

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

### 1.1. Product identifier

Product form : Mixture  
 Product name : R-213 WD ANTI RUST AGENT  
 UFI : TYMF-K406-E00Y-5M1P  
 Product code : 002777050061  
 Type of product : Lubricating agent  
 Vaporizer : Aerosol  
 Product group : End product

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

#### Relevant identified uses

Intended for general public  
 Main use category : Consumer use, Professional use, Industrial use  
 Use of the substance/mixture : Lubricant

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

TYGRIS LTD  
 UNIT 31  
 KYLE ROAD INDUSTRIAL ESTATE  
 IRVINE  
 SCOTLAND  
 T 01294 311066  
[Jon.Butcher@tygrisindustrial.com](mailto:Jon.Butcher@tygrisindustrial.com)

### 1.4. Emergency telephone number

Country/Area	Organisation/Company	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals- 24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

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

Aerosol, Category 1 H222;H229  
 Specific target organ toxicity – Single exposure, Category 3, H336  
 Narcosis  
 Full text of H- and EUH-statements: see section 16

#### Adverse physicochemical, human health and environmental effects

Pressurised container: May burst if heated. Extremely flammable aerosol. May cause drowsiness or dizziness.

### 2.2. Label elements

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

Hazard pictograms (CLP)



Signal word (CLP)	: Danger
Contains	: Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics
Hazard statements (CLP)	: H222 - Extremely flammable aerosol. H229 - Pressurised container: May burst if heated. H336 - May cause drowsiness or dizziness.
Precautionary statements (CLP)	: P101 - If medical advice is needed, have product container or label at hand. P102 - Keep out of reach of children. 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. P261 - Avoid breathing vapours, spray. P271 - Use only outdoors or in a well-ventilated area. P280 - Wear protective gloves. P264 - Wash hands thoroughly after handling. P312 - Call a POISON CENTER, doctor if you feel unwell. P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C, 122 °F. P501 - Dispose of contents/ container in accordance with local regulations.
EUH-statements	: EUH066 - Repeated exposure may cause skin dryness or cracking.
Child-resistant fastening	: Not applicable
Tactile warning	: Not applicable

### 2.3. Other hazards

Contains no PBT and/or vPvB substances  $\geq 0.1\%$  assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics substance with national workplace exposure limit(s) (PL, CH); substance with a Community workplace exposure limit (Note P)	CAS-No.: 64742-48-9 EC-No.: 919-857-5 EC Index-No.: 649-327-00-6 REACH-no: 01-2119463258-33	$\geq 50$	Flam. Liq. 3, H226 STOT SE 3, H336 Asp. Tox. 1, H304 EUH066
Distillates (petroleum), hydrotreated light naphthenic (Note L)	CAS-No.: 64742-53-6 EC-No.: 265-156-6 EC Index-No.: 649-466-00-2	20 – 25	Asp. Tox. 1, H304
Petroleum gases, liquefied (Contains < 0.1% 1,3-butadiene) substance with national workplace exposure limit(s) (BE, CZ, GB, GR, HR, TR) (Note K)	CAS-No.: 68476-85-7 EC-No.: 270-704-2 EC Index-No.: 649-202-00-6	20 – 25	Flam. Gas 1A, H220 Press. Gas
Diethyl phthalate substance with national workplace exposure limit(s) (AT, BE, BG, DK, EE, ES, FI, FR, GB, GR, HR, IE, LT, LV, PL, PT, SE, IS, NO, MK, CH)	CAS-No.: 84-66-2 EC-No.: 201-550-6	0.1 – 0.2	Not classified

