

SAFETY DATA SHEET



Aluminium Spray A-100

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

1.1 Product identifier

Product name : Aluminium Spray A-100
Product code : 110500
Color : Silver.

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

| Identified uses |
|-----------------|
| Not available. |

1.3 Details of the supplier of the safety data sheet

WEICON GmbH & Co. KG
Königsberger Str. 255
48157 Münster
Germany
Phone: +49 251 93220
Fax: +49(0)251 / 9322 - 244
Internet: www.weicon.de

e-mail address of person responsible for this SDS : msds@weicon.de

1.4 Emergency telephone number

Telephone number : EMERGENCY CONTACT – UK, UAE, South Africa (24h): Tel: ++44 1865 407333 (English)
TRANSPORT EMERGENCY CONTACT - UK, UAE, South Africa (24h): Tel: ++44 1865 407333 (English)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

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

Aerosol 1, H222, H229

Eye Irrit. 2, H319

STOT SE 3, H336

Aquatic Chronic 3, H412

The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard pictograms :



Signal word : Danger

SECTION 2: Hazards identification

| | |
|---|---|
| Hazard statements | : H222, H229 - Extremely flammable aerosol. Pressurized container: may burst if heated. H319 - Causes serious eye irritation. H336 - May cause drowsiness or dizziness. H412 - Harmful to aquatic life with long lasting effects. |
| Precautionary statements | |
| Prevention | : P280 - Wear eye or face protection. 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. P273 - Avoid release to the environment. P261 - Avoid breathing dust or mist. P251 - Do not pierce or burn, even after use. |
| Response | : P304 + P312 - IF INHALED: Call a POISON CENTER or doctor if you feel unwell. P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical advice or attention. |
| Storage | : P410 + P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. P403 + P233 - Store in a well-ventilated place. Keep container tightly closed. |
| Disposal | : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations. |
| Hazardous ingredients | : acetone ethyl acetate |
| Supplemental label elements | : Repeated exposure may cause skin dryness or cracking. |
| Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles | : Restricted to professional users. |

2.3 Other hazards

| | |
|--|---|
| Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII | : This mixture does not contain any substances that are assessed to be a PBT or a vPvB. |
| Other hazards which do not result in classification | : Aspiration hazard - Not applicable. |

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

| Product/ingredient name | Identifiers | % | Regulation (EC) No. 1272/2008 [CLP] | Type |
|-------------------------|---|-----------|---|---------|
| acetone | REACH #: 01-2119471330-49 EC: 200-662-2 CAS: 67-64-1 Index: 606-001-00-8 | ≥10 - ≤25 | Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066 | [1] [2] |
| ethyl acetate | REACH #: 01-2119475103-46 EC: 205-500-4 CAS: 141-78-6 Index: 607-022-00-5 | ≥10 - ≤25 | Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066 | [1] [2] |
| butane | REACH #: | ≥10 - ≤25 | Flam. Gas 1A, H220 | [2] |

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SECTION 3: Composition/information on ingredients

| | | | | |
|--|---|-----|--|---------|
| xylene | 01-2119474691-32 EC: 203-448-7 CAS: 106-97-8 Index: 601-004-00-0 REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7 Index: 601-022-00-9 | <10 | Press. Gas (Comp.), H280 Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Asp. Tox. 1, H304 Aquatic Chronic 3, H412 | [1] [2] |
| Solvent naphtha (petroleum), light arom. | REACH #: 01-2119455851-35 CAS: 64742-95-6 Index: 649-356-00-4 | ≤9 | Flam. Liq. 3, H226 STOT SE 3, H335 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 EUH066 | [1] |
| aluminium powder (stabilised) | REACH #: 01-2119529243-45 EC: 231-072-3 CAS: 7429-90-5 Index: 013-002-00-1 | ≤10 | Flam. Sol. 1, H228 Water-react. 2, H261 | [2] |
| n-butyl acetate | REACH #: 01-2119485493-29 EC: 204-658-1 CAS: 123-86-4 Index: 607-025-00-1 | ≤10 | Flam. Liq. 3, H226 STOT SE 3, H336 EUH066 See Section 16 for the full text of the H statements declared above. | [1] [2] |

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit
- [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
- [5] Substance of equivalent concern
- [6] Additional disclosure due to company policy

