

SAFETY DATA SHEET

Rust Reformer Aerosol

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

1.1 Product identifier

Product name : Rust Reformer Aerosol
Product description : Aerosol. Paint.
Product type : Aerosol.

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

| Identified uses | |
|---|--------|
| Industrial uses Consumer uses Professional uses | |
| Uses advised against | Reason |
| None identified. | - |

1.3 Details of the supplier of the safety data sheet

e-mail address of person responsible for this SDS : rpmeurohas@ro-m.com

1.4 Emergency telephone number

Supplier

Telephone number : +44 (0) 207 858 1228
Hours of operation : 24 / 7

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
 Skin Irrit. 2, H315
 Eye Irrit. 2, H319
 STOT SE 3, H336
 STOT RE 2, H373
 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** : Extremely flammable aerosol.
 Pressurised container: May burst if heated.
 Causes serious eye irritation.
 Causes skin irritation.
 May cause drowsiness or dizziness.
 May cause damage to organs through prolonged or repeated exposure.
 Harmful to aquatic life with long lasting effects.
- Precautionary statements**
- General** : P102 - Keep out of reach of children.
 P103 - Read label before use.
 P101 - If medical advice is needed: Have product container or label at hand.
- Prevention** : P211 - Do not spray on an open flame or other ignition source.
 P210 - Keep away from heat, sparks, open flames and hot surfaces. - No smoking.
 P271 - Use only outdoors or in a well-ventilated area.
 P260 - Do not breathe vapour or spray.
 P280 - Wear protective gloves and eye protection:
 - gloves neoprene safety glasses with side-shields.
 P251 - Do not pierce or burn, even after use.
- Response** : P305 - IF IN EYES:
 P351 - Rinse cautiously with water for several minutes.
 P338 - Remove contact lenses, if present and easy to do. Continue rinsing.
 P337 - If eye irritation persists:
 P313 - Get medical attention.
 P302 - IF ON SKIN:
 P352 - Wash with plenty of soap and water.
- Storage** : P410 + P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C.
- Disposal** : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Hazardous ingredients** : acetone; xylene (mixture of isomeres)
- Supplemental label elements** : Not applicable.
- Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles** : Not applicable.
- Special packaging requirements**
- Containers to be fitted with child-resistant fastenings** : Not applicable.
- Tactile warning of danger** : Yes, applicable.
- 2.3 Other hazards**
- Other hazards which do not result in classification** : None known.

SECTION 3: Composition/information on ingredients

- 3.2 Mixtures** : Mixture

SECTION 3: Composition/information on ingredients

| Product/ingredient name | Identifiers | % | Classification | |
|---|--|-----------|--|---------|
| | | | Regulation (EC) No. 1272/2008 [CLP] | Type |
| liquefied petroleum gas | REACH #: Annex V EC: 270-704-2 CAS: 68476-85-7 Index: 649-202-00-6 | ≥25 - ≤50 | Flam. Gas 1, H220 | [2] |
| acetone | REACH #: 01-2119471330-49 EC: 200-662-2 CAS: 67-64-1 Index: 606-001-00-8 | ≥25 - ≤50 | Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336 EUH066 | [1] [2] |
| xylene (mixture of isomeres) | REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7 | ≥10 - ≤25 | Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 STOT RE 2, H373 Asp. Tox. 1, H304 | [1] [2] |
| hydrocarbons, C9-C11, n-/ iso-/ cyclo-alkanes, < 2% aromatics | REACH #: 01-2119463258-33 EC: 919-857-5 Index: 649-327-00-6 | ≤5 | Flam. Liq. 3, H226 STOT SE 3, H336 Asp. Tox. 1, H304 EUH066 | [1] [2] |
| 1-methoxy-2-propanol | REACH #: 01-2119457435-35 EC: 203-539-1 CAS: 107-98-2 Index: 603-064-00-3 | ≤3 | Flam. Liq. 3, H226 STOT SE 3, H336 | [1] [2] |
| ethylbenzene | REACH #: 01-2119489370-35 EC: 202-849-4 CAS: 100-41-4 Index: 601-023-00-4 | ≤3 | Flam. Liq. 2, H225 Acute Tox. 4, H332 STOT RE 2, H373 (hearing organs) Asp. Tox. 1, H304 | [1] [2] |
| trizinc bis (orthophosphate) | REACH #: 02-2119485044-40 EC: 231-944-3 CAS: 7779-90-0 Index: 030-011-00-6 | ≤1 | Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1) | [1] |
| zinc oxide | REACH #: 01-2119463881-32 EC: 215-222-5 CAS: 1314-13-2 Index: 030-013-00-7 | ≤0,3 | Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1) | [1] |
| | | | See Section 16 for the full text of the H statements declared above. | |