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol	CAS-No.: 95-38-5 EC-No.: 202-414-9 REACH-no: 01-2119777867-13	0.05 – 0.1	Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight) Skin Corr. 1C, H314 Eye Dam. 1, H318 STOT RE 2, H373 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=1)
(Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine substance with national workplace exposure limit(s) (DE, CH)	CAS-No.: 110-25-8 EC-No.: 203-749-3 REACH-no: 01-2119488991-20	0.05 – 0.1	Acute Tox. 4 (Inhalation), H332 (ATE=1.5 mg/l/4h) Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Acute 1, H400 Aquatic Chronic 3, H412
Benzyl acetate substance with national workplace exposure limit(s) (BE, DK, ES, IE, LT, LV, PT, RO)	CAS-No.: 140-11-4 EC-No.: 205-399-7	0.005 – 0.05	Aquatic Chronic 3, H412
(R)-p-mentha-1,8-diene substance with national workplace exposure limit(s) (DE, ES, FI, SI, NO, CH)	CAS-No.: 5989-27-5 EC-No.: 227-813-5 EC Index-No.: 601-096-00-2	0.005 – 0.05	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1, H317 Asp. Tox. 1, H304 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410
Diphenyl ether substance with national workplace exposure limit(s) (AT, BE, BG, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GI, GR, HR, HU, IE, IT, LT, LU, LV, MT, NL, PL, PT, RO, SE, SI, SK, IS, NO, MK, RS, CH); substance with a Community workplace exposure limit	CAS-No.: 101-84-8 EC-No.: 202-981-2	0.005 – 0.05	Eye Irrit. 2, H319 Aquatic Acute 1, H400 Aquatic Chronic 3, H412
p-cymene substance with national workplace exposure limit(s) (DK, EE, LT, SE, IS)	CAS-No.: 99-87-6 EC-No.: 202-796-7 EC Index-No.: 601-094-00-1	0.005 – 0.05	Flam. Liq. 3, H226 Acute Tox. 3 (Inhalation), H331 (ATE=0.5 mg/l/4h) Asp. Tox. 1, H304 Aquatic Chronic 2, H411
Pin-2(3)-ene substance with national workplace exposure limit(s) (BE, EE, ES, LT, PT, SE, NO, CH)	CAS-No.: 80-56-8 EC-No.: 201-291-9	0.0000001 – 0.005	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1, H317 Asp. Tox. 1, H304 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)
Turpentine, oil substance with national workplace exposure limit(s) (AT, BE, BG, CZ, DK, EE, ES, FI, FR, GB, GR, HR, IE, LT, PL, PT, RO, SE, SK, IS, NO, MK, CH, TR)	CAS-No.: 8006-64-2 EC-No.: 232-350-7 EC Index-No.: 650-002-00-6 REACH-no: 01-2119502456-45	0.0000001 – 0.005	Flam. Liq. 2, H225 Acute Tox. 4 (Oral), H302 (ATE=500 mg/kg bodyweight) Acute Tox. 4 (Dermal), H312 (ATE=1100 mg/kg bodyweight) Acute Tox. 4 (Inhalation), H332 (ATE=1.5 mg/l/4h) Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Asp. Tox. 1, H304 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 2, H411

- Note K:** The harmonised classification as a carcinogen or mutagen applies unless it can be shown that the substance contains less than 0,1 % w/w 1,3- butadiene (Einecs No 203-450-8), in which case a classification in accordance with Title II of this Regulation shall be performed also for those hazard classes. Where the substance is not classified as a carcinogen or mutagen, at least the precautionary statements (P102-)P210-P403 shall apply.
- Note L:** The harmonised classification as a carcinogen applies unless it can be shown that the substance contains less than 3 % of dimethyl sulphoxide extract as measured by IP 346 ("Determination of polycyclic aromatics in unused lubricating base oils and asphaltene free petroleum fractions – Dimethyl sulphoxide extraction refractive index method" Institute of Petroleum, London), in which case a classification in accordance with Title II of this Regulation shall be performed also for that hazard class.
- Note P:** Note P : The classification as a carcinogen or mutagen need not apply if it can be shown that the substance contains less than 0,1 % w/w benzene (EINECS No 200-753-7). When the substance is not classified as a carcinogen at least the precautionary statements (P102-)P260-P262- P301 + P310-P331 (Table 3.1) or the S-phrases (2-)23-24-62 (Table 3.2) shall apply. This note applies only to certain complex oil-derived substances in Part 3.