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

SECTION 4: First aid measures

- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Wash skin thoroughly with soap and water or use recognized skin cleanser. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

4.2 Most important symptoms and effects, both acute and delayed

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness
- Skin contact** : Adverse symptoms may include the following:
irritation
dryness
cracking
- Ingestion** : No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media : None known.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture : Extremely flammable aerosol. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. Bursting aerosol containers may be propelled from a fire at high speed. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous combustion products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
metal oxide/oxides

5.3 Advice for firefighters

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. In the case of aerosols being ruptured, care should be taken due to the rapid escape of the pressurized contents and propellant. If a large number of containers are ruptured, treat as a bulk material spillage according to the instructions in the clean-up section. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions

: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

6.3 Methods and materials for containment and cleaning up

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

SECTION 6: Accidental release measures

6.4 Reference to other sections : See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance.

7.1 Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing gas. Avoid breathing vapor or mist. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous.

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Do not store above the following temperature: 50°C (122°F). Store in accordance with local regulations. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Seveso Directive - Reporting thresholds

Danger criteria

| Category | Notification and MAPP threshold | Safety report threshold |
|----------|---------------------------------|-------------------------|
| P3a | 150 tonne | 500 tonne |

7.3 Specific end use(s)

Recommendations : Not available.

Industrial sector specific solutions : Not available.

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

8.1 Control parameters

Occupational exposure limits

| Product/ingredient name | Exposure limit values |
|-------------------------|---|
| acetone | EH40/2005 WELs (United Kingdom (UK), 8/2018). STEL: 3620 mg/m ³ 15 minutes. STEL: 1500 ppm 15 minutes. TWA: 500 ppm 8 hours. TWA: 1210 mg/m ³ 8 hours. |
| ethyl acetate | EH40/2005 WELs (United Kingdom (UK), 8/2018). STEL: 400 ppm 15 minutes. TWA: 200 ppm 8 hours. STEL: 1468 mg/m ³ 15 minutes. |

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SECTION 8: Exposure controls/personal protection

| | |
|-------------------------------|---|
| butane | TWA: 734 mg/m ³ 8 hours. EH40/2005 WELs (United Kingdom (UK), 8/2018). STEL: 1810 mg/m ³ 15 minutes. STEL: 750 ppm 15 minutes. TWA: 1450 mg/m ³ 8 hours. TWA: 600 ppm 8 hours. |
| xylene | EH40/2005 WELs (United Kingdom (UK), 8/2018). Absorbed through skin. STEL: 441 mg/m ³ 15 minutes. TWA: 50 ppm 8 hours. TWA: 220 mg/m ³ 8 hours. STEL: 100 ppm 15 minutes. |
| aluminium powder (stabilised) | EH40/2005 WELs (United Kingdom (UK), 8/2018). TWA: 10 mg/m ³ 8 hours. Form: Inhalable fraction TWA: 4 mg/m ³ 8 hours. Form: Respirable dust |
| n-butyl acetate | EH40/2005 WELs (United Kingdom (UK), 8/2018). STEL: 966 mg/m ³ 15 minutes. STEL: 200 ppm 15 minutes. TWA: 724 mg/m ³ 8 hours. TWA: 150 ppm 8 hours. |

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

| Product/ingredient name | Type | Exposure | Value | Population | Effects |
|-------------------------|------|-----------------------|------------------------|--------------------|----------|
| acetone | DNEL | Long term Oral | 62 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 62 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 186 mg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Inhalation | 200 mg/m ³ | General population | Systemic |
| | DNEL | Long term Inhalation | 1210 mg/m ³ | Workers | Systemic |
| | DNEL | Short term Inhalation | 2420 mg/m ³ | Workers | Local |
| ethyl acetate | DNEL | Long term Oral | 4.5 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 37 mg/kg bw/day | General population | Systemic |

