# SAFETY DATA SHEET

Rust Loosener and Contact Spray

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

### 1.1 Product identifier

**Product name** : Rust Loosener and Contact Spray

**UFI** : NP50-K0A7-N00G-GPJV

**Product code** : 151040

**Color** : Colorless.

**Product type** : Aerosol.

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

| Identified uses |
|---|
| Aerosol product |

| Uses advised against | Reason |
|---|---|
| Not applicable. | |

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

CIMCO-Werkzeuge
GmbH & Co. KG
Hohenhagener Str. 1-5
D-42855 Remscheid
Tel. +49 (0) 2191 3718-01
Fax +49 (0) 2191 3718-86
info@cimco.de · www.cimco.de

**e-mail address of person responsible for this SDS** : info@cimco.de

### 1.4 Emergency telephone number

**National advisory body/Poison Center**

**Telephone number** : Emergency CONTACT (24-Hour-Number):
GBK GmbH +49 (0)6132-84463

## 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
Aquatic Chronic 3, H412
Asp. Tox. 1, H304

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

## SECTION 2: Hazards identification

**Hazard pictograms** :

**Signal word** : Danger

**Hazard statements** : H222, H229 - Extremely flammable aerosol. Pressurized container: may burst if heated.
H412 - Harmful to aquatic life with long lasting effects.

**Precautionary statements**

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

**Prevention** : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211 - Do not spray on an open flame or other ignition source.
P251 - Do not pierce or burn, even after use.
P273 - Avoid release to the environment.

**Response** : Not applicable.

**Storage** : P410 + P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

**Disposal** : P501 - Dispose of waste according to applicable legislation.

**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.

### 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 | % | Classification | Specific Conc. Limits, M-factors and ATEs | Type |
|---|---|---|---|---|---|
| Hydrocarbons, C10-13, n-alkanes, isoalkanes, cycloalkanes, <2% aromatics | REACH #: 01-2119457273-39<br>EC: 918-481-9 | ≥10 - <20 | Asp. Tox. 1, H304<br>EUH066 | - | [1] |
| propane | REACH #: 01-2119486944-21<br>EC: 200-827-9<br>CAS: 74-98-6<br>Index: 601-003-00-5 | ≥5 - ≤10 | Flam. Gas 1A, H220<br>Press. Gas (Comp.), H280 | - | [1] [2] |
| Butane (containing >= 0.1% butadiene (203-450-8)) | EC: 203-448-7<br>CAS: 106-97-8 | ≥1 - ≤3 | Flam. Gas 1A, H220<br>Press. Gas (Comp.), H280 | - | [1] [2] |

## SECTION 3: Composition/information on ingredients

| | | | | | |
|---|---|---|---|---|---|
| 2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol | EC: 202-414-9<br>CAS: 95-38-5 | ≥0.3 - <1 | Acute Tox. 4, H302<br>Skin Corr. 1B, H314<br>Eye Dam. 1, H318<br>STOT RE 2, H373<br>Aquatic Acute 1, H400<br>Aquatic Chronic 1, H410 | ATE [Oral] = 500 mg/kg<br>M [Acute] = 10<br>M [Chronic] = 1 | [1] |
| (Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine | EC: 203-749-3<br>CAS: 110-25-8 | ≥0.3 - <1 | Acute Tox. 4, H332<br>Skin Irrit. 2, H315<br>Eye Dam. 1, H318<br>Aquatic Acute 1, H400<br>Aquatic Chronic 3, H412 | ATE [Inhalation (vapours)] = 11 mg/l<br>M [Acute] = 1 | [1] [2] |
| Isobutane (Containing >= 0.1% butadiene (203-450-8)) | EC: 200-857-2<br>CAS: 75-28-5 | ≥0.3 - ≤1 | Flam. Gas 1A, H220<br>Press. Gas (Comp.), H280<br>**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 physical, health or environmental hazard

[2] Substance with a workplace exposure limit

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. Get medical attention if irritation occurs.

**Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing.

**Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

**Ingestion** : Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel.

**Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

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

**Over-exposure signs/symptoms**

**Eye contact** : Adverse symptoms may include the following:
irritation
redness

**Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing

**Skin contact** : No specific data.

**Ingestion** : No specific data.

### 4.3 Indication of any immediate medical attention and special treatment needed

## SECTION 4: First aid measures

**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

### 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. 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

## SECTION 6: Accidental release measures

**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 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 spilled 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. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

### 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

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. 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 |
|---|---|
| propane | **TRGS 900 OEL (Germany, 4/2023).**<br>TWA: 1800 mg/m³ 8 hours.<br>PEAK: 7200 mg/m³ 15 minutes.<br>TWA: 1000 ppm 8 hours.<br>PEAK: 4000 ppm 15 minutes.<br>**DFG MAC-values list (Germany, 7/2022).**<br>TWA: 1000 ppm 8 hours.<br>PEAK: 4000 ppm, 4 times per shift, 15 minutes.<br>TWA: 1800 mg/m³ 8 hours.<br>PEAK: 7200 mg/m³, 4 times per shift, 15 minutes. |
| Butane (containing >= 0.1% butadiene (203-450-8)) | **DFG MAC-values list (Germany, 7/2022). [Butane (both isomers)]**<br>TWA: 1000 ppm 8 hours.<br>PEAK: 4000 ppm, 4 times per shift, 15 minutes.<br>TWA: 2400 mg/m³ 8 hours.<br>PEAK: 9600 mg/m³, 4 times per shift, 15 minutes.<br>**TRGS 900 OEL (Germany, 4/2023).**<br>TWA: 2400 mg/m³ 8 hours.<br>PEAK: 9600 mg/m³ 15 minutes.<br>TWA: 1000 ppm 8 hours.<br>PEAK: 4000 ppm 15 minutes. |
| (Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine | **DFG MAC-values list (Germany, 7/2022).**<br>PEAK: 0.1 mg/m³, 4 times per shift, 15 minutes. Form: inhalable fraction<br>TWA: 0.05 mg/m³ 8 hours. Form: inhalable fraction<br>**TRGS 900 OEL (Germany, 4/2023).**<br>PEAK: 0.1 mg/m³ 15 minutes. Form: inhalable fraction<br>TWA: 0.05 mg/m³ 8 hours. Form: inhalable fraction |
| Isobutane (Containing >= 0.1% butadiene (203-450-8)) | **DFG MAC-values list (Germany, 7/2022). [Butane (both isomers)]**<br>TWA: 1000 ppm 8 hours.<br>PEAK: 4000 ppm, 4 times per shift, 15 minutes.<br>TWA: 2400 mg/m³ 8 hours.<br>PEAK: 9600 mg/m³, 4 times per shift, 15 minutes.<br>**TRGS 900 OEL (Germany, 4/2023).**<br>TWA: 2400 mg/m³ 8 hours.<br>PEAK: 9600 mg/m³ 15 minutes.<br>TWA: 1000 ppm 8 hours.<br>PEAK: 4000 ppm 15 minutes. |

**Biological exposure indices**

No exposure indices known.

**Recommended monitoring procedures** : 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

# SECTION 8: Exposure controls/personal protection

documents for methods for the determination of hazardous substances will also be required.

**DNELs/DMELs**

| Product/ingredient name | Type | Exposure | Value | Population | Effects |
|---|---|---|---|---|---|
| 2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol | DNEL | Long term Dermal | 0.06 mg/kg bw/day | Workers | Systemic |
| | DNEL | Long term Inhalation | 0.46 mg/m³ | Workers | Systemic |
| | DNEL | Short term Dermal | 2 mg/kg bw/day | Workers | Systemic |
| | DNEL | Short term Inhalation | 14 mg/m³ | Workers | Systemic |

**PNECs**

No PNECs available.

**8.2 Exposure controls**

**Appropriate engineering controls** : Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, 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: safety glasses with side-shields.

**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): Protective gloves made of nitrile rubber (material thickness of 0,4 mm); EN 374-5 Cat. III 4 - 8 hours (breakthrough time): Protective gloves made of Viton®/ butyl rubber (material thickness of 0,7 mm); EN388 Cat.II / EN374 Cat.III / EN374-2

**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.

## SECTION 8: Exposure controls/personal protection

**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

**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

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

### 9.1 Information on basic physical and chemical properties

**Appearance**

**Physical state** : Gas.

**Color** : Colorless.

**Odor** : Characteristic.

**Odor threshold** : Not available.

**Melting point/freezing point** : Not applicable.

**Initial boiling point and boiling range** : -44.5°C (-48.1°F)

**Flammability** : 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.

**Lower and upper explosion limit** : Lower: 0.7%
Upper: 10.9%

**Flash point** : Closed cup: -97°C (-142.6°F)

**Auto-ignition temperature** : Not applicable.

**Decomposition temperature** : Not available.

**pH** : Not applicable.

**Viscosity** : Not applicable.

Not available.