Product subject to CLP Annex I, item 1.1.3.7. The disclosure rules of the components is modified in this case.

Full text of H- and EUH-statements: see section 16

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

- |                                       |   |
|---------------------------------------|---|
| First-aid measures general            | : Call a poison center or a doctor if you feel unwell.                            |
| First-aid measures after inhalation   | : Remove person to fresh air and keep comfortable for breathing.                  |
| First-aid measures after skin contact | : Wash skin with plenty of water.   |
| First-aid measures after eye contact  | : Rinse eyes with water as a precaution.  |
| First-aid measures after ingestion    | : Call a poison center or a doctor if you feel unwell.                            |
| First-aid measures for first aider    | : First aid workers will be equipped with suitable personal protective equipment. |

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

- |                                     |   |
|-------------------------------------|---|
| Symptoms/effects                    | : May cause drowsiness or dizziness.  |
| Symptoms/effects after inhalation   | : Although no appropriate human or animal health effects data are known to exist, this material is expected to be an inhalation hazard. |
| Symptoms/effects after skin contact | : None under normal conditions.   |
| Symptoms/effects after eye contact  | : None under normal conditions.   |
| Symptoms/effects after ingestion    | : None under normal conditions.   |

### 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. Dry powder. Foam. Carbon dioxide. |
| Unsuitable extinguishing media | : Do not use a heavy water stream.               |

### 5.2. Special hazards arising from the substance or mixture

- |  |   |
|--|---|
| Fire hazard                                      | : Extremely flammable aerosol.                |
| Explosion hazard                                 | : Pressurised container: May burst if heated. |
| Hazardous decomposition products in case of fire | : Toxic fumes may be released.                |

### 5.3. Advice for firefighters

- |                                |   |
|--------------------------------|---|
| Firefighting instructions      | : Fight fire from safe distance and protected location. Do not enter fire area without proper protective equipment, including respiratory protection. |
| Protection during firefighting | : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.              |

## SECTION 6: Accidental release measures

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

General measures : Stop leak if safe to do so. Notify authorities if product enters sewers or public waters.  
Absorb spillage to prevent material damage.

#### For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.  
Emergency procedures : Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid breathing dust/fume/gas/mist/vapours/spray.

#### For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".  
Emergency procedures : Evacuate unnecessary personnel. Stop leak if safe to do so.

### 6.2. Environmental precautions

Avoid release to the environment.

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

For containment : Absorb spilled material with sand or earth. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak without risks if possible.  
Methods for cleaning up : Mechanically recover the product.  
Other information : Dispose of materials or solid residues at an authorized site.

### 6.4. Reference to other sections

For further information refer to section 13.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Additional hazards when processed : Not expected to present a significant hazard under anticipated conditions of normal use.  
Precautions for safe handling : Wear personal protective equipment. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Use only outdoors or in a well-ventilated area. Avoid breathing dust/fume/gas/mist/vapours/spray.  
Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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

Technical measures : Keep in a cool, well-ventilated place away from heat.  
Storage conditions : Protect from sunlight. Do not expose to temperatures exceeding 50 °C/ 122 °F. Store locked up. Store in a well-ventilated place. Keep container tightly closed.  
Packaging materials : Store always product in container of same material as original container.