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

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

SECTION 4: First aid measures

4.1 Description of first aid measures

- General** : In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and seek medical advice.
- Eye contact** : Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.
- Inhalation** : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
- Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.
- Ingestion** : If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.
- 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

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 for details.

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

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
redness
- 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.

SECTION 4: First aid measures

Specific treatments : No specific treatment.

See toxicological information (Section 11)

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Recommended: alcohol-resistant foam, CO₂, powders, water spray.

Unsuitable extinguishing media : Do not use water jet.

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 thermal decomposition 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.

Additional information : Pressurised container: May burst if heated. Bursting aerosol containers may be propelled from a fire at high speed. Do not puncture, incinerate or store the container at temperatures above 49°C (120°F) or in direct sunlight.

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 pressurised 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 spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialised 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".

SECTION 6: Accidental release measures

6.2 Environmental precautions : Avoid dispersal of spilt 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 material for containment and cleaning up

Small spill : 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.

Large spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product.

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 : Prevent the creation of flammable or explosive concentrations of vapours in air and avoid vapour concentrations higher than the occupational exposure limits. In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard. Mixture may charge electrostatically: always use earthing leads when transferring from one container to another. Operators should wear antistatic footwear and clothing and floors should be of the conducting type. Keep away from heat, sparks and flame. No sparking tools should be used. Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates, spray or mist arising from the application of this mixture. Avoid inhalation of dust from sanding. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Put on appropriate personal protective equipment (see Section 8). Never use pressure to empty. Container is not a pressure vessel. Always keep in containers made from the same material as the original one. Comply with the health and safety at work laws. Do not allow to enter drains or watercourses.

Information on fire and explosion protection
Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air.

When operators, whether spraying or not, have to work inside the spray booth, ventilation is unlikely to be sufficient to control particulates and solvent vapour in all cases. In such circumstances they should wear a compressed air-fed respirator during the spraying process and until such time as the particulates and solvent vapour concentration has fallen below the exposure limits.

7.2 Conditions for safe storage, including any incompatibilities

SECTION 7: Handling and storage

Store in accordance with local regulations.

Notes on joint storage

Keep away from: oxidising agents, strong alkalis, strong acids.

Additional information on storage conditions

Observe label precautions. Do not store above the following temperature: 35°C (95°F). Store in a dry, cool and well-ventilated area. Keep away from heat and direct sunlight. Keep away from sources of ignition. No smoking. Prevent unauthorised access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Seveso Directive - Reporting thresholds (in tonnes)**Named substances**

| Name | Notification and MAPP threshold | Safety report threshold |
|------|---------------------------------|-------------------------|
| LPG | 50 | 200 |

Danger criteria

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

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 |
|---|--|
| liquefied petroleum gas | EH40/2005 WELs (United Kingdom (UK), 12/2011). STEL: 2180 mg/m ³ 15 minutes. STEL: 1250 ppm 15 minutes. TWA: 1750 mg/m ³ 8 hours. TWA: 1000 ppm 8 hours. |
| acetone | EH40/2005 WELs (United Kingdom (UK), 12/2011). STEL: 3620 mg/m ³ 15 minutes. STEL: 1500 ppm 15 minutes. TWA: 500 ppm 8 hours. TWA: 1210 mg/m ³ 8 hours. |
| xylene (mixture of isomeres) | EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed through skin. STEL: 441 mg/m ³ 15 minutes. STEL: 100 ppm 15 minutes. TWA: 220 mg/m ³ 8 hours. TWA: 50 ppm 8 hours. |
| hydrocarbons, C9-C11, n-/ iso-/ cyclo-alkanes, < 2% aromatics | EH40/2005 WELs (United Kingdom (UK), 8/2007). STEL: 850 mg/m ³ , (as turpentine (150 ppm)) 15 minutes. Form: Vapour TWA: 566 mg/m ³ , (as turpentine (100 ppm)) 8 hours. Form: Vapour |
| 1-methoxy-2-propanol | EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed through skin. STEL: 560 mg/m ³ 15 minutes. |