SECTION 8: Exposure controls/personal protection

| | | | | | |
|--------|-----------------|-----------------------|--------------------------|-----------------------|----------|
| xylene | DNEL | Long term Dermal | 63 mg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Inhalation | 367 mg/m ³ | General population | Local |
| | DNEL | Long term Inhalation | 367 mg/m ³ | General population | Systemic |
| | DNEL | Short term Inhalation | 734 mg/m ³ | General population | Local |
| | DNEL | Short term Inhalation | 734 mg/m ³ | General population | Systemic |
| | DNEL | Long term Inhalation | 734 mg/m ³ | Workers | Local |
| | DNEL | Long term Inhalation | 734 mg/m ³ | Workers | Systemic |
| | DNEL | Short term Inhalation | 1468 mg/m ³ | Workers | Local |
| | DNEL | Short term Inhalation | 1468 mg/m ³ | Workers | Systemic |
| | DNEL | Long term Oral | 1.6 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Inhalation | 14.8 mg/m ³ | General population | Systemic |
| | DNEL | Long term Inhalation | 77 mg/m ³ | Workers | Systemic |
| | DNEL | Long term Dermal | 108 mg/kg bw/day | General population | Systemic |
| | DNEL | Long term Dermal | 180 mg/kg bw/day | Workers | Systemic |
| | n-butyl acetate | DNEL | Short term Inhalation | 289 mg/m ³ | Workers |
| DNEL | | Short term Inhalation | 289 mg/m ³ | Workers | Systemic |
| DNEL | | Long term Oral | 3.4 mg/kg bw/day | General population | Systemic |
| DNEL | | Long term Dermal | 3.4 mg/kg bw/day | General population | Systemic |
| DNEL | | Long term Dermal | 7 mg/kg bw/day | Workers | Systemic |
| DNEL | | Long term Inhalation | 12 mg/m ³ | General population | Systemic |
| DNEL | | Long term Inhalation | 48 mg/m ³ | Workers | Systemic |
| DNEL | | Long term Inhalation | 102.34 mg/m ³ | General population | Local |

SECTION 8: Exposure controls/personal protection

| | | | | | |
|--|------|-----------------------|-------------------------|--------------------|----------|
| | DNEL | Long term Inhalation | 480 mg/m ³ | Workers | Local |
| | DNEL | Short term Inhalation | 859.7 mg/m ³ | General population | Local |
| | DNEL | Short term Inhalation | 859.7 mg/m ³ | General population | Systemic |
| | DNEL | Short term Inhalation | 960 mg/m ³ | Workers | Local |
| | DNEL | Short term Inhalation | 960 mg/m ³ | Workers | Systemic |

PNECs

No PNECs available.

8.2 Exposure controls

Appropriate engineering controls : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. Recommended : 1 - 4 hours (breakthrough time): nitrile rubber 4 - 8 hours (breakthrough time): Viton®/butyl rubber

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Refer to European Standard EN 1149 for further information on material and design requirements and test methods.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Recommended : organic vapor (Type AX) and particulate filter

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SECTION 8: Exposure controls/personal protection

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state : Aerosol.
Color : Silver.
Odor : Characteristic. [Strong]
Odor threshold : Not available.
pH : Not applicable.
Melting point/freezing point : Not available.
Initial boiling point and boiling range : <0°C
Flash point : Closed cup: -97°C
Evaporation rate : Not available.
Flammability (solid, gas) : Extremely flammable in the presence of the following materials or conditions: open flames, sparks and static discharge.
Highly flammable in the presence of the following materials or conditions: heat.
Upper/lower flammability or explosive limits : Not available.
Vapor pressure : Not available.
Vapor density : Not available.
Relative density : Not available.
Density : Not available.
Solubility(ies) : Insoluble in the following materials: cold water and hot water.
Partition coefficient: n-octanol/ water : Not available.
Auto-ignition temperature : Not available.
Decomposition temperature : Not available.
Viscosity : Kinematic (40°C): >0.205 cm²/s
Remarks : Not available.
Explosive properties : Not available.
Oxidizing properties : Not available.

9.2 Other information

Fire point : >200°C
Solubility in water : Not available.
Aerosol product
Type of aerosol : Spray
Heat of combustion : 26.25 kJ/g

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SECTION 10: Stability and reactivity

- 10.1 Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- 10.2 Chemical stability** : The product is stable.
- 10.3 Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- 10.4 Conditions to avoid** : Avoid all possible sources of ignition (spark or flame).
- 10.5 Incompatible materials** : No specific data.
- 10.6 Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|--|----------------------|---------|--------------|----------|
| acetone | LD50 Oral | Rat | 5800 mg/kg | - |
| ethyl acetate | LD50 Oral | Rat | 5620 mg/kg | - |
| xylene | LC50 Inhalation Gas. | Rat | 5000 ppm | 4 hours |
| Solvent naphtha (petroleum), light arom. | LD50 Oral | Rat | 4300 mg/kg | - |
| | LD50 Oral | Rat | 8400 mg/kg | - |
| n-butyl acetate | LD50 Dermal | Rabbit | >17600 mg/kg | - |
| | LD50 Oral | Rat | 10768 mg/kg | - |

Conclusion/Summary : Not available.