### 7.3. Specific end use(s)

No additional information available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

National occupational exposure and biological limit values

**Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics (64742-48-9)**

**EU - Indicative Occupational Exposure Limit (IOEL)**

Local name	White spirit Type 3
IOEL TWA	116 mg/m <sup>3</sup>
	20 ppm
IOEL STEL	290 mg/m <sup>3</sup>
	50 ppm
Remark	Skin. (Year of adoption 2007)
Regulatory reference	SCOEL Recommendations

**Benzyl acetate (140-11-4)**

**Ireland - Occupational Exposure Limits**

Local name	Benzyl acetate
OEL TWA	10 ppm
Regulatory reference	Chemical Agents Code of Practice 2021

**Turpentine, oil (8006-64-2)**

**Ireland - Occupational Exposure Limits**

Local name	Turpentine
OEL TWA	112 mg/m <sup>3</sup>
	20 ppm
OEL STEL	840 mg/m <sup>3</sup>
	150 ppm
Remark	Advisory OELV (Advisory Occupational Exposure Limit Values), Sens (In the workplace, respiratory or dermal exposures to sensitising agents may occur. Sensitisers may evoke respiratory or dermal reactions, e.g. asthma, rhinitis and allergic contact dermatitis. The "sens" notation alone does not distinguish between respiratory or dermal sensitisation. Chemical agents that are sensitisers present special problems in the workplace. Should an employee become sensitised, subsequent exposure may cause intense responses, even at low exposure concentrations well below the OELV. Exposure should be eliminated or significantly reduced through control measures such as engineering and process controls and use of personal protective equipment (PPE))
Regulatory reference	Chemical Agents Code of Practice 2024

**Diethyl phthalate (84-66-2)**

**Ireland - Occupational Exposure Limits**

Local name	Diethyl phthalate
OEL TWA	5 mg/m <sup>3</sup>
OEL STEL	10 mg/m <sup>3</sup>
Regulatory reference	Chemical Agents Code of Practice 2021

**Diphenyl ether (101-84-8)**

**EU - Indicative Occupational Exposure Limit (IOEL)**

Local name	Diphenyl ether
IOEL TWA	7 mg/m <sup>3</sup>
	1 ppm

Diphenyl ether (101-84-8)	
IOEL STEL	14 mg/m <sup>3</sup>
	2 ppm
Regulatory reference	COMMISSION DIRECTIVE (EU) 2017/164
Ireland - Occupational Exposure Limits	
Local name	Diphenyl ether (vapour)
OEL TWA	7 mg/m <sup>3</sup>
	1 ppm
OEL STEL	14 mg/m <sup>3</sup>
	2 ppm
Remark	IOELV (Indicative Occupational Exposure Limit Values)
Regulatory reference	Chemical Agents Code of Practice 2021

## 8.2. Exposure controls

### Appropriate engineering controls

#### Appropriate engineering controls:

Ensure good ventilation of the work station.

### Personal protection equipment

#### Personal protective equipment:

Wear recommended personal protective equipment.

#### Personal protective equipment symbol(s):



### Eye and face protection

#### Eye protection:

Safety glasses

Eye protection			
Type	Field of application	Characteristics	Standard
Safety glasses			EN 166

### Skin protection

#### Skin and body protection:

Wear suitable protective clothing

Skin and body protection	
Type	Standard
protective clothing	EN ISO 6530

#### Hand protection:

Protective gloves

Hand protection					
Type	Material	Permeation	Thickness (mm)	Penetration	Standard
Disposable gloves, Reusable gloves					EN ISO 374

#### Respiratory protection

##### Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

#### Environmental exposure controls

##### Environmental exposure controls:

Avoid release to the environment.

## SECTION 9: Physical and chemical properties

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

Physical state	: Liquid
Colour	: brown.
Appearance	: Aerosol.
Odour	: Not available
Odour threshold	: Not available
Melting point	: Not applicable
Freezing point	: Not available
Boiling point	: -40 – -2 °C (LPG)
Flammability	: Extremely flammable aerosol.
Explosive properties	: Pressurised container: May burst if heated.
Lower explosion limit	: 1.4 vol % (LPG)
Upper explosion limit	: 10.9 vol % (LPG)
Flash point	: < -40 °C
Auto-ignition temperature	: 365 °C (LPG)
Decomposition temperature	: Not available
pH	: Not available
Viscosity, kinematic	: < 20.5 mm²/s
Solubility	: Not available
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: 590 – 1760 kPa (LPG)
Vapour pressure at 50°C	: Not available
Density	: Not available
Relative density	: Not available
Relative vapour density at 20°C	: Not available
Particle characteristics	: Not applicable