SECTION 8: Exposure controls/personal protection

| | |
|--------------|---|
| ethylbenzene | STEL: 150 ppm 15 minutes. TWA: 375 mg/m ³ 8 hours. TWA: 100 ppm 8 hours. EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed through skin. STEL: 552 mg/m ³ 15 minutes. STEL: 125 ppm 15 minutes. TWA: 441 mg/m ³ 8 hours. TWA: 100 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 |
|---|------|------------------------|-------------------------|------------|----------|
| hydrocarbons, C9-C11, n-/ iso-/ cyclo-alkanes, < 2% aromatics | DNEL | Long term Dermal | 208 mg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Inhalation | 871 mg/m ³ | Workers | Systemic |
| | DNEL | Long term Oral, Dermal | 125 mg/kg bw/day | Consumers | Systemic |
| | DNEL | Long term Inhalation | 185 mg/m ³ | Consumers | Systemic |
| 1-methoxy-2-propanol | DNEL | Short term Inhalation | 553,5 mg/m ³ | Workers | Local |
| | DNEL | Long term Inhalation | 369 mg/m ³ | Workers | Systemic |
| | DNEL | Long term Dermal | 50,6 mg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Inhalation | 43,9 mg/m ³ | Consumers | Systemic |
| trizinc bis(orthophosphate) | DNEL | Long term Dermal | 18,1 mg/kg bw/day | Consumers | Systemic |
| | DNEL | Long term Oral | 3,3 mg/kg bw/day | Consumers | Systemic |
| | DNEL | Long term Inhalation | 5 mg/m ³ | Workers | Systemic |
| | DNEL | Long term Inhalation | 2,5 mg/m ³ | Consumers | Systemic |
| zinc oxide | DNEL | Long term Dermal | 83 mg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Dermal | 83 mg/kg bw/day | Consumers | Systemic |
| | DNEL | Long term Oral | 0,83 mg/kg bw/day | Consumers | Systemic |
| | DNEL | Long term Inhalation | 5 mg/m ³ | Workers | Systemic |
| | DNEL | Long term Inhalation | 2,5 mg/m ³ | Consumers | Systemic |
| | DNEL | Long term Dermal | 83 mg/kg bw/day | Workers | Systemic |

SECTION 8: Exposure controls/personal protection

| | | | | | |
|--|------|------------------|-----------------------|-----------|----------|
| | DNEL | Long term Dermal | 83 mg/kg bw/day | Consumers | Systemic |
| | DNEL | Long term Oral | 0,83 mg/ kg bw/day | Consumers | Systemic |

PNECs

| Product/ingredient name | Compartment Detail | Value | Method Detail |
|-----------------------------|------------------------|----------------|---------------|
| 1-methoxy-2-propanol | Fresh water | 10 mg/l | - |
| | Fresh water sediment | 41,6 mg/l | - |
| | Marine water sediment | 4,17 mg/l | - |
| | Soil | 2,47 mg/l | - |
| | Sewage Treatment Plant | 100 mg/l | - |
| trizinc bis(orthophosphate) | Fresh water | 48,1 µg/l | - |
| | Marine | 14,2 µg/l | - |
| | Fresh water sediment | 550,2 mg/kg | - |
| | Marine water sediment | 263,9 mg/kg | - |
| | Soil | 249,4 mg/kg | - |
| zinc oxide | Sewage Treatment Plant | 121,4 µg/l | - |
| | Fresh water | 25,6 µg/l | - |
| | Marine | 7,6 µg/l | - |
| | Sewage Treatment Plant | 64,7 µg/l | - |
| | Fresh water sediment | 146 mg/kg dwt | - |
| | Marine water sediment | 70,3 mg/kg dwt | - |
| | Soil | 44,3 mg/kg dwt | - |

8.2 Exposure controls

Appropriate engineering controls : Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapours below the OEL, suitable respiratory protection must be worn.