Acute toxicity estimates

| Route | |
|--------------------|----------------|
| Dermal | 14666.67 mg/kg |
| Inhalation (gases) | 66666.67 ppm |

Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|-------------------------|--------------------------|---------|-------|-----------------|-------------|
| acetone | Eyes - Mild irritant | Human | - | 186300 ppm | - |
| | Eyes - Mild irritant | Rabbit | - | 10 UI | - |
| | Eyes - Moderate irritant | Rabbit | - | 24 hours 20 mg | - |
| | Eyes - Severe irritant | Rabbit | - | 20 mg | - |
| | Skin - Mild irritant | Rabbit | - | 24 hours 500 mg | - |
| | Skin - Mild irritant | Rabbit | - | 395 mg | - |
| xylene | Eyes - Mild irritant | Rabbit | - | 87 mg | - |
| | Eyes - Severe irritant | Rabbit | - | 24 hours 5 | - |

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SECTION 11: Toxicological information

| | | | | mg | |
|---|--------------------------|--------|---|-----------------|---|
| Solvent naphtha (petroleum), light arom. n-butyl acetate | Skin - Mild irritant | Rat | - | 8 hours 60 UI | - |
| | Skin - Moderate irritant | Rabbit | - | 24 hours 500 mg | - |
| | Skin - Moderate irritant | Rabbit | - | 100 % | - |
| | Eyes - Mild irritant | Rabbit | - | 24 hours 100 UI | - |
| | Eyes - Moderate irritant | Rabbit | - | 100 mg | - |
| | Skin - Moderate irritant | Rabbit | - | 24 hours 500 mg | - |

Conclusion/Summary

Skin : Irritating to skin.

Eyes : Irritating to eyes.

Sensitization

Conclusion/Summary : Not available.

Mutagenicity

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

| Product/ingredient name | Category | Route of exposure | Target organs |
|--|------------|-------------------|------------------------------|
| acetone | Category 3 | - | Narcotic effects |
| ethyl acetate | Category 3 | - | Narcotic effects |
| xylene | Category 3 | - | Respiratory tract irritation |
| Solvent naphtha (petroleum), light arom. | Category 3 | - | Respiratory tract irritation |
| | Category 3 | - | Narcotic effects |
| n-butyl acetate | Category 3 | - | Narcotic effects |

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

| Product/ingredient name | Result |
|--|--------------------------------|
| xylene | ASPIRATION HAZARD - Category 1 |
| Solvent naphtha (petroleum), light arom. | ASPIRATION HAZARD - Category 1 |

Information on the likely routes of exposure : Not available.

SECTION 11: Toxicological information

Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
- Skin contact** : Defatting to the skin. May cause skin dryness and irritation.
- Ingestion** : Can cause central nervous system (CNS) depression.

Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness
- Skin contact** : Adverse symptoms may include the following:
irritation
dryness
cracking
- Ingestion** : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

Long term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

Potential chronic health effects

Not available.

- Conclusion/Summary** : Not available.
- General** : Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis.
- Carcinogenicity** : No known significant effects or critical hazards.
- Mutagenicity** : No known significant effects or critical hazards.
- Teratogenicity** : No known significant effects or critical hazards.
- Developmental effects** : No known significant effects or critical hazards.
- Fertility effects** : No known significant effects or critical hazards.
- Other information** : Not available.