### 9.2. Other information

#### Information with regard to physical hazard classes

% of flammable ingredients : 78.748887904 %

#### Other safety characteristics

Volatility : Volatile

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Extremely flammable aerosol. Pressurised container: May burst if heated.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

### 10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.



### 10.5. Incompatible materials

No additional information available

### 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 (oral) : Not classified  
 Acute toxicity (dermal) : Not classified  
 Acute toxicity (inhalation) : Not classified

#### Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics (64742-48-9)

LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rabbit	> 3160 mg/kg Source: IUCLID

#### Benzyl acetate (140-11-4)

LD50 oral rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
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#### Turpentine, oil (8006-64-2)

LD50 oral rat	2620 mg/kg Source: ECHA
LD50 oral	5760 mg/kg bodyweight
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))
LD50 dermal rabbit	> 2000 mg/kg Source: ECHA
LD50 dermal	5010 mg/kg bodyweight
LC50 Inhalation - Rat	13.7 mg/l air Animal: rat, Animal sex: male, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity), 95% CL: 11,1 - 14,8
LC50 Inhalation - Rat (Dust/Mist)	3425 mg/l
LC50 Inhalation - Rat (Vapours)	9.97 mg/l/4h

#### (R)-p-mentha-1,8-diene (5989-27-5)

LD50 oral rat	> 2000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method)
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#### Pin-2(3)-ene (80-56-8)

LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal))
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#### p-cymene (99-87-6)

LD50 dermal rabbit	> 5000 mg/kg bodyweight Animal: rabbit, Guideline: other:
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Skin corrosion/irritation : Not classified

#### 2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol (95-38-5)

pH	11.1 Remarks on result: 'other:'
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Serious eye damage/irritation : Not classified

#### 2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol (95-38-5)

pH	11.1 Remarks on result: 'other:'
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Respiratory or skin sensitisation : Not classified  
Germ cell mutagenicity : Not classified  
Carcinogenicity : Not classified

Benzyl acetate (140-11-4)	
IARC group	3 - Not classifiable

(R)-p-mentha-1,8-diene (5989-27-5)	
IARC group	3 - Not classifiable

Reproductive toxicity : Not classified  
STOT-single exposure : May cause drowsiness or dizziness.

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics (64742-48-9)	
STOT-single exposure	May cause drowsiness or dizziness.

STOT-repeated exposure : Not classified

2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol (95-38-5)	
NOAEL (oral, rat, 90 days)	20 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test), Guideline: other:
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

Diphenyl ether (101-84-8)	
NOAEL (dermal, rat/rabbit, 90 days)	1000 mg/kg bodyweight Animal: rat

Petroleum gases, liquefied (Contains < 0.1% 1,3-butadiene) (68476-85-7)	
LOAEC (inhalation, rat, gas, 90 days)	12000 ppm Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test), Guideline: other:

Aspiration hazard : Not classified

R-213 WD ANTI RUST AGENT	
Vaporizer	Aerosol
Viscosity, kinematic	< 20.5 mm²/s
Not able to form a pool	Yes

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics (64742-48-9)	
Viscosity, kinematic	< 1 mm²/s Temp.: 'other:' Parameter: 'kinematic viscosity (in mm²/s)'

## 11.2. Information on other hazards

No additional information available

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.  
Hazardous to the aquatic environment, short-term (acute) : Not classified  
Hazardous to the aquatic environment, long-term (chronic) : Not classified

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics (64742-48-9)	
LC50 - Fish [1]	> 1000 mg/l

**Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics (64742-48-9)**

LC50 - Other aquatic organisms [1]	2.6 mg/l Source: IUCLID
EC50 - Other aquatic organisms [1]	> 1000 mg/l waterflea
EC50 - Other aquatic organisms [2]	> 1000 mg/l