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. Recommended: safety glasses with side-shields (EN 166)

Skin protection

Hand protection

There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.

The breakthrough time must be greater than the end use time of the product.

The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.

Gloves should be replaced regularly and if there is any sign of damage to the glove material.

Always ensure that gloves are free from defects and that they are stored and used correctly.

The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance.

Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.

SECTION 8: Exposure controls/personal protection

- Gloves** : For prolonged or repeated handling, use the following type of gloves:
- Recommended: > 8 hours (breakthrough time): neoprene (0.65mm)
- The recommendation for the type or types of glove to use when handling this product is based on information from the following source:
- EN 374-3 : 2003
- The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.
- 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. Recommended: disposable overall (EN 1149-1) .
- 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 vapour (Type A) and particulate filter (as filter combination A-P2). (EN 140)
- 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** : Liquid. [Aerosol.]
- Colour** : Black.
- Odour** : Solvent-like [Slight]
- Odour threshold** : Not available.
- pH** : Not available.
- Melting point/freezing point** : Not available.
- Initial boiling point and boiling range** : Not available.
- Flash point** : Closed cup: -70°C
- Evaporation rate** : Not available.
- Flammability (solid, gas)** : Highly flammable in the presence of the following materials or conditions: open flames, sparks and static discharge and heat.
Slightly flammable in the presence of the following materials or conditions: shocks and mechanical impacts.
In use, may form flammable/explosive vapour-air mixture. Vapour may travel a considerable distance to source of ignition and flash back.
- Upper/lower flammability or explosive limits** : Lower: 3%
Upper: 18%
- Vapour pressure** : 400 kPa [room temperature]
- Vapour density** : >1 [Air = 1]
- Relative density** : 0,76
- Solubility(ies)** : Very slightly soluble in the following materials: cold water and hot water.

SECTION 9: Physical and chemical properties

Partition coefficient: n-octanol/ water : Not available.

Auto-ignition temperature : 405°C

Decomposition temperature : Not available.

Viscosity : Not available.

Explosive properties : Highly explosive in the presence of the following materials or conditions: open flames, sparks and static discharge, heat and shocks and mechanical impacts. Pressurised container: protect from sunlight and do not expose to temperature exceeding 50°C. Do not pierce or burn, even after use. Do not puncture, incinerate or store the container at temperatures above 49°C (120°F) or in direct sunlight. Container explosion may occur under fire conditions or when heated. Bursting aerosol containers may be propelled from a fire at high speed.

Oxidising properties : Not available.

9.2 Other information

Type of aerosol : Spray

Heat of combustion : 14,54 kJ/g

No additional information.

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 : Stable under recommended storage and handling conditions (see Section 7).

10.3 Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid : When exposed to high temperatures may produce hazardous decomposition products.

10.5 Incompatible materials : Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids.

10.6 Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced. If involved in a fire, toxic gases including CO, CO₂ and smoke can be generated.

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 | - |
| xylene (mixture of isomers) | LC50 Inhalation Gas. | Rat | 5000 ppm | 4 hours |
| | LC50 Inhalation Gas. | Rat | 6670 ppm | 4 hours |
| | LD50 Oral | Rat | 4300 mg/kg | - |
| 1-methoxy-2-propanol | TDLo Dermal | Rabbit | 4300 mg/kg | - |
| | LC50 Inhalation Vapour | Rat | 55000 mg/m ³ | 4 hours |
| | LD50 Dermal | Rabbit | 13 g/kg | - |
| ethylbenzene | LD50 Oral | Rat | 6600 mg/kg | - |
| | LC50 Inhalation Vapour | Rat | 50000 mg/m ³ | 2 hours |
| | LCLo Inhalation Vapour | Rat | 4000 ppm | 4 hours |
| trizinc bis(orthophosphate) | LD50 Oral | Rat | 3500 mg/kg | - |
| | LC50 Inhalation Dusts and | Rat | >5,7 mg/l | 4 hours |

