Rust Shock 500ml

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

* **1.1. Product identifier**

Trade name/designation:

Rust Shock 500ml

Article No.:
T261001

UFI:
5796-C4Q8-3PQA-SF63

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

Use of the substance/mixture:
Rust remover

1.3. Details of the supplier of the safety data sheet

Supplier:

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

1.4. Emergency telephone number

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

SECTION 2: Hazards identification

* **2.1. Classification of the substance or mixture**

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

Hazard classes and hazard categories	Hazard statements	Classification procedure
aerosol dispensers and lighters *(Aerosol 1)*	H222; H229: Extremely flammable aerosol. Pressurised container: May burst if heated.	On basis of test data.
Aspiration hazard *(Asp. Tox. 1)*	H304: May be fatal if swallowed and enters airways.	Calculation method.
Skin corrosion/irritation *(Skin Irrit. 2)*	H315: Causes skin irritation.	Calculation method.
STOT-repeated exposure *(STOT RE 2)*	H373: May cause damage to organs through prolonged or repeated exposure.	Calculation method.
Hazardous to the aquatic environment *(Aquatic Chronic 3)*	H412: Harmful to aquatic life with long lasting effects.	Calculation method.

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2.2. Label elements

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

Hazard pictograms:

GHS08
Health hazard

GHS07
Exclamation mark

GHS02
Flame

Signal word: Danger

Hazard components for labelling:
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane; Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics; Hydrocarbons, C10-C13, n-alkanes, iso-alkanes, cyclenes, aromatics (2-25 %)

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

Hazard statements for health hazards	
H315	Causes skin irritation.
H373	May cause damage to organs through prolonged or repeated exposure.

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

Supplemental hazard information	
EUH208	Contains methyl salicylate. May produce an allergic reaction.

Precautionary statements Prevention	
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P273	Avoid release to the environment.
P280	Wear protective gloves.

Precautionary statements Response	
P314	Get medical advice/attention if you feel unwell.
P332 + P313	If skin irritation occurs: Get medical advice/attention.

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

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

Additional information:
Formation of explosive mixtures possible without adequate ventilation.

2.3. Other hazards

Other adverse effects:
The mixture does not meet the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006.
The product does not contain any substances with endocrine-disrupting properties.

SECTION 3: Composition/information on ingredients

* **3.2. Mixtures**

Hazardous ingredients / Hazardous impurities / Stabilisers:

Product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]	Concentration
EC No.: 921-024-6 REACH No.: 01-2119475514-35-XXXX	**Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane** Aquatic Chronic 2 (H411), Asp. Tox. 1 (H304), Flam. Liq. 2 (H225), STOT SE 3 (H336), Skin Irrit. 2 (H315)  Danger **Acute Toxicity Estimate** ATE (oral) > 5,000 mg/kg ATE (dermal) > 2,920 mg/kg ATE (inhalation, gases) > 20 ppmV ATE (inhalation, vapour) > 25.2 mg/L	10 – < 20 weight-%
CAS No.: 64742-48-9 EC No.: 918-481-9 REACH No.: 01-2119463258-33	**Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics** Asp. Tox. 1 (H304)  Danger **Acute Toxicity Estimate** ATE (oral) > 8,000 mg/kg ATE (dermal) > 3,160 mg/kg ATE (inhalation, vapour) > 0.004951 mg/L ATE (inhalation, dust/mist) > 4,951 mg/L **Additional information:** EUH066	1 – < 10 weight-%
CAS No.: 64742-82-1 EC No.: 919-164-8 REACH No.: 01-2119473977-17-XXXX	**Hydrocarbons, C10-C13, n-alkanes, iso-alkanes, cyclenes, aromatics (2-25 %)** Aquatic Chronic 3 (H412), Asp. Tox. 1 (H304), STOT RE 1 (H372)  Danger **Acute Toxicity Estimate** ATE (oral) > 15,000 mg/kg ATE (dermal) > 3,400 mg/kg ATE (inhalation, vapour) > 13.1 mg/L ATE (inhalation, dust/mist) 13.1 mg/L **Additional information:** EUH066	< 10 weight-%
CAS No.: 119-36-8 EC No.: 204-317-7 Index No.: 607-749-00-8 REACH No.: 01-2119515671-44-XXXX	**methyl salicylate** Acute Tox. 4 (H302), Aquatic Chronic 3 (H412), Eye Dam. 1 (H318), Repr. 2 (H361d), Skin Sens. 1B (H317)  Danger **Acute Toxicity Estimate** ATE (oral) 890 mg/kg ATE (dermal) > 5,000 mg/kg	0.1 – < 1 weight-%
CAS No.: 95-38-5 EC No.: 202-414-9 REACH No.: 01-2119777867-13-XXXX	**2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol** Acute Tox. 4 (H302), Aquatic Acute 1 (H400), Aquatic Chronic 1 (H410), Eye Dam. 1 (H318), STOT RE 2 (H373), Skin Corr. 1C (H314)  Danger M-factor (acute): 10 M-factor (chronic): 1 **Acute Toxicity Estimate** ATE (oral) 1,265 mg/kg ATE (dermal) > 2,000 mg/kg	0.01 – < 0.1 weight-%