**2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol (95-38-5)**

EC50 - Crustacea [1]	0.163 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	0.03 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
EC50 72h - Algae [2]	0.0169 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)

**Benzyl acetate (140-11-4)**

LC50 - Fish [1]	4 mg/l Test organisms (species): Oryzias latipes
EC50 - Crustacea [1]	17 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	110 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
EC50 72h - Algae [2]	92 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
NOEC chronic fish	0.92 mg/l Test organisms (species): Oryzias latipes Duration: '28 d'

**Turpentine, oil (8006-64-2)**

LC50 - Fish [1]	29 mg/l
EC50 - Crustacea [1]	0.475 mg/l Source: ECHA
EC50 - Other aquatic organisms [1]	6.4 mg/l waterflea
EC50 - Other aquatic organisms [2]	17.1 mg/l
EC50 72h - Algae [1]	0.519 mg/l Source: ECHA

**(R)-p-mentha-1,8-diene (5989-27-5)**

LC50 - Fish [1]	720 µg/l Test organisms (species): Pimephales promelas
LC50 - Fish [2]	702 µg/l Test organisms (species): Pimephales promelas
EC50 - Crustacea [1]	0.307 mg/l Test organisms (species): Daphnia magna
EC50 - Crustacea [2]	0.51 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	0.32 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
EC50 72h - Algae [2]	0.214 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)

**Pin-2(3)-ene (80-56-8)**

LC50 - Fish [1]	0.303 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
EC50 - Crustacea [1]	0.475 mg/l Test organisms (species): Daphnia magna

**Diethyl phthalate (84-66-2)**

EC50 96h - Algae [1]	85.6 mg/l Test organisms (species): Pseudokirchneriella subcapitata (previous names: Raphidocelis subcapitata, Selenastrum capricornutum)
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<b>Diphenyl ether (101-84-8)</b>	
LC50 - Fish [1]	4.2 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Crustacea [1]	1.96 mg/l Test organisms (species): Daphnia magna
<b>p-cymene (99-87-6)</b>	
LC50 - Fish [1]	48 mg/l Test organisms (species): Cyprinodon variegatus
EC50 - Crustacea [1]	3.7 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	4.03 mg/l Test organisms (species): Scenedesmus capricornutum
EC50 72h - Algae [2]	2.01 mg/l Test organisms (species): Scenedesmus capricornutum
<b>Petroleum gases, liquefied (Contains &lt; 0.1% 1,3-butadiene) (68476-85-7)</b>	
LC50 - Fish [1]	0.362 mg/l
EC50 - Crustacea [1]	0.018 mg/l
ErC50 algae	7.6 mg/l Source: ECOTOX
<b>12.2. Persistence and degradability</b>	
<b>R-213 WD ANTI RUST AGENT</b>	
Persistence and degradability	Not rapidly degradable
<b>Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, &lt; 2% aromatics (64742-48-9)</b>	
Persistence and degradability	Rapidly degradable
Biodegradation	80 %
<b>Distillates (petroleum), hydrotreated light naphthenic (64742-53-6)</b>	
Persistence and degradability	Not rapidly degradable
<b>2-(2-heptadec-8-enyl-2-imidazolin-1-yl)ethanol (95-38-5)</b>	
Persistence and degradability	Not rapidly degradable
<b>(Z)-N-methyl-N-(1-oxo-9-octadecenyl)glycine (110-25-8)</b>	
Persistence and degradability	Not rapidly degradable
<b>Benzyl acetate (140-11-4)</b>	
Persistence and degradability	Not rapidly degradable
<b>Turpentine, oil (8006-64-2)</b>	
Persistence and degradability	Not rapidly degradable
<b>(R)-p-mentha-1,8-diene (5989-27-5)</b>	
Persistence and degradability	Not rapidly degradable
<b>Pin-2(3)-ene (80-56-8)</b>	
Persistence and degradability	Not rapidly degradable
<b>Diethyl phthalate (84-66-2)</b>	
Persistence and degradability	Not rapidly degradable
<b>Diphenyl ether (101-84-8)</b>	
Persistence and degradability	Not rapidly degradable