SECTION 11: Toxicological information

| | | | | |
|------------|---------------------------------|-------|-------------------------|---------|
| zinc oxide | mists LD50 Oral | Rat | >5000 mg/kg | - |
| | LC50 Inhalation Dusts and mists | Mouse | 2500 mg/m ³ | 4 hours |
| | LC50 Inhalation Dusts and mists | Rat | >5700 mg/m ³ | 4 hours |
| | LD50 Oral | Rat | >15 g/kg | - |

Conclusion/Summary : Based on available data, the classification criteria are not met.

Acute toxicity estimates

Not available.

Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|------------------------------|--------------------------|---------|-------|--------------------------|-------------|
| acetone | Eyes - Mild irritant | Human | - | 186300 parts per million | - |
| | Eyes - Mild irritant | Rabbit | - | 10 microliters | - |
| | Eyes - Moderate irritant | Rabbit | - | 24 hours 20 milligrams | - |
| | Eyes - Severe irritant | Rabbit | - | 20 milligrams | - |
| | Skin - Mild irritant | Rabbit | - | 24 hours 500 milligrams | - |
| xylene (mixture of isomeres) | Skin - Mild irritant | Rabbit | - | 395 milligrams | - |
| | Eyes - Mild irritant | Rabbit | - | 87 milligrams | - |
| | Eyes - Severe irritant | Rabbit | - | 24 hours 5 milligrams | - |
| | Skin - Mild irritant | Rat | - | 8 hours 60 microliters | - |
| 1-methoxy-2-propanol | Skin - Moderate irritant | Rabbit | - | 24 hours 500 milligrams | - |
| | Eyes - Mild irritant | Rabbit | - | 100 Percent | - |
| | Skin - Mild irritant | Rabbit | - | 24 hours 500 milligrams | - |
| ethylbenzene | Skin - Mild irritant | Rabbit | - | 500 milligrams | - |
| | Eyes - Severe irritant | Rabbit | - | 24 hours 15 milligrams | - |
| zinc oxide | Skin - Mild irritant | Rabbit | - | 24 hours 500 milligrams | - |
| | Eyes - Mild irritant | Rabbit | - | 24 hours 500 milligrams | - |

Conclusion/Summary

Skin : Causes skin irritation.

Eyes : Causes serious eye irritation.

Respiratory : May cause drowsiness or dizziness. May cause damage to organs through prolonged or repeated exposure if inhaled.

Sensitisation

| Product/ingredient name | Route of exposure | Species | Result |
|--|-------------------|---------|-----------------|
| hydrocarbons, C9-C11, n-/iso-/ cyclo-alkanes, < 2% aromatics | skin | Rabbit | Not sensitizing |

Conclusion/Summary

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

SECTION 11: Toxicological information

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

Mutagenicity

Conclusion/Summary : Based on available data, the classification criteria are not met.

Carcinogenicity

Conclusion/Summary : Based on available data, the classification criteria are not met.

Reproductive toxicity

Conclusion/Summary : Based on available data, the classification criteria are not met.

Teratogenicity

Conclusion/Summary : Based on available data, the classification criteria are not met.

Specific target organ toxicity (single exposure)

| Product/ingredient name | Category | Route of exposure | Target organs |
|---|------------|-------------------|------------------------------|
| acetone | Category 3 | Not applicable. | Narcotic effects |
| xylene (mixture of isomeres) | Category 3 | Not applicable. | Respiratory tract irritation |
| hydrocarbons, C9-C11, n-/ iso-/ cyclo-alkanes, < 2% aromatics | Category 3 | Not applicable. | Narcotic effects |
| 1-methoxy-2-propanol | Category 3 | Not applicable. | Narcotic effects |

Specific target organ toxicity (repeated exposure)

| Product/ingredient name | Category | Route of exposure | Target organs |
|------------------------------|------------|-------------------|----------------|
| xylene (mixture of isomeres) | Category 2 | Not determined | Not determined |
| ethylbenzene | Category 2 | Not determined | hearing organs |

Aspiration hazard

| Product/ingredient name | Result |
|---|--------------------------------|
| xylene (mixture of isomeres) | ASPIRATION HAZARD - Category 1 |
| hydrocarbons, C9-C11, n-/ iso-/ cyclo-alkanes, < 2% aromatics | ASPIRATION HAZARD - Category 1 |
| ethylbenzene | ASPIRATION HAZARD - Category 1 |

Delayed and immediate effects as well as 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 : Based on available data, the classification criteria are not met.