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

SECTION 4: First aid measures

* **4.1. Description of first aid measures**

Following inhalation:
Remove person from danger zone. Fresh air supply, consult a doctor in case of complaints.

In case of skin contact:
Wash with plenty of water and soap. Wash contaminated clothing immediately. In case of skin reactions, consult a physician.

After eye contact:
First rinse with water for a long time, (remove contact lenses if this is easily possible), then consult a doctor.

Following ingestion:
Rinse mouth thoroughly with water. Do not induce vomiting, seek medical help immediately. If vomiting occurs, keep head low so that stomach contents do not enter the lungs.

Self-protection of the first aider:
First aider: Pay attention to self-protection! Never give anything by mouth to an unconscious person!

* **4.2. Most important symptoms and effects, both acute and delayed**
If applicable, delayed symptoms and effects can be found in section 11. or in the routes of intake under section 4.1.
In certain cases, the symptoms of poisoning may only appear after a longer period of time/after several hours. Skin irritation, Dermatitis, Nausea, Vomiting, Aspiration hazard, Pulmonary oedema, Chemical pneumonitis; May cause damage to organs.

* **4.3. Indication of any immediate medical attention and special treatment needed**
Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:
Water spray jet, alcohol resistant foam, Carbon dioxide (CO2), Dry extinguishing powder

Unsuitable extinguishing media:
Full water jet

5.2. Special hazards arising from the substance or mixture

In case of fire may be liberated: Carbon oxides, toxic gases, Nitrogen oxides
Heating causes rise in pressure with risk of bursting.
In use, may form flammable/explosive vapour-air mixture.

5.3. Advice for firefighters

Personal protection equipment: see section 8.
Do not inhale explosion and combustion gases.
Use suitable breathing apparatus.
Full protection suit
Immerse in cold water for a prolonged period.
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
Dispose of waste according to applicable legislation.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Personal precautions:
Personal protection equipment: see section 8.
Provide adequate ventilation. Avoid dust formation with solid or powdery products. Keep away from sources of ignition - No smoking. Avoid contact with skin, eyes and clothes. Leave the danger zone as far as possible, use existing emergency plans if necessary. Special danger of slipping by leaking/spilling product.

6.1.2. For emergency responders

Personal protection equipment:
Personal protection equipment: see section 8

6.2. Environmental precautions

Prevent entry into drains, cellars, work pits or other places where gas accumulation could be dangerous.
Always contact the emergency services in the event of accidental emissions from this product. In case of spillage into water or sewage system, inform the competent authorities.

6.3. Methods and material for containment and cleaning up

For cleaning up:
Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

6.4. Reference to other sections

Further information on proper storage: see section 7.
For further information on personal protective equipment: see section 8.
For further information on disposal: see section 13.

SECTION 7: Handling and storage

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7.1. Precautions for safe handling

Advices on general occupational hygiene

The usual precautions when handling chemicals must be observed. Do not eat, drink, smoke or snort while working. Do not inhale dust/fume/mist. Keep away from food, drink and animal feed. Wash hands before breaks and at the end of work. Ensure good ventilation/extraction at the workplace. Avoid breathing vapours. Avoid contact with skin, eyes and clothes. Take precautionary measures against static discharge. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels:
Store out of reach of unauthorised persons. Do not store the product in passageways and stairways. Store product only in the original packaging and closed. Observe special instructions for aerosols. Observe special storage conditions. Do not store together with oxidising or spontaneously combustible substances. Protect from sunlight. Do no expose to temperatures exceeding 50 °C. Store in a cool dry place. Store in a well-ventilated place.
Storage class (TRGS 510, Germany): 2B – Aerosol dispensers and lighters