**p-cymene (99-87-6)**

Persistence and degradability	Not rapidly degradable
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**Petroleum gases, liquefied (Contains < 0.1% 1,3-butadiene) (68476-85-7)**

Persistence and degradability	Rapidly degradable
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**12.3. Bioaccumulative potential**

**Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, < 2% aromatics (64742-48-9)**

Partition coefficient n-octanol/water (Log Pow)	2.1 – 6 Source: IUCLID
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**Turpentine, oil (8006-64-2)**

Partition coefficient n-octanol/water (Log Pow)	4.16 – 4.83 Source: HSDB
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**Petroleum gases, liquefied (Contains < 0.1% 1,3-butadiene) (68476-85-7)**

Partition coefficient n-octanol/water (Log Pow)	≤ 2.8 Source: IUCLID
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**12.4. Mobility in soil**

No additional information available

**12.5. Results of PBT and vPvB assessment**

No additional information available

**12.6. Endocrine disrupting properties**

No additional information available

**12.7. Other adverse effects**

No additional information available






**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**

Regional waste regulation	: Disposal must be done according to official regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Disposal must be done according to official regulations.
Additional information	: Do not re-use empty containers.
HP Code	: HP3 - "Flammable:" – flammable liquid waste: liquid waste having a flash point below 60 °C or waste gas oil, diesel and light heating oils having a flash point > 55 °C and ≤ 75 °C; – flammable pyrophoric liquid and solid waste: solid or liquid waste which, even in small quantities, is liable to ignite within five minutes after coming into contact with air; – flammable solid waste: solid waste which is readily combustible or may cause or contribute to fire through friction; – flammable gaseous waste: gaseous waste which is flammable in air at 20 °C and a standard pressure of 101.3 kPa; – water reactive waste: waste which, in contact with water, emits flammable gases in dangerous quantities; – other flammable waste: flammable aerosols, flammable self-heating waste, flammable organic peroxides and flammable self-reactive waste. HP5 - "Specific Target Organ Toxicity (STOT)/Aspiration Toxicity:" waste which can cause specific target organ toxicity either from a single or repeated exposure, or which cause acute toxic effects following aspiration.

#### SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
<b>14.1. UN number or ID number</b>				
UN 1950	UN 1950	UN 1950	UN 1950	UN 1950
<b>14.2. UN proper shipping name</b>				
AEROSOLS	AEROSOLS	Aerosols, flammable	AEROSOLS	AEROSOLS
<b>Transport document description</b>				
UN 1950 AEROSOLS, 2.1, (D)	UN 1950 AEROSOLS, 2.1	UN 1950 Aerosols, flammable, 2.1	UN 1950 AEROSOLS, 2.1	UN 1950 AEROSOLS, 2.1
<b>14.3. Transport hazard class(es)</b>				
2.1	2.1	2.1	2.1	2.1
				
<b>14.4. Packing group</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.5. Environmental hazards</b>				
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No EmS-No. (Fire): F-D EmS-No. (Spillage): S-U	Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No
No supplementary information available				

#### 14.6. Special precautions for user

##### Overland transport






Classification code (ADR)	: 5F
Special provisions (ADR)	: 190, 327, 344, 625
Limited quantities (ADR)	: 1I
Excepted quantities (ADR)	: E0
Packing instructions (ADR)	: P207, LP200
Special packing provisions (ADR)	: PP87, RR6, L2
Mixed packing provisions (ADR)	: MP9
Transport category (ADR)	: 2
Special provisions for carriage - Packages (ADR)	: V14
Special provisions for carriage - Loading, unloading and handling (ADR)	: CV9, CV12
Special provisions for carriage - Operation (ADR)	: S2
Tunnel restriction code (ADR)	: D