**Solubility in water** : Not available.

**Partition coefficient: n-octanol/water** : Not applicable.

**Vapor pressure** : 830 kPa (6225.5 mm Hg)

**Relative density** : Not applicable.

**Density** : 0.803 g/cm³ [20°C (68°F)]

**Vapor density** : Not available.

**Particle characteristics**

**Median particle size** : Not applicable.

### 9.2 Other information

#### 9.2.1 Information with regard to physical hazard classes

**Fire point** : 236°C

**Heat of combustion** : 43.919 kJ/g

**Explosive properties** : Not available.

**Oxidizing properties** : Not available.

**Aerosol product**

**Type of aerosol** : Spray

#### 9.2.2 Other safety characteristics

## SECTION 9: Physical and chemical properties

**Miscible with water** : No.

## 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 hazard classes as defined in Regulation (EC) No 1272/2008**

**Acute toxicity**

| Product/ingredient name | Result | Species | Dose | Exposure |
|---|---|---|---|---|
| butane | LC50 Inhalation Vapor | Rat | 658000 mg/m³ | 4 hours |
| isobutane | LC50 Inhalation Vapor | Rat | 658000 mg/m³ | 4 hours |

**Conclusion/Summary** : Not available.

**Acute toxicity estimates**

| Product/ingredient name | Oral (mg/kg) | Dermal (mg/kg) | Inhalation (gases) (ppm) | Inhalation (vapors) (mg/l) | Inhalation (dusts and mists) (mg/l) |
|---|---|---|---|---|---|
| butane | N/A | N/A | N/A | 658 | N/A |
| 2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol | 500 | N/A | N/A | N/A | N/A |
| (Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine | N/A | N/A | N/A | 11 | N/A |
| isobutane | N/A | N/A | N/A | 658 | N/A |

**Irritation/Corrosion**

**Conclusion/Summary** : Not available.

**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)**

Not available.

**Specific target organ toxicity (repeated exposure)**

# SECTION 11: Toxicological information

| Product/ingredient name | Category | Route of exposure | Target organs |
|---|---|---|---|
| 2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol | Category 2 | - | - |

**Aspiration hazard**

| Product/ingredient name | Result |
|---|---|
| Hydrocarbons, C10-13, n-alkanes, isoalkanes, cycloalkanes, <2% aromatics | ASPIRATION HAZARD - Category 1 |

**Information on the likely routes of exposure** : Not available.

**Potential acute health effects**

**Eye contact** : No known significant effects or critical hazards.

**Inhalation** : No known significant effects or critical hazards.

**Skin contact** : No known significant effects or critical hazards.

**Ingestion** : No known significant effects or critical hazards.

**Symptoms related to the physical, chemical and toxicological characteristics**

**Eye contact** : Adverse symptoms may include the following:
irritation
redness

**Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing

**Skin contact** : No specific data.

**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** : No known significant effects or critical hazards.

**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.

**11.2 Information on other hazards**

**11.2.1 Endocrine disrupting properties**

Not available.

**11.2.2 Other information**

## SECTION 11: Toxicological information

Not available.

## SECTION 12: Ecological information

### 12.1 Toxicity

**Conclusion/Summary** : Not available.

### 12.2 Persistence and degradability

**Conclusion/Summary** : Not available.

### 12.3 Bioaccumulative potential

| Product/ingredient name | $LogP_{ow}$ | BCF | Potential |
|---|---|---|---|
| propane | 1.09 | - | Low |
| (Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine | 3.5 to 4.2 | - | Low |
| Isobutane (Containing >= 0.1% butadiene (203-450-8)) | 2.8 | - | Low |

### 12.4 Mobility in soil

**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 Endocrine disrupting properties

Not available.

### 12.7 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**

## SECTION 13: Disposal considerations

**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) | |
|---|---|---|
| Can | 15 01 10* | packaging containing residues of or contaminated by hazardous substances |

**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 | ADN | IMDG | IATA |
|---|---|---|---|---|
| **14.1 UN number or ID number** | UN1950 | UN1950 | UN1950 | UN1950 |
| **14.2 UN proper shipping name** | AEROSOLS | AEROSOLS | AEROSOLS | 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**

**ADR/RID** : **Limited quantity** 1 L
**Special provisions** 190, 327, 625, 344
**Tunnel code** (D)
**ADR Classification Code:** 5F

**ADN** : **Special provisions** 190, 327, 625, 344

**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 Maritime 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

| Product/ingredient name | % | Designation [Usage] |
|---|---|---|
| propane | ≥5 - ≤10 | 40 |

**Labeling** : Not applicable.

### Other EU regulations

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

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

**Explosive precursors** : Not applicable.

#### Ozone depleting substances (1005/2009/EU)

Not listed.

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

Not listed.

#### Persistent Organic Pollutants

Not listed.

**Aerosol dispensers** :

3

Extremely flammable

#### Seveso Directive

This product is controlled under the Seveso Directive.

##### Danger criteria

| Category |
|---|
| P3a |

## Annex VIIA - Labelling for Contents

| Identification | Concentration |
|---|---|
| aliphatic hydrocarbons | 15% or over but less than 30% |

**VOC content** : 25.2 %

**VOC (g/L)** : 202

# SECTION 15: Regulatory information

## National regulations

**Storage class (TRGS 510)** : 2B

### Hazardous incident ordinance

This product is controlled under the Germany Hazardous Incident Ordinance.

**Danger criteria**

| Category | Reference number |
|---|---|
| P3a | 1.2.3.1 |

**Hazard class for water** : 3

**Technical instruction on air quality control** : TA-Luft Number 5.2.5: 12.8-36%
TA-Luft Class I - Number 5.2.7.1.1: 1.1-3.5%
TA-Luft Class I - Number 5.2.5: 0.2-1%

## 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** : Not determined.

**China** : All components are listed or exempted.

**Eurasian Economic Union** : **Russian Federation inventory**: Not determined.

**Japan** : **Japan inventory (CSCL)**: All components are listed or exempted.
**Japan inventory (ISHL)**: Not determined.

**New Zealand** : Not determined.

**Philippines** : Not determined.

**Republic of Korea** : Not determined.

**Taiwan** : Not determined.

**Thailand** : Not determined.

**Turkey** : Not determined.

**United States** : All components are active or exempted.

**Viet Nam** : Not determined.

**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<br>Aquatic Chronic 3, H412<br>Asp. Tox. 1, H304 | On basis of test data<br>Calculation method<br>manual |

**Full text of abbreviated H statements**

| | |
|---|---|
| H220 | Extremely flammable gas. |
| H222, H229 | Extremely flammable aerosol. Pressurized container: may burst if heated. |
| H280 | Contains gas under pressure; may explode if heated. |
| H302 | Harmful if swallowed. |
| H304 | May be fatal if swallowed and enters airways. |
| H314 | Causes severe skin burns and eye damage. |
| H315 | Causes skin irritation. |
| H318 | Causes serious eye damage. |
| H332 | Harmful if inhaled. |
| 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. |
| 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 Acute 1 | AQUATIC HAZARD (ACUTE) - Category 1 |
| Aquatic Chronic 1 | AQUATIC HAZARD (LONG-TERM) - Category 1 |
| Aquatic Chronic 3 | AQUATIC HAZARD (LONG-TERM) - Category 3 |
| Asp. Tox. 1 | ASPIRATION HAZARD - Category 1 |
| Eye Dam. 1 | SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 |
| Flam. Gas 1A | FLAMMABLE GASES - Category 1A |
| Press. Gas (Comp.) | GASES UNDER PRESSURE - Compressed gas |
| Skin Corr. 1B | SKIN CORROSION/IRRITATION - Category 1B |
| Skin Irrit. 2 | SKIN CORROSION/IRRITATION - Category 2 |
| STOT RE 2 | SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 |

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**Notice to reader**

## SECTION 16: Other information

**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.**