General : May cause damage to organs through prolonged or repeated exposure.

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**

There are no data available on the mixture itself.
Do not allow to enter drains or watercourses.

The mixture has been assessed following the summation method of the CLP Regulation (EC) No 1272/2008 and is classified for eco-toxicological properties accordingly. See Sections 2 and 3 for details.

| Product/ingredient name | Result | Species | Exposure | |
|--|--|--|------------------------------------|----------|
| acetone | Acute LC50 8,64 to 8098 mg/l Fresh water | Crustaceans - Ceriodaphnia dubia - Neonate | 48 hours | |
| | Acute LC50 7,88 to 7280 mg/l Fresh water | Fish - Pimephales promelas | 96 hours | |
| hydrocarbons, C9-C11, n-/iso-/ cyclo-alkanes, < 2% aromatics | Acute NOEC 100 mg/l | Algae - Pseudokirchneriella subcapitata | 72 hours | |
| | Chronic NOEC 0,23 mg/l | Daphnia spec. | - | |
| 1-methoxy-2-propanol | Chronic NOEC 0,131 mg/l | Fish | - | |
| | Acute EC50 >1000 mg/l | Algae - Selenastrum capricornutum | 7 days | |
| ethylbenzene | Acute LC50 23300 mg/l | Daphnia spec. | 96 hours | |
| | Acute LC50 20800 mg/l | Fish | 96 hours | |
| ethylbenzene | Acute EC50 3600 µg/l Fresh water | Algae - Pseudokirchneriella subcapitata | 96 hours | |
| | Acute EC50 9,46 to 6530 µg/l Fresh water | Crustaceans - Artemia sp. - Nauplii | 48 hours | |
| | Acute EC50 4,4 to 2970 µg/l Fresh water | Daphnia spec. - Daphnia magna - Neonate | 48 hours | |
| | Acute LC50 13,7 to 8780 µg/l Fresh water | Crustaceans - Artemia sp. - Nauplii | 48 hours | |
| | Acute LC50 5200 µg/l Marine water | Crustaceans - Americamysis bahia | 48 hours | |
| | Acute LC50 11 to 9090 µg/l Fresh water | Fish - Pimephales promelas | 96 hours | |
| | Acute LC50 4200 µg/l Fresh water | Fish - Oncorhynchus mykiss | 96 hours | |
| | Chronic NOEC 1000 µg/l Fresh water | Algae - Pseudokirchneriella subcapitata | 96 hours | |
| | trizinc bis(orthophosphate) | Acute EC50 5,7 mg/l | Daphnia spec. - ceriodaphnia dubia | 48 hours |
| | | Acute IC50 1,87 mg/l | Algae - selenastrum capricornutum | 72 hours |

Conclusion/Summary : Based on available data, the classification criteria are not met.

12.2 Persistence and degradability

| Product/ingredient name | Test | Result | Dose | Inoculum |
|---|-----------|--------------------------------|------------------------------|----------|
| xylene (mixture of isomeres) hydrocarbons, C9-C11, n-/iso-/ cyclo-alkanes, < 2% aromatics | - | 90 % - Readily - 5 days | - | - |
| | OECD 301B | >80 % - Readily - 28 days | - | - |
| 1-methoxy-2-propanol | OECD 301F | >80 % - Readily - 28 days | - | - |
| | OECD 301E | 96 % - Readily - 28 days | - | - |
| | - | >90 % - Readily - 5 days | 1,95 gO ₂ /g ThOD | - |
| | OECD 301C | 88 to 92 % - Readily - 28 days | - | - |