7.3. Specific end use(s)

No data available

SECTION 8: Exposure controls/personal protection

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8.1. Control parameters

8.1.1. Occupational exposure limit values

Limit value type (country of origin)	**Substance name**	**① Long-term occupational exposure limit value ② Short-term occupational exposure limit value ③ Instantaneous value ④ Monitoring and observation processes ⑤ Remark**
MAK (AT)	**Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics** CAS No.: 64742-48-9 EC No.: 918-481-9	① 200 mL/m³ ② 400 mL/m³ ⑤ (für Kohlenwasserstoffgemische mit einem Gehalt an aromatischen Kohlenwasserstoffen von weniger als 1 %, an n-Hexan von weniger als 5 % und an Cyclo-/ Isohexanen von weniger als 25 %)
MAK (AT)	**Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics** CAS No.: 64742-48-9 EC No.: 918-481-9	① 170 mL/m³ ② 340 mL/m³ ⑤ (für Kohlenwasserstoffgemische mit einem Gehalt an aromatischen Kohlenwasserstoffen von weniger als 1 %, an n-Hexan von weniger als 5 % und an Cyclo-/ Isohexanen von 25 % oder mehr)
MAK (AT)	**Hydrocarbons, C10-C13, n-alkanes, iso-alkanes, cyclenes, aromatics (2-25 %)** CAS No.: 64742-82-1 EC No.: 919-164-8	① 20 mL/m³ ② 40 mL/m³ ⑤ (für Kohlenwasserstoffgemische mit einem Gehalt an aromatischen Kohlenwasserstoffen von mehr als 25 %)

Limit value type (country of origin)	Substance name	① Long-term occupational exposure limit value ② Short-term occupational exposure limit value ③ Instantaneous value ④ Monitoring and observation processes ⑤ Remark
MAK (AT)	**Hydrocarbons, C10-C13, n-alkanes, iso-alkanes, cyclenes, aromatics (2-25 %)** CAS No.: 64742-82-1 EC No.: 919-164-8	① 70 mL/m³ ② 140 mL/m³ ⑤ (für Kohlenwasserstoffgemische mit einem Gehalt an aromatischen Kohlenwasserstoffen von 1 % bis 25 % und an Hexanen von weniger als 1 %)
MAK (AT)	**butane** CAS No.: 106-97-8 EC No.: 203-448-7	① 800 ppm (1,900 mg/m³)
MAK (AT)	**butane** CAS No.: 106-97-8 EC No.: 203-448-7	② 1,600 ppm (3,800 mg/m³) ⑤ (max. 3x60 min./Schicht, Momentanwert)
MAK (AT)	**propane** CAS No.: 74-98-6 EC No.: 200-827-9	② 2,000 ppm (3,600 mg/m³) ⑤ (max. 3x60 min./Schicht, Momentanwert)
MAK (AT)	**propane** CAS No.: 74-98-6 EC No.: 200-827-9	① 1,000 ppm (1,800 mg/m³)
MAK (AT)	**Isobutane** CAS No.: 75-28-5 EC No.: 200-857-2	② 1,600 ppm (3,800 mg/m³) ⑤ (max. 3x60 min./SchichtMomentanwert)
MAK (AT)	**Isobutane** CAS No.: 75-28-5 EC No.: 200-857-2	① 800 ppm (1,900 mg/m³)

8.1.2. Biological limit values
No data available

8.1.3. DNEL-/PNEC-values

Substance name	DNEL value	① DNEL type ② Exposure route
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane EC No.: 921-024-6	2,035 mg/m³	① DNEL worker ② Long-term – inhalation, systemic effects
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane EC No.: 921-024-6	608 mg/m³	① DNEL Consumer ② Long-term – inhalation, systemic effects
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane EC No.: 921-024-6	773 mg/kg bw/day	① DNEL worker ② Long-term - dermal, systemic effects
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane EC No.: 921-024-6	300 mg/kg bw/day	① DNEL worker ② Long-term - dermal, systemic effects
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane EC No.: 921-024-6	699 mg/kg bw/day	① DNEL Consumer ② Long-term - dermal, systemic effects
Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane EC No.: 921-024-6	699 mg/kg bw/day	① DNEL Consumer ② Long-term - oral, systemic effects
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics CAS No.: 64742-48-9 EC No.: 918-481-9	871 mg/m³	① DNEL worker ② Long-term – inhalation, systemic effects

Substance name	DNEL value	① DNEL type ② Exposure route
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics CAS No.: 64742-48-9 EC No.: 918-481-9	185 mg/m³	① DNEL Consumer ② Long-term – inhalation, systemic effects
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics CAS No.: 64742-48-9 EC No.: 918-481-9	208 mg/kg bw/day	① DNEL worker ② Long-term - dermal, systemic effects
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics CAS No.: 64742-48-9 EC No.: 918-481-9	125 mg/kg bw/day	① DNEL Consumer ② Long-term - dermal, systemic effects
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics CAS No.: 64742-48-9 EC No.: 918-481-9	125 mg/kg bw/day	① DNEL Consumer ② Long-term - oral, systemic effects
methyl salicylate CAS No.: 119-36-8 EC No.: 204-317-7	17.5 mg/m³	① DNEL worker ② Long-term – inhalation, systemic effects
methyl salicylate CAS No.: 119-36-8 EC No.: 204-317-7	4 mg/m³	① DNEL Consumer ② Long-term – inhalation, systemic effects
methyl salicylate CAS No.: 119-36-8 EC No.: 204-317-7	285 mg/m³	① DNEL worker ② Acute - inhalation, systemic effects
methyl salicylate CAS No.: 119-36-8 EC No.: 204-317-7	213 mg/m³	① DNEL Consumer ② Acute - inhalation, local effects
methyl salicylate CAS No.: 119-36-8 EC No.: 204-317-7	6 mg/kg bw/day	① DNEL worker ② Long-term - dermal, systemic effects
methyl salicylate CAS No.: 119-36-8 EC No.: 204-317-7	3 mg/kg bw/day	① DNEL Consumer ② Long-term - dermal, systemic effects
methyl salicylate CAS No.: 119-36-8 EC No.: 204-317-7	1 mg/kg bw/day	① DNEL Consumer ② Long-term - oral, systemic effects
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol CAS No.: 95-38-5 EC No.: 202-414-9	0.46 mg/m³	① DNEL worker ② Long-term – inhalation, systemic effects
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol CAS No.: 95-38-5 EC No.: 202-414-9	14 mg/m³	① DNEL worker ② Acute - inhalation, systemic effects
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol CAS No.: 95-38-5 EC No.: 202-414-9	0.06 mg/kg bw/day	① DNEL worker ② Long-term - dermal, systemic effects

Substance name	DNEL value	① DNEL type ② Exposure route
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol CAS No.: 95-38-5 EC No.: 202-414-9	2 mg/kg bw/day	① DNEL worker ② Acute – dermal, systemic effects

Substance name	PNEC Value	① PNEC type
methyl salicylate CAS No.: 119-36-8 EC No.: 204-317-7	20 µg/L	① PNEC aquatic, freshwater
methyl salicylate CAS No.: 119-36-8 EC No.: 204-317-7	2 µg/L	① PNEC aquatic, marine water
methyl salicylate CAS No.: 119-36-8 EC No.: 204-317-7	140 mg/L	① PNEC sewage treatment plant
methyl salicylate CAS No.: 119-36-8 EC No.: 204-317-7	0.52 mg/kg bw/day	① PNEC sediment, freshwater
methyl salicylate CAS No.: 119-36-8 EC No.: 204-317-7	0.052 mg/kg bw/day	① PNEC sediment, marine water
methyl salicylate CAS No.: 119-36-8 EC No.: 204-317-7	0.35 mg/kg bw/day	① PNEC soil
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol CAS No.: 95-38-5 EC No.: 202-414-9	0 mg/L	① PNEC aquatic, freshwater
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol CAS No.: 95-38-5 EC No.: 202-414-9	0 mg/L	① PNEC aquatic, marine water
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol CAS No.: 95-38-5 EC No.: 202-414-9	0.27 mg/L	① PNEC sewage treatment plant
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol CAS No.: 95-38-5 EC No.: 202-414-9	0.376 mg/kg	① PNEC sediment, freshwater
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol CAS No.: 95-38-5 EC No.: 202-414-9	0.038 mg/kg	① PNEC sediment, marine water
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol CAS No.: 95-38-5 EC No.: 202-414-9	0.075 mg/kg	① PNEC soil
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol CAS No.: 95-38-5 EC No.: 202-414-9	0 mg/L	① PNEC aquatic, intermittent release

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Ensure good ventilation/extraction at the workplace. If this is not sufficient to keep the concentration below the occupational exposure limits (OEL), suitable respiratory protection must be worn. Applies only if exposure limit values are listed here. Appropriate assessment methods for checking the effectiveness of the protective measures taken include metrological and non-measured determination methods. Such

methods are described by e.g. EN 14042, TRGS 402 (Germany). EN 14042 "Workplace atmospheres. Guidance for the application and use of methods and equipment for the determination of chemical and biological agents". TRGS 402 "Determining and assessing the hazards of activities involving hazardous substances - Inhalation exposure".

8.2.2. Personal protection equipment

Eye/face protection:
Safety goggles with side shields (EN 166).

Skin protection:
Hand protection:
Chemical-resistant protective gloves (EN ISO 374). Protective gloves made of Neoprene® / polychloroprene (EN ISO 374). Protective gloves made of nitrile (EN ISO 374). Protective gloves in Viton® / in fluoroelastomer (EN ISO 374). Minimum layer thickness in mm: 0.5. Permeation time (breakthrough time) in minutes: 480. The breakthrough times determined according to EN 16523-1 were not carried out under practical conditions. A maximum wearing time corresponding to 50% of the breakthrough time is recommended. Hand protection cream recommended. Selection of glove material considering breakthrough times, permeation rates and degradation. The selection of a suitable glove depends not only on the material, but also on other quality features and varies from manufacturer to manufacturer.

Skin protection:
Protective work clothing (e.g. safety shoes EN ISO 20345, long-sleeved work clothing).

Respiratory protection:
Filter A2/P2 EN 14387; Identification colour: brown white
Observe the wear time limits as specified by the manufacturer.

Other protection measures:
The usual precautions when handling chemicals must be observed.

8.2.3. Environmental exposure controls

No data available

SECTION 9: Physical and chemical properties

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9.1. Information on basic physical and chemical properties

Appearance

Physical state: Liquid
Colour: colourless
flammability: No data available
Form: Aerosol
Odour: characteristic

Safety relevant basis data

Parameter	Value	at °C	① Method ② Remark
pH	*not applicable*		② insoluble in: Water
Melting point	*No data available*		
Freezing point	*No data available*		
Initial boiling point and boiling range	*No data available*		
Flash point	-60 °C		② The flash point of the mixture was not tested, but corresponds to that of the ingredient with the lowest value
Evaporation rate	*No data available*		
Auto-ignition temperature	*No data available*		
Upper/lower flammability or explosive limits	*No data available*		
Vapour pressure	4,000 hPa	20 °C	
Vapour density	*No data available*		
Density	0.73 g/mL		
Bulk density	*not applicable*		

Parameter	Value	at °C	① Method ② Remark
Water solubility	practically insoluble		
Dynamic viscosity	*No data available*		
Kinematic viscosity	*No data available*		

9.2. Other information
No data available

SECTION 10: Stability and reactivity

* **10.1. Reactivity**
The product has not been tested.

10.2. Chemical stability
Stable under normal conditions.

10.3. Possibility of hazardous reactions
No dangerous reactions known.

10.4. Conditions to avoid
Direct sunlight, heat, open flames, sparks, hot surfaces, sources of ignition.Pressurised container: May burst if heated.

10.5. Incompatible materials
Avoid contact with strong oxidising agents.

10.6. Hazardous decomposition products
No dangerous decomposition products known.

SECTION 11: Toxicological information

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

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane EC No.: 921-024-6
LD_{50} oral: >5,000 mg/kg (Rat) OECD 401
LD_{50} dermal: >2,920 mg/kg (Rabbit)
LC_{50} Acute inhalation toxicity (gas): >20 ppmV 4 h (Rat) OECD 403
LC_{50} Acute inhalation toxicity (vapour): >25.2 mg/L 4 h (Rat)
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics CAS No.: 64742-48-9 EC No.: 918-481-9
LD_{50} oral: >8,000 mg/kg (Rat)
LD_{50} dermal: >3,160 mg/kg (Rabbit)
LC_{50} Acute inhalation toxicity (vapour): >0.004951 mg/L 4 h (Rat) OECD 403
LC_{50} Acute inhalation toxicity (dust/mist): >4,951 mg/L
Hydrocarbons, C10-C13, n-alkanes, iso-alkanes, cyclenes, aromatics (2-25 %) CAS No.: 64742-82-1 EC No.: 919-164-8
LD_{50} oral: >15,000 mg/kg (Rat)
LD_{50} dermal: >3,400 mg/kg (Rabbit) OECD 403
LC_{50} Acute inhalation toxicity (vapour): >13.1 mg/L 4 h (Rat) OECD 401
LC_{50} Acute inhalation toxicity (dust/mist): 13.1 mg/L 4 h (Rat)
methyl salicylate CAS No.: 119-36-8 EC No.: 204-317-7
LD_{50} oral: 890 mg/kg (#RENDERER_HINT_HIDE_STRING#)
LD_{50} dermal: >5,000 mg/kg (Kaninchen)

2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol CAS No.: 95-38-5 EC No.: 202-414-9
ATE (oral): 1,265 mg/kg
LD_{50} oral: 1,085 mg/kg (Rat)
LD_{50} dermal: >2,000 mg/kg (Rabbit)

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

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

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

Skin corrosion/irritation:
Causes skin irritation. Repeated exposure may cause skin dryness or cracking.

Serious eye damage/irritation:
Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation:
Contains methyl salicylate. May produce an allergic reaction. Contains .... May produce an allergic reaction.

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

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

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

STOT-single exposure:
May cause drowsiness or dizziness.

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

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

Additional information:
No data available

11.2. Information on other hazards
No data available

SECTION 12: Ecological information

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12.1. Toxicity

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane EC No.: 921-024-6
LC_{50}: 11.4 mg/L 4 d (fish, Oncorhynchus mykiss) OECD 203
EC_{50}: 3 mg/L 2 d (crustaceans, Daphnia magna) OECD 202
NOEC: 0.17 mg/L 21 d (crustaceans, Daphnia magna) OECD 211
LOEC: 0.32 mg/L 21 d (crustaceans, Daphnia magna)
EC_{50}: 30 – 100 mg/L 3 d (Algae/water plant, Pseudokirchneriella subcapitata)
LC_{50}: >1 – 10 mg/L 4 d (fish, Pimephales promelas)
EC_{50}: >1 – 10 mg/L 2 d (crustaceans, Daphnia magna)
NOEC: 2.045 mg/L 28 d (fish, Oncorhynchus mykiss)
NOEC: 1 mg/L 21 d (crustaceans, Daphnia magna) OECD 211
ErC_{50}: 10 – 30 mg/L 3 d (Algae/water plant, Pseudokirchneriella subcapitata) OECD 201
LOEC: 0.32 mg/L 21 d (Daphnia magna)
LC_{50}: 11.4 mg/L 4 d (fish)

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics CAS No.: 64742-48-9 EC No.: 918-481-9
LC_{50}: >1,000 mg/L 4 d (fish, Oncorhynchus mykiss (Rainbow trout))
LC_{50}: >1,000 mg/L 4 d (fish, Oncorhynchus mykiss (Rainbow trout))
EC_{50}: >1,000 mg/L 2 d (crustaceans, Daphnia magna)
ErC_{50}: >1,000 mg/L 4 d (Algae/water plant, Scenedesmus subspicatus)
LC_{50}: >1,000 mg/L 4 d (fish, Oncorhynchus mykiss) OECD 203
EC_{50}: >1,000 mg/L (crustaceans, Daphnia magna) OECD 202
Hydrocarbons, C10-C13, n-alkanes, iso-alkanes, cyclenes, aromatics (2-25 %) CAS No.: 64742-82-1 EC No.: 919-164-8
ErC_{50}: 4.1 mg/L 3 d (Algae/water plant, Pseudokirchneriella subcapitata) OECD 201
EC_{50}: 10 – 22 mg/L 2 d (crustaceans, Daphnia magna) OECD 202
NOEC: 0.13 mg/L 28 d (fish, Oncorhynchus mykiss)
NOEC: 0.28 mg/L 21 d (crustaceans, Daphnia magna) OECD 211
NOEC: 0.097 mg/L 21 d (crustaceans, Daphnia magna)
methyl salicylate CAS No.: 119-36-8 EC No.: 204-317-7
LC_{50}: 19.8 mg/L 4 d (fish, Pimephales promelas) OECD 203
EC_{50}: 27 mg/L 3 d (Algae/water plant, Desmodesmus subspicatus) OECD 201
NOEC: 0.79 mg/L 3 d (Algae/water plant, Desmodesmus subspicatus) Regulation (EC) 440/2008 C.3
LC_{50}: 19.8 mg/L 4 d (fish, Pimephales promelas) OECD 203
EC_{50}: 870 mg/L 2 d (crustaceans, Daphnia magna) OECD 202
EC_{50}: 28 mg/L 2 d (crustaceans, Daphnia magna) OECD 202
NOEC: 0.79 mg/L 3 d (Algae/water plant, Desmodesmus subspicatus)
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol CAS No.: 95-38-5 EC No.: 202-414-9
LC_{50}: 0.3 mg/L 4 d (fish, Danio rerio)
ErC_{50}: 0.03 mg/L 3 d (Algae/water plant, Desmodesmus subspicatus) OECD 201
EC_{50}: 0.163 mg/L 2 d (crustaceans, Daphnia magna) OECD 202
LC_{50}: 0.3 mg/L 4 d (fish, Brachydanio rerio) OECD 203
EC_{50}: 0.136 mg/L 2 d (crustaceans, Daphnia magna) OECD 202
EC_{50}: 0.03 mg/L 3 d (Algae/water plant, Desmodesmus subspicatus) OECD 201

Aquatic toxicity:
Harmful to aquatic life with long lasting effects.

*
12.2. Persistence and degradability

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane EC No.: 921-024-6
Biodegradation: Yes, rapidly
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics CAS No.: 64742-48-9 EC No.: 918-481-9
Biodegradation: Yes, rapidly
Hydrocarbons, C10-C13, n-alkanes, iso-alkanes, cyclenes, aromatics (2-25 %) CAS No.: 64742-82-1 EC No.: 919-164-8
Biodegradation: Yes, rapidly
methyl salicylate CAS No.: 119-36-8 EC No.: 204-317-7
Biodegradation: Yes, rapidly
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol CAS No.: 95-38-5 EC No.: 202-414-9
Biodegradation: Yes, slowly

* 12.3. Bioaccumulative potential

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane EC No.: 921-024-6
Log K_{OW}: 5.2
Bioconcentration factor (BCF): 250
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics CAS No.: 64742-48-9 EC No.: 918-481-9
Log K_{OW}: 7.2
Hydrocarbons, C10-C13, n-alkanes, iso-alkanes, cyclenes, aromatics (2-25 %) CAS No.: 64742-82-1 EC No.: 919-164-8
Log K_{OW}: 4.2
methyl salicylate CAS No.: 119-36-8 EC No.: 204-317-7
Log K_{OW}: 2.5
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol CAS No.: 95-38-5 EC No.: 202-414-9
Log K_{OW}: 8.4
Bioconcentration factor (BCF): 371.8

12.4. Mobility in soil

No data available

* 12.5. Results of PBT and vPvB assessment

Hydrocarbons, C6-C7, n-alkanes, isoalkanes, cyclics, <5% n-hexane EC No.: 921-024-6
Results of PBT and vPvB assessment: —
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics CAS No.: 64742-48-9 EC No.: 918-481-9
Results of PBT and vPvB assessment: —
Hydrocarbons, C10-C13, n-alkanes, iso-alkanes, cyclenes, aromatics (2-25 %) CAS No.: 64742-82-1 EC No.: 919-164-8
Results of PBT and vPvB assessment: —
methyl salicylate CAS No.: 119-36-8 EC No.: 204-317-7
Results of PBT and vPvB assessment: —
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol CAS No.: 95-38-5 EC No.: 202-414-9
Results of PBT and vPvB assessment: —

12.6. Endocrine disrupting properties

No data available

* 12.7. Other adverse effects

water hazard class 2: obviously hazardous to water

SECTION 13: Disposal considerations

* 13.1. Waste treatment methods

The waste codes given are recommendations based on the expected use of this product. Due to the specific use and disposal conditions at the user's site, other waste codes may be assigned under certain circumstances. (2014/955/EU)

13.1.1. Product/Packaging disposal

Waste codes/waste designations according to EWC/AVV

Waste code product

16 05 04 *	Gases in pressure containers (including halons) containing hazardous substances

**: Evidence for disposal must be provided.*

Directive 2008/98/EC (Waste Framework Directive)

HP 3	Flammable
HP 5	Specific Target Organ Toxicity (STOT)/Aspiration Toxicity
HP 14	Ecotoxic

Waste code packaging

15 01 04	metallic packaging

Waste treatment options

Appropriate disposal / Product:
Consult the appropriate local waste disposal expert about waste disposal. Dispose of waste according to applicable legislation.

Appropriate disposal / Package:
Do not pierce or burn, even after use. Dispose of waste according to applicable legislation.

Other disposal recommendations:
Do not allow to enter into surface water or drains.

SECTION 14: Transport information

Land transport (ADR/RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
14.1. UN number or ID number			
UN 1950	UN 1950	UN 1950	UN 1950
14.2. UN proper shipping name			
AEROSOLS	AEROSOLS	AEROSOLS	AEROSOLS
14.3. Transport hazard class(es)			
 2.1	 2.1	 2.1	 2.1
14.4. Packing group			
		-	
* **14.5. Environmental hazards**			
No data available	No data available	No data available	No data available
14.6. Special precautions for user			
Special Provisions: 190 | 327 | 344 | 625 **Limited quantity (LQ):** 1 L **Excepted Quantities (EQ):** E0 **Classification code:** 5F **Tunnel restriction code:** (D) **Remark:** Persons engaged in the carriage of dangerous goods shall be instructed. Safety regulations shall be observed by all persons involved in the carriage. Precautions shall be taken to prevent damage.	**Special Provisions:** 190 | 327 | 344 | 625 **Limited quantity (LQ):** 1 L **Excepted Quantities (EQ):** E0 **Classification code:** 5F	**Special Provisions:** 63 | 190 | 277 | 327 | 344 | 381 | 959 **Limited quantity (LQ):** Siehe SV277 **Excepted Quantities (EQ):** E0 **EmS-No.:** F-D, S-U **Remark:** Persons engaged in the carriage of dangerous goods shall be instructed. Safety regulations shall be observed by all persons involved in the carriage. Precautions shall be taken to prevent damage.	**Special Provisions:** A145 | A167 **Limited quantity (LQ):** Y203 **Excepted Quantities (EQ):** E0 **Remark:** Persons engaged in the carriage of dangerous goods shall be instructed. Safety regulations shall be observed by all persons involved in the carriage. Precautions shall be taken to prevent damage.

* **14.7. Maritime transport in bulk according to IMO instruments**

The freight is not carried as bulk goods but as general cargo, therefore not applicable. Minimum quantity regulations are not observed here. Hazard number and packaging code on request. Please observe the special provisions.

SECTION 15: Regulatory information

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

15.1.1. EU legislation

Restrictions on use:

Directive 2012/18/EU
Seveso category Annex I Part 1
P3a FLAMMABLE AEROSOLS; Note Appendix I: 11.1;
Quantity threshold (in tonnes) for dangerous substances referred to in Article 3(10) for the application of - requirements for lower-tier establishments 150 t
Quantity threshold (in tonnes) for dangerous substances referred to in Article 3(10) for the application of - requirements for upper-tier establishments 500 t
Seveso category Annex I Part 2
entry 18, Note Appendix I 19
Quantity threshold (in tons) for use in lower class farms 50 t
Quantity threshold (in tons) for use in upper-tier establishments 200t
Regulation (EC) No. 648/2004 [Detergents regulation]: 30 % and above: aliphatic hydrocarbons. Less than 5 %: aromatic hydrocarbons, fragrances.
methyl salicylate
Ensure compliance with the occupational exposure limit value(s) (OEL) and/or other limit values

Other regulations (EU):

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances [Seveso-III-Directive], Hazard categories:
• P3a 'Flammable' aerosols Category 1 or 2, containing flammable gases Category 1 or 2 or flammable liquids
• E2 Hazardous to the Aquatic Environment in Category Chronic 2

Directive 2004/42/EC on the limitation of emissions of volatile organic compounds:

Volatile organic compounds (VOC) content in percent by weight: 98.35 weight-%

15.1.2. National regulations

No data available

15.2. Chemical Safety Assessment

A chemical safety assessment has not been carried out.

SECTION 16: Other information

* **16.1. Indication of changes**

1.1.	Product identifier
2.1.	Classification of the substance or mixture
2.2.	Label elements
3.2.	Mixtures
4.1.	Description of first aid measures
4.2.	Most important symptoms and effects, both acute and delayed
4.3.	Indication of any immediate medical attention and special treatment needed
7.1.	Precautions for safe handling
8.1.	Control parameters
9.1.	Information on basic physical and chemical properties
10.1.	Reactivity
11.1.	Information on hazard classes as defined in Regulation (EC) No 1272/2008
12.1.	Toxicity
12.2.	Persistence and degradability
12.3.	Bioaccumulative potential
12.5.	Results of PBT and vPvB assessment
12.7.	Other adverse effects
13.1.	Waste treatment methods

14.5.	Environmental hazards
14.7.	Maritime transport in bulk according to IMO instruments
15.1.	Safety, health and environmental regulations/legislation specific for the substance or mixture
16.1.	Indication of changes
16.2.	Abbreviations and acronyms
16.5.	List of relevant hazard statements and/or precautionary statements from sections 2 to 15

*
16.2. Abbreviations and acronyms

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

16.3. Key literature references and sources for data

No data available

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

Hazard classes and hazard categories	Hazard statements	Classification procedure
aerosol dispensers and lighters *(Aerosol 1)*	H222; H229: Extremely flammable aerosol. Pressurised container: May burst if heated.	On basis of test data.
Aspiration hazard *(Asp. Tox. 1)*	H304: May be fatal if swallowed and enters airways.	Calculation method.
Skin corrosion/irritation *(Skin Irrit. 2)*	H315: Causes skin irritation.	Calculation method.
STOT-repeated exposure *(STOT RE 2)*	H373: May cause damage to organs through prolonged or repeated exposure.	Calculation method.

Hazard classes and hazard categories	Hazard statements	Classification procedure
Hazardous to the aquatic environment *(Aquatic Chronic 3)*	H412: Harmful to aquatic life with long lasting effects.	Calculation method.

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

Hazard statements	
H225	Highly flammable liquid and vapour.
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.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H336	May cause drowsiness or dizziness.
H361d	Suspected of damaging the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.
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.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

16.6. Training advice
No data available

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

* Data changed compared with the previous version.