SECTION 12: Ecological information

12.1 Toxicity

| Product/ingredient name | Result | Species | Exposure |
|-------------------------|-------------------------------------|--|----------|
| acetone | Acute EC50 20.565 mg/l Marine water | Algae - Ulva pertusa | 96 hours |
| | Acute LC50 6000000 µg/l Fresh water | Crustaceans - Gammarus pulex | 48 hours |
| | Acute LC50 10000 µg/l Fresh water | Daphnia - Daphnia magna | 48 hours |
| | Acute LC50 5600 ppm Fresh water | Fish - Poecilia reticulata | 96 hours |
| | Chronic NOEC 4.95 mg/l Marine water | Algae - Ulva pertusa | 96 hours |
| | Chronic NOEC 0.016 ml/L Fresh water | Crustaceans - Daphniidae | 21 days |
| | Chronic NOEC 0.1 ml/L Fresh water | Daphnia - Daphnia magna - Neonate | 21 days |
| | Chronic NOEC 5 µg/l Marine water | Fish - Gasterosteus aculeatus - Larvae | 42 days |
| ethyl acetate | Acute EC50 2500000 µg/l Fresh water | Algae - Selenastrum sp. | 96 hours |
| | Acute LC50 750000 µg/l Fresh water | Crustaceans - Gammarus pulex | 48 hours |
| | Acute LC50 154000 µg/l Fresh water | Daphnia - Daphnia cucullata | 48 hours |
| | Acute LC50 212500 µg/l Fresh water | Fish - Heteropneustes fossilis | 96 hours |
| | Chronic NOEC 2400 µg/l Fresh water | Daphnia - Daphnia magna | 21 days |
| | Chronic NOEC 75.6 mg/l Fresh water | Fish - Pimephales promelas - Embryo | 32 days |
| xylene | Acute EC50 90 mg/l Fresh water | Crustaceans - Cypris subglobosa | 48 hours |
| | Acute LC50 13400 µg/l Fresh water | Fish - Pimephales promelas | 96 hours |
| n-butyl acetate | Acute LC50 32 mg/l Marine water | Crustaceans - Artemia salina | 48 hours |
| | Acute LC50 18000 µg/l Fresh water | Fish - Pimephales promelas | 96 hours |

Conclusion/Summary : Not available.

12.2 Persistence and degradability

Conclusion/Summary : Not available.

12.3 Bioaccumulative potential

| Product/ingredient name | LogP _{ow} | BCF | Potential |
|--|--------------------|-------------|-----------|
| acetone | -0.23 | - | low |
| ethyl acetate | 0.68 | 30 | low |
| xylene | 3.12 | 8.1 to 25.9 | low |
| Solvent naphtha (petroleum), light arom. | - | 10 to 2500 | high |
| n-butyl acetate | 2.3 | - | low |

12.4 Mobility in soil

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SECTION 12: Ecological information

Soil/water partition coefficient (K_{oc}) : Not available.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Other adverse effects : No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product

Methods of disposal : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste : Yes.

European waste catalogue (EWC)

| Waste code | Waste designation |
|------------|---|
| 16 05 04* | gases in pressure containers (including halons) containing hazardous substances |




Packaging

Methods of disposal : The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

| Type of packaging | European waste catalogue (EWC) |
|-------------------|--------------------------------|
| 15 01 04 | metallic packaging |

Special precautions : This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

SECTION 14: Transport information

| | ADR/RID | IMDG | IATA |
|--|--|--|--|
| 14.1 UN number | UN1950 | UN1950 | UN1950 |
| 14.2 UN proper shipping name | AEROSOLS | AEROSOLS | Aerosols, flammable |
| 14.3 Transport hazard class(es) | 2  | 2.1  | 2.1  |
| 14.4 Packing group | - | - | - |
| 14.5 Environmental hazards | No. | No. | No. |

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SECTION 14: Transport information

Additional information

- ADR/RID** : **Limited quantity** 1 L
Special provisions 190, 327, 625, 344
Tunnel code (D)
- IMDG** : **Emergency schedules** F-D, S-U
Special provisions 63, 190, 277, 327, 344, 381, 959
- IATA** : **Quantity limitation** Passenger and Cargo Aircraft: 75 kg. Packaging instructions: 203. Cargo Aircraft Only: 150 kg. Packaging instructions: 203. Limited Quantities - Passenger Aircraft: 30 kg. Packaging instructions: Y203.
Special provisions A145, A167, A802

14.6 Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Transport in bulk according to IMO instruments : Not available.

SECTION 15: Regulatory information

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

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorization

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Restricted to professional users.

Restrictions on Manufacture, Marketing and Use

| Product name | CAS # | % | Restriction |
|--|------------|----------|-------------|
| Aluminium Spray A-100 | | 100 | 28, 29 |
| butane | 106-97-8 | 10 - 20 | 28, 29 |
| xylene | 1330-20-7 | 5 - 10 | 3 |
| Solvent naphtha (petroleum), light arom. | 64742-95-6 | 2.5 - 10 | 3, 28, 29 |

Other EU regulations

Industrial emissions (integrated pollution prevention and control) - Air : Listed

Industrial emissions (integrated pollution prevention and control) - Water : Not listed

Ozone depleting substances (1005/2009/EU)

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

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SECTION 15: Regulatory information

Aerosol dispensers :

3



Extremely flammable

Seveso Directive

This product is controlled under the Seveso Directive.

Danger criteria

Category

P3a

National regulations

| Product/ingredient name | List name | Name on list | Classification | Notes |
|-------------------------|--|--------------|----------------|-------|
| butane | UK Occupational Exposure Limits EH40 - WEL | butane | Carc. | - |

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

| | |
|--|--|
| Australia | : All components are listed or exempted. |
| Canada | : All components are listed or exempted. |
| China | : All components are listed or exempted. |
| Europe | : All components are listed or exempted. |
| Japan | : All components are listed or exempted. |
| New Zealand | : All components are listed or exempted. |
| Philippines | : All components are listed or exempted. |
| Republic of Korea | : All components are listed or exempted. |
| Taiwan | : All components are listed or exempted. |
| Turkey | : All components are listed or exempted. |
| United States | : All components are active or exempted. |
| Viet Nam | : All components are listed or exempted. |
| 15.2 Chemical Safety Assessment | : This product contains substances for which Chemical Safety Assessments are still required. |

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms

: ATE = Acute Toxicity Estimate
 CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
 DMEL = Derived Minimal Effect Level
 DNEL = Derived No Effect Level
 EUH statement = CLP-specific Hazard statement
 N/A = Not available
 PBT = Persistent, Bioaccumulative and Toxic
 PNEC = Predicted No Effect Concentration
 RRN = REACH Registration Number
 SGG = Segregation Group
 vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

| Classification | Justification |
|---|---|
| Aerosol 1, H222, H229 Eye Irrit. 2, H319 STOT SE 3, H336 Aquatic Chronic 3, H412 | On basis of test data Calculation method Calculation method Calculation method |

Full text of abbreviated H statements

| | |
|--------------------|--|
| H220 H222, H229 | Extremely flammable gas. Extremely flammable aerosol. Pressurized container: may burst if heated. |
| H225 H226 | Highly flammable liquid and vapor. Flammable liquid and vapor. |
| H228 | Flammable solid. |
| H261 | In contact with water releases flammable gas. |
| 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. |
| H411 | Toxic to aquatic life with long lasting effects. |
| H412 | Harmful to aquatic life with long lasting effects. |
| EUH066 | Repeated exposure may cause skin dryness or cracking. |

Full text of classifications [CLP/GHS]

| | |
|--------------------|---|
| Acute Tox. 4 | ACUTE TOXICITY - Category 4 |
| Aerosol 1 | AEROSOLS - Category 1 |
| Aquatic Chronic 2 | AQUATIC HAZARD (LONG-TERM) - Category 2 |
| Aquatic Chronic 3 | AQUATIC HAZARD (LONG-TERM) - Category 3 |
| Asp. Tox. 1 | ASPIRATION HAZARD - Category 1 |
| Eye Irrit. 2 | SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2 |
| Flam. Gas 1A | FLAMMABLE GASES - Category 1A |
| Flam. Liq. 2 | FLAMMABLE LIQUIDS - Category 2 |
| Flam. Liq. 3 | FLAMMABLE LIQUIDS - Category 3 |
| Flam. Sol. 1 | FLAMMABLE SOLIDS - Category 1 |
| Press. Gas (Comp.) | GASES UNDER PRESSURE - Compressed gas |
| Skin Irrit. 2 | SKIN CORROSION/IRRITATION - Category 2 |
| STOT SE 3 | SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 3 |
| Water-react. 2 | SUBSTANCES AND MIXTURES, WHICH IN CONTACT WITH WATER, EMIT FLAMMABLE GASES - Category 2 |

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SECTION 16: Other information

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Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.