special Provisions:** 190 \| 327 \| 344 \| 625<br>**Limited quantity (LQ):** 1 L<br>**Excepted Quantities (EQ):** E0<br>**Classification code:** 5F<br>**Tunnel restriction code:** (D)<br>**Remark:** Attention: Gases Transport category 2 | **Special Provisions:** 190 \| 327 \| 344 \| 625<br>**Limited quantity (LQ):** 1 L<br>**Excepted Quantities (EQ):** E0<br>**Classification code:** 5F<br>**Remark:** Attention: Gases | **Special Provisions:** 63 \| 190 \| 277 \| 327 \| 344 \| 381 \| 959<br>**Limited quantity (LQ):** Siehe SV277<br>**Excepted Quantities (EQ):** E0<br>**EmS-No.:** F-D, S-U<br>**Remark:** Attention: Gases Stowage Code: SW1 Protected from sources of heat. SW22 For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a capacity above 1 litre: Category B. For WASTE AEROSOLS: Category C, Clear of living quarters. Segregation Code: SG69 For AEROSOLS with a maximum capacity of 1 litre: Segregation as for class 9. Stow "separated from" class 1 except for division 1.4. For AEROSOLS with a capacity above 1 litre: Segregation as for the appropriate subdivision of class 2. For WASTE AEROSOLS: Segregation | **Special Provisions:** A145 \| A167<br>**Limited quantity (LQ):** Y203<br>**Excepted Quantities (EQ):** E0<br>**Remark:** Attention: Gases On passenger aircraft/rail: 75kg On cargo aircraft only: 150kg |

| Land transport (ADR/RID) | Inland waterway craft (ADN) | Sea transport (IMDG) | Air transport (ICAO-TI / IATA-DGR) |
|---|---|---|---|
| | | as for the appropriate subdivision of class 2. | |

### 14.7. Maritime transport in bulk according to IMO instruments
not applicable

## SECTION 15: Regulatory information

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

### 15.1.1. EU legislation

**Authorisations:**
Directive 2012/18/EU
Named dangerous substances - ANNEX I: None of the ingredients are included.

**Restrictions on use:**
Quantity threshold (in tons) for use in lower class farms 150t
Quantity threshold (in tons) for use in upper-tier establishments 500t
Regulation (EC) No 1907/2006 ANNEX XVII: Restriction conditions: 3
Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment - Annex II: None of the ingredients are included.
Regulation (EU) 2019/1148
Annex I - RESTRICTED EXPORT SUBSTANCES FOR EXPLOSIVES (upper concentration limit for a permit pursuant to Article 5(3)): None of the ingredients are included.
Annex II - EXPLOSIVES REPORTABLE FOR EXPLOSIVES: Acetone (67-64-1)
Regulation (EC) No 273/2004 on drug precursors: Acetone (67-64-1), Toluene (108-88-3)
Regulation (EC) No 111/2005 laying down rules for the monitoring of trade in drug precursors between the Community and third countries: Acetone (67-64-1), toluene (108-88-3)

**Other regulations (EU):**
Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances [Seveso-III-Directive], Hazard categories:
• P3a 'Flammable' aerosols Category 1 or 2, containing flammable gases Category 1 or 2 or flammable liquids

Named dangerous substances:
• Liquefied flammable gases, Category 1 or 2 (including liquefied petroleum gas) and natural gas

**Directive 2004/42/EC on the limitation of emissions of volatile organic compounds:**
Volatile organic compound (VOC) content: 679.7 g/L

### 15.1.2. National regulations
No data available

### 15.2. Chemical Safety Assessment
A chemical safety assessment has not been carried out.

## SECTION 16: Other information

* **16.1. Indication of changes**

| | |
|---|---|
| 3.2. | Mixtures |
| 8.1. | Control parameters |
| 9.1. | Information on basic physical and chemical properties |
| 11.1. | Information on hazard classes as defined in Regulation (EC) No 1272/2008 |
| 12.1. | Toxicity |
| 12.7. | Other adverse effects |
| 14.6. | Special precautions for user |
| 15.1. | Safety, health and environmental regulations/legislation specific for the substance or mixture |
| 16.1. | Indication of changes |
| 16.2. | Abbreviations and acronyms |