Conclusion/Summary : This product has not been tested for biodegradation. Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|--|---------------------------------|-------------------|------------------|
| acetone | - | - | Readily |
| xylene (mixture of isomeres) | - | - | Readily |
| hydrocarbons, C9-C11, n-/iso-/ cyclo-alkanes, < 2% aromatics | - | 100%; < 28 day(s) | Readily |
| 1-methoxy-2-propanol | Fresh water <28 days, 5 to 25°C | - | Readily |
| ethylbenzene | - | - | Readily |

12.3 Bioaccumulative potential

| Product/ingredient name | LogP _{ow} | BCF | Potential |
|--|--------------------|-------------|-----------|
| acetone | -0,23 | - | low |
| xylene (mixture of isomeres) | 3,12 | 8.1 to 25.9 | low |
| hydrocarbons, C9-C11, n-/iso-/ cyclo-alkanes, < 2% aromatics | 5 to 6.5 | - | high |
| 1-methoxy-2-propanol | <1 | <100 | low |
| ethylbenzene | 3,6 | - | low |
| trizinc bis(orthophosphate) | - | 60960 | high |
| zinc oxide | - | 60960 | high |

12.4 Mobility in soil

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

Mobility : Volatile. This product is likely to volatilise rapidly into the air because of its high vapour pressure.

12.5 Results of PBT and vPvB assessment

PBT : Not applicable.

vPvB : Not applicable.

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.

13.1 Waste treatment methods**Product**

Methods of disposal : The generation of waste should be avoided or minimised 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.

Disposal considerations : Do not allow to enter drains or watercourses. Dispose of according to all federal, state and local applicable regulations. If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned. For further information, contact your local waste authority.

European waste catalogue (EWC)

The European Waste Catalogue classification of this product, when disposed of as waste, is:

SECTION 13: Disposal considerations

| Waste code | Waste designation |
|------------|---|
| 20 01 27* | paint, inks, adhesives and resins containing hazardous substances |





Packaging

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

Disposal considerations : Using information provided in this safety data sheet, advice should be obtained from the relevant waste authority on the classification of empty containers. Empty containers must be scrapped or reconditioned. Dispose of containers contaminated by the product in accordance with local or national legal provisions.

Special precautions : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spill material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

| | ADR/RID | ADN | IMDG | IATA |
|--|--|--|--|---|
| 14.1 UN number | UN1950 | UN1950 | UN1950 | UN1950 |
| 14.2 UN proper shipping name | AEROSOLS, Flammable [Limited quantity] | AEROSOLS, Flammable [Limited quantity] | AEROSOLS, Flammable [Limited quantity] | AEROSOLS, Flammable |
| 14.3 Transport hazard class(es) | 2  | 2  | 2.1  | 2.1  |
| 14.4 Packing group | - | - | - | - |
| 14.5 Environmental hazards | No. | No. | No. | No. |
| Additional information | Limited quantity: LQ2 Remarks: (≤ 1L:) Limited Quantity - ADR/IMDG 3.4 ADR Tunnel code: (D) | - | Emergency schedules (EmS): F-D + S-U Remarks: Limited Quantity - ADR/IMDG 3.4 | Passenger and Cargo Aircraft Quantity limitation: 75 kg Packaging instructions: 203 Cargo Aircraft Only Quantity limitation: 150 kg Packaging instructions: 203 Limited Quantities - Passenger Aircraft Quantity limitation: 30 kg Packaging instructions: Y 203 |

SECTION 14: Transport information

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.

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 authorisation

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 : Not applicable.

Other EU regulations

VOC : The provisions of Directive 2004/42/EC on VOC apply to this product. Refer to the product label and/or technical data sheet for further information.

VOC for Ready-for-Use Mixture : Not applicable.

Europe inventory : All components are listed or exempted.

Black List Chemicals (76/464/EEC) :

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

Ozone depleting substances (1005/2009/EU)

Not listed.

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

Not listed.

Aerosol dispensers :

3



Extremely flammable

Seveso Directive

This product is controlled under the Seveso Directive.