##### Transport by sea

Special provisions (IMDG)	: 63, 190, 277, 327, 344, 381, 959
Limited quantities (IMDG)	: SP277
Excepted quantities (IMDG)	: E0
Packing instructions (IMDG)	: P207, LP200
Special packing provisions (IMDG)	: PP87, L2
Stowage category (IMDG)	: None
Stowage and handling (IMDG)	: SW1, SW22
Segregation (IMDG)	: SG69

#### SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
<b>14.1. UN number or ID number</b>				
UN 1950	UN 1950	UN 1950	UN 1950	UN 1950
<b>14.2. UN proper shipping name</b>				
AEROSOLS	AEROSOLS	Aerosols, flammable	AEROSOLS	AEROSOLS
<b>Transport document description</b>				
UN 1950 AEROSOLS, 2.1, (D)	UN 1950 AEROSOLS, 2.1	UN 1950 Aerosols, flammable, 2.1	UN 1950 AEROSOLS, 2.1	UN 1950 AEROSOLS, 2.1
<b>14.3. Transport hazard class(es)</b>				
2.1	2.1	2.1	2.1	2.1
				
<b>14.4. Packing group</b>				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
<b>14.5. Environmental hazards</b>				
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No EmS-No. (Fire): F-D EmS-No. (Spillage): S-U	Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No
No supplementary information available				

#### 14.6. Special precautions for user

##### Overland transport

Classification code (ADR)	: 5F
Special provisions (ADR)	: 190, 327, 344, 625
Limited quantities (ADR)	: 1I
Excepted quantities (ADR)	: E0
Packing instructions (ADR)	: P207, LP200
Special packing provisions (ADR)	: PP87, RR6, L2
Mixed packing provisions (ADR)	: MP9
Transport category (ADR)	: 2
Special provisions for carriage - Packages (ADR)	: V14
Special provisions for carriage - Loading, unloading and handling (ADR)	: CV9, CV12
Special provisions for carriage - Operation (ADR)	: S2
Tunnel restriction code (ADR)	: D

##### Transport by sea

Special provisions (IMDG)	: 63, 190, 277, 327, 344, 381, 959
Limited quantities (IMDG)	: SP277
Excepted quantities (IMDG)	: E0
Packing instructions (IMDG)	: P207, LP200
Special packing provisions (IMDG)	: PP87, L2
Stowage category (IMDG)	: None
Stowage and handling (IMDG)	: SW1, SW22
Segregation (IMDG)	: SG69

**Explosives Precursors Regulation (2019/1148)**

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

**Drug Precursors Regulation (273/2004)**

Contains substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

**15.2. Chemical safety assessment**

No chemical safety assessment has been carried out

**SECTION 16: Other information**

**Abbreviations and acronyms:**

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit



**Abbreviations and acronyms:**

VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disruptor

**Full text of H- and EUH-statements:**

Acute Tox. 3 (Inhalation)	Acute toxicity (inhal.), Category 3
Acute Tox. 4 (Dermal)	Acute toxicity (dermal), Category 4
Acute Tox. 4 (Inhalation)	Acute toxicity (inhal.), Category 4
Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
Aquatic Chronic 3	Hazardous to the aquatic environment – Chronic Hazard, Category 3
Asp. Tox. 1	Aspiration hazard, Category 1
EUH066	Repeated exposure may cause skin dryness or cracking.
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Gas 1A	Flammable gases, Category 1A
Flam. Liq. 2	Flammable liquids, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
H220	Extremely flammable gas.
H222	Extremely flammable aerosol.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H229	Pressurised container: May burst if heated.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.

**Full text of H- and EUH-statements:**

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.
Press. Gas	Gases under pressure
Skin Corr. 1C	Skin corrosion/irritation, Category 1, Sub-Category 1C
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1	Skin sensitisation, Category 1
STOT RE 2	Specific target organ toxicity – Repeated exposure, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Narcosis

**Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:**

Aerosol 1	H222;H229	On basis of test data
STOT SE 3	H336	Calculation method

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.