| 16.4. | Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP] |
|---|---|

* **16.2. Abbreviations and acronyms**

| | |
|---|---|
| ACGIH | American Conference of Governmental Industrial Hygienists |
| ADN | European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways |
| ADR | European Agreement concerning the International Carriage of Dangerous Goods by Road |
| ATE | Acute Toxicity Estimate |
| AVV | Waste Shipment Ordinance (DE) |
| BCF | Bioconcentration Factor |
| CAS | Chemical Abstracts Service |
| CLP | Classification, Labelling and Packaging |
| DNEL | derived no-effect level |
| EAK | European Waste Catalogue |
| $EC_{50}$ | Effective Concentration 50% |
| EG | European Community |
| EN | European Standard |
| ES | Exposure scenario |
| EU | European Union |
| EWC | European Waste Catalogue |
| $IC_{50}$ | Inhibition Concentration 50 % |
| ICAO | International Civil Aviation Organization |
| IMDG | International Maritime Dangerous Goods |
| IMO | International Maritime Organization |
| KG | body weight |
| $LC_{50}$ | Lethal (fatal) Concentration 50% |
| $LD_{50}$ | Lethal (fatal) Dose 50% |
| MAK | Maximum concentration in the workplace air (CH) |
| NFPA | National Fire Protection Association |
| NIOSH | National Institute for Occupational Safety & Health |
| NOEC | No Observed Effect Concentration |
| OECD | Organisation for Economic Cooperation and Development |
| OEL | Threshold Limit Value |
| OSHA | Occupational Safety & Health Administration |
| PBT | persistent and bioaccumulative and toxic |
| PNEC | Predicted No Effect Concentration |
| QSAR | Quantitative Structure-Activity Relationship |
| REACH | Registration, Evaluation and Authorization of Chemicals |
| RID | Dangerous goods regulations for transport by rail |
| SCL | Specific concentration limit |
| Tox. | Toxicity |
| TRGS | Technische Regeln für Gefahrstoffe |
| UFI | Unique Formula Identifier |
| UN | United Nations |
| VOC | Volatile organic compounds |
| ZNS | central nervous system |

### 16.3. Key literature references and sources for data
No data available

* **16.4. Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]**

| Hazard classes and hazard categories | Hazard statements | Classification procedure |
|---|---|---|
| aerosol dispensers and lighters *(Aerosol 1)* | H222; H229: Extremely flammable aerosol. Pressurised container: May burst if heated. | |
| Serious eye damage/eye irritation *(Eye Irrit. 2)* | H319: Causes serious eye irritation. | |

| Hazard classes and hazard categories | Hazard statements | Classification procedure |
|---|---|---|
| STOT-single exposure *(STOT SE 3)* | H336: May cause drowsiness or dizziness. | |
| Aspiration hazard *(Asp. Tox. 1)* | H304: May be fatal if swallowed and enters airways. | |
| Hazardous to the aquatic environment *(Aquatic Chronic 3)* | H412: Harmful to aquatic life with long lasting effects. | |

### 16.5. List of relevant hazard statements and/or precautionary statements from sections 2 to 15

| Hazard statements | |
|---|---|
| H220 | Extremely flammable gas. |
| H225 | Highly flammable liquid and vapour. |
| H226 | Flammable liquid and vapour. |
| H280 | Contains gas under pressure; may explode if heated. |
| H304 | May be fatal if swallowed and enters airways. |
| H312 | Harmful in contact with skin. |
| H315 | Causes skin irritation. |
| H319 | Causes serious eye irritation. |
| H332 | Harmful if inhaled. |
| H335 | May cause respiratory irritation. |
| H336 | May cause drowsiness or dizziness. |
| H373 | May cause damage to organs through prolonged or repeated exposure. |
| H411 | Toxic to aquatic life with long lasting effects. |
| H412 | Harmful to aquatic life with long lasting effects. |

| Supplemental hazard information | |
|---|---|
| EUH066 | Repeated exposure may cause skin dryness or cracking. |

### 16.6. Training advice
No data available

### 16.7. Additional information
To the best of our knowledge, the information contained herein is accurate. However, neither the above-mentioned supplier nor its subsidiaries assume any liability with regard to the correctness or completeness of the information provided. A final determination of the suitability of individual materials is the sole responsibility of the user. All materials may involve unknown risks and should be used with caution. While certain risks are described herein, we cannot guarantee that these are the only possible risks.

* Data changed compared with the previous version.