Named substances

Name

LPG

Rust Reformer Aerosol

SECTION 15: Regulatory information**Danger criteria****Category**

P3a

National regulations

The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation. The provisions of the national health and safety at work regulations apply to the use of this product at work.

| Product/ingredient name | List name | Name on list | Classification | Notes |
|-------------------------|---|------------------------------|----------------|-------|
| liquefied petroleum gas | UK Occupational Exposure Limits EH40 - WEL | liquefied petroleum gas; LPG | Carc. | - |

References : EH40/2005 Workplace exposure limits
Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2016/918

International regulations**Chemical Weapon Convention List Schedules I, II & III Chemicals**

Not listed.

Montreal Protocol (Annexes A, B, C, E)

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.

CN code : 3208 10 90**UFI Code** : V610-Y0CC-Y007-NA7J**International lists****National inventory**

Australia : Not determined.
Canada : Not determined.
China : At least one component is not listed.
Japan : **Japan inventory (ENCS)**: Not determined.
Japan inventory (ISHL): Not determined.
Malaysia : Not determined.
New Zealand : Not determined.
Philippines : At least one component is not listed.
Republic of Korea : At least one component is not listed.
Taiwan : Not determined.
Turkey : Not determined.
United States : Not determined.

15.2 Chemical safety assessment : No Chemical Safety Assessment has been carried out.

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
- PBT = Persistent, Bioaccumulative and Toxic
- PNEC = Predicted No Effect Concentration
- RRN = REACH Registration Number
- 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 | Expert judgment |
| Skin Irrit. 2, H315 | Calculation method |
| Eye Irrit. 2, H319 | Calculation method |
| STOT SE 3, H336 | Calculation method |
| STOT RE 2, H373 | Calculation method |
| Aquatic Chronic 3, H412 | Calculation method |

Full text of H-phrases referred to in sections 2 and 3

Full text of abbreviated H statements

| | |
|------------|--|
| H220 | Extremely flammable gas. |
| H222, H229 | Extremely flammable aerosol. Pressurised container: May burst if heated. |
| H225 | Highly flammable liquid and vapour. |
| H226 | Flammable liquid and vapour. |
| H304 | May be fatal if swallowed and enters airways. |
| H312 | Harmful in contact with skin. |
| H315 | Causes skin irritation. |
| 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. |
| H400 | Very toxic to aquatic life. |
| H410 | Very toxic to aquatic life with long lasting effects. |
| H412 | Harmful to aquatic life with long lasting effects. |

Full text of classifications [CLP/GHS]

| | |
|-------------------------|--|
| Acute Tox. 4, H312 | ACUTE TOXICITY (dermal) - Category 4 |
| Acute Tox. 4, H332 | ACUTE TOXICITY (inhalation) - Category 4 |
| Aerosol 1, H222, H229 | AEROSOLS - Category 1 |
| Aquatic Acute 1, H400 | SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1 |
| Aquatic Chronic 1, H410 | LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1 |
| Aquatic Chronic 3, H412 | LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3 |
| Asp. Tox. 1, H304 | ASPIRATION HAZARD - Category 1 |
| EUH066 | Repeated exposure may cause skin dryness or cracking. |
| Eye Irrit. 2, H319 | SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2 |
| Flam. Gas 1, H220 | FLAMMABLE GASES - Category 1 |
| Flam. Liq. 2, H225 | FLAMMABLE LIQUIDS - Category 2 |
| Flam. Liq. 3, H226 | FLAMMABLE LIQUIDS - Category 3 |
| Skin Irrit. 2, H315 | SKIN CORROSION/IRRITATION - Category 2 |
| STOT RE 2, H373 | SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2 |
| STOT SE 3, H335 | SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Respiratory tract irritation) - Category 3 |
| STOT SE 3, H336 | SPECIFIC TARGET ORGAN TOXICITY - SINGLE |

SECTION 16: Other information

EXPOSURE (Narcotic effects) - Category 3

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The information in this Safety Data Sheet is based on the present state of knowledge and current legislation. It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications. The product should not be used for purposes other than those shown in Section 1 without first referring to the supplier and obtaining written handling instructions. As the specific conditions of use of the product are outside the supplier's control, the user is responsible for ensuring that the requirements of relevant legislation are complied with. The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation.