

# SAFETY DATA SHEET ACCORDING TO REGULATION (EC) 1907/2006

**Product name: Starthilfe-Spray REZ1198**

**Creation date: 11.10.2021, Revision: 17.07.2023, version: 4.2**



## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1 Product identifier

Product name

Starthilfe-Spray REZ1198



<https://my.chemius.net/p/Jr2cR9/en/pd/en>

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

Relevant identified uses

Engine starting aid.

Uses advised against

No information.

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

Supplier

Peter Kwasny GmbH  
Heilbronner Str. 96  
D-74831 Gundelsheim, Germany  
049-(0)6269-95-20  
labor@kwasny.de

### 1.4 Emergency Telephone Number

Emergency

112

Supplier

+49 6269 95 20

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

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

Aerosol 1; H222 Extremely flammable aerosol.

Aerosol 1; H229 Pressurised container: May burst if heated.

Acute Tox. 4; H302 Harmful if swallowed.

Asp. Tox. 1; H304 May be fatal if swallowed and enters airways.

Skin Irrit. 2; H315 Causes skin irritation.

STOT SE 3; H336 May cause drowsiness or dizziness.

Aquatic Chronic 2; H411 Toxic to aquatic life with long lasting effects.

### 2.2 Label elements

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

**Signal word: DANGER**

H222 Extremely flammable aerosol.

H229 Pressurised container: May burst if heated.

H302 Harmful if swallowed.

H315 Causes skin irritation.

H336 May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.

EUH019 May form explosive peroxides.

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.

P273 Avoid release to the environment.

P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.

P302 + P352 + P362 + P364 IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse.

P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTRE/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 national regulation.

**Contains:**

hydrocarbons, C7, n-alkanes, isoalkanes, cyclics

diethyl ether

**2.3 Other hazards****PBT/vPvB**

No information.

**Endocrine disrupting properties**

No information.

**Additional information**

No information.

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS****3.1 Substances**

For mixtures see 3.2.

**3.2 Mixtures**

Name	CAS EC Index Reach	%	Classification according to Regulation (EC) No 1272/2008 (CLP)	Specific Concentration Limits	Notes for substances
isobutane	75-28-5 200-857-2 601-004-00-0 01-2119485395-27	25-50	Flam. Gas 1; H220 Press. Gas; H280	/	C, S
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	64742-49-0 927-510-4 - 01-2119475515-33	25-50	Flam. Liq. 2; H225 Asp. Tox. 1; H304 Skin Irrit. 2; H315 STOT SE 3; H336 Aquatic Chronic 2; H411	/	/

diethyl ether	60-29-7 200-467-2 603-022-00-4	<25	Flam. Liq. 1; H224 Acute Tox. 4; H302 STOT SE 3; H336 EUH019 EUH066	/	/
propane	74-98-6 200-827-9 601-003-00-5 01-2119486944-21	10-25	Flam. Gas 1; H220 Press. Gas; H280	/	U
n-hexane	110-54-3 203-777-6 601-037-00-0	<1	Flam. Liq. 2; H225 Asp. Tox. 1; H304 Skin Irrit. 2; H315 STOT SE 3; H336 Repr. 2; H361F STOT RE 2; H373 Aquatic Chronic 2; H411	STOT RE 2; H373; C ≥ 5%	/

### Notes for substances

C	Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers.  In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers.
S	This substance may not require a label according to Article 17 (see Section 1.3 of Annex I) (Table 3).
U	When put on the market gases have to be classified as 'Gases under pressure', in one of the groups compressed gas, liquefied gas, refrigerated liquefied gas or dissolved gas. The group depends on the physical state in which the gas is packaged and therefore has to be assigned case by case. The following codes are assigned: Press. Gas (Comp.) Press. Gas (Liq.) Press. Gas (Ref. Liq.) Press. Gas (Diss.) Aerosols shall not be classified as gases under pressure (See Annex I, Part 2, Section 2.3.2.1, Note 2).

### Product description

Hydrocarbons with a propellant.

## SECTION 4: FIRST AID MEASURES

### 4.1 Description of first aid measures

#### General notes

In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Never give anything by mouth to an unconscious person. Place patient in recovery position and ensure airway patency. No action shall be taken involving any personal risk or without suitable training.

#### Following inhalation

If symptoms occur, seek medical advice. Leave contaminated area - breathe fresh air. Keep at rest in a position comfortable for breathing. If breathing is irregular or respiratory arrest occurs provide artificial respiration. In case of unconsciousness bring patient into stable side position and seek medical attention.

#### Following skin contact

Take off all contaminated clothing. Wash affected skin areas immediately with plenty of water and soap. If symptoms develop and persist, seek medical attention. Wash contaminated clothes and shoes before reuse.

#### Following eye contact

Immediately flush eyes with running water, keeping eyelids apart. If irritation persists, seek professional medical attention.

#### Following ingestion

Not likely. Accidental ingestion: Rinse mouth thoroughly with water. Do not induce vomiting! Immediately consult a doctor. Show the physician the safety data sheet or label. Never give anything by mouth to an unconscious person.

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

##### Following inhalation

Vapours may cause drowsiness and dizziness. Excessive exposure to spray mist, fog, or vapours may cause respiratory irritation. Coughing, sneezing, nasal discharge, labored breathing.

##### Following skin contact

Irritating to the skin. Itching, redness, pain.

##### Following eye contact

Contact with eyes can cause irritation (redness, tearing, pain).

##### Following ingestion

Ingestion is unlikely because it is an aerosol. Accidental ingestion: Harmful to health. May cause nausea/vomiting and diarrhea. May be fatal if swallowed and enters airways.

#### 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

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

##### Unsuitable extinguishing media

Full water jet.

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

##### Hazardous combustion products

In case of a fire toxic gases can be generated; do not inhale gases/smoke. In the event of fire the following can be generated: carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>). Hydrocarbons.

Aldehydes. Soot.

#### 5.3 Advice for firefighters

##### Protective actions

In case of fire or heating do not breathe fumes/vapours. Cool containers at risk with water spray. If possible remove containers from endangered area. Vapours can form explosive mixtures with air. In case of fire aerosols can explode and be propelled to considerable distances in different directions.

##### Special protective equipment for fire-fighters

Firefighters should wear appropriate protective clothing for firefighters (including helmets, protective boots and gloves) (EN 469) and self-contained breathing apparatus (SCBA) with a full face-piece (EN 137).

##### Additional information

Contaminated firefighting water must be disposed of in accordance with the regulations; do not allow to reach the sewage system.

### SECTION 6: ACCIDENTAL RELEASE MEASURES

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

##### For non-emergency personnel

##### Protective equipment

Use personal protective equipment (Section 8).

**Precautionary measures**

Ensure adequate ventilation. Keep away from sources of ignition and/or heat; No smoking!

**Emergency procedures**

Prevent access to unauthorised personnel. Prevent access to unprotected personnel. Avoid contact with skin and eyes. Do not breathe vapour or mist.

**For emergency responders**

Use personal protective equipment.

**6.2 Environmental precautions**

Do not allow product to reach water/drains/sewage systems or permeable soil. If accidental large entry into water or ground occurs, inform responsible authorities.

**6.3 Methods and material for containment and cleaning up****For containment**

Stem the spill if this does not pose risks.

**For cleaning up**

Collect the spray cans and hand them over to an authorized waste disposal contractor. Release of liquid because of damaged aerosol can (release of large quantities): Absorb product (with inert material), collect it in special container and dispose it to a licensed hazardous-waste disposal contractor. Do not absorb spillage with sawdust or other combustible material. Dispose in accordance with applicable regulations (see Section 13). Clean residue from spill site.

**OTHER INFORMATION**

See Section 7: safe handling.

**6.4 Reference to other sections**

See also sections 8 and 13.

**SECTION 7: HANDLING AND STORAGE****7.1 Precautions for safe handling****Protective measures****Measures to prevent fire**

Ensure adequate ventilation. Take precautionary measures against static discharges. Keep away from sources of ignition - no smoking. Use spark-proof tools. Pressurized container; protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Do not spray on a naked flame or incandescent material.

**Measures to prevent aerosol and dust generation**

Use general or local exhaust ventilation to prevent inhaling vapours and aerosols.

**Measures to protect the environment**

Avoid release to the environment.

**Other measures**

No information.

**Advice on general occupational hygiene**

Wear suitable protective equipment; see Section 8. Refer to instructions on label and regulations for safety and health at work. Use good personal hygiene practices – wash hands at breaks and when done working with material. Avoid contact with skin, eyes and clothes. Do not eat, drink or smoke while working. Do not breathe vapours/mist. Product is not for eating – do not ingest! Consider measures required in Section 8 of this safety data sheet.

**7.2 Conditions for safe storage, including any incompatibilities****Technical measures and storage conditions**

Store in accordance with local regulations. Keep in well closed containers. Keep in cool and well ventilated area. Protect from open fire, heat and direct sunlight. Keep away from sources of ignition. Keep away from oxidising substances. Keep away from food, drink and animal feeding stuffs.

**Packaging materials**

The original container of producer.

**Requirements for storage rooms and vessels**

Do not store in unlabelled containers.

**Storage class**

No information.

**Further information on storage conditions**

No information.

**7.3 Specific end use(s)****Recommendations**

No information.

**Industrial sector specific solutions**

No information.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION****8.1 Control parameters****Occupational Exposure limit values**

Name	mg/m <sup>3</sup>	ml/m <sup>3</sup>	Short-term value mg/m <sup>3</sup>	Short-term value ml/m <sup>3</sup>	Remark	Biological Tolerance Values
n-Hexane (110-54-3)	72	20	/	/	/	/
Diethyl ether (60-29-7)	310	100	620	200	/	/

**Information on monitoring procedures**

BS EN 14042:2003 Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. BS EN 689:2018 Workplace exposure. Measurement of exposure by inhalation to chemical agents. Strategy for testing compliance with occupational exposure limit values. BS EN 482:2021 Workplace exposure. Procedures for the determination of the concentration of chemical agents. Basic performance requirements.

**DNEL/DMEL values****For product**

No information.

**For components**

Name	Type	Exposure route	exp. frequency	Remark	value
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Worker	inhalation	long term systemic effects	/	2085 mg/m <sup>3</sup>
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Worker	dermal	long term systemic effects	/	300 mg/kg bw/day
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Consumer	inhalation	long term systemic effects	/	447 mg/m <sup>3</sup>
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Consumer	dermal	long term systemic effects	/	149 mg/kg bw/day
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Consumer	oral	long term systemic effects	/	149 mg/kg bw/day
diethyl ether	Worker	inhalation	short term systemic effects	/	616 mg/m <sup>3</sup>
diethyl ether	Worker	dermal	long term systemic effects	/	44 mg/kg bw/day
diethyl ether	Worker	inhalation	long term systemic effects	/	308 mg/m <sup>3</sup>

diethyl ether	Consumer	oral	long term systemic effects	/	15.6 mg/kg bw/day
diethyl ether	Consumer	inhalation	long term systemic effects	/	54.5 mg/m³
diethyl ether	Consumer	dermal	long term systemic effects	/	15.6 mg/kg bw/day

#### PNEC values

##### For product

No information.

##### For components

Name	Exposure route	Remark	value
diethyl ether	fresh water	/	2 mg/L
diethyl ether	marine water	/	0.2 mg/L
diethyl ether	water, intermittent release	/	1.65 mg/L
diethyl ether	fresh water sediment	dry weight	9.14 mg/kg
diethyl ether	marine water sediment	dry weight	0.914 mg/kg
diethyl ether	soil	dry weight	0.66 mg/kg
diethyl ether	water treatment plant	/	4.2 mg/L

## 8.2 Exposure controls

### Appropriate engineering control

#### Substance/mixture related measures to prevent exposure during identified uses

Use good personal hygiene practices – wash hands at breaks and when done working with material. Do not eat, drink or smoke while working. Avoid contact with skin, eyes and clothes. Do not breathe vapours/aerosols. Keep away from foodstuffs, beverages and feed. Personal protective equipment selections vary based on potential exposure conditions such as applications, handling practices, concentration and ventilation.

#### Structural measures to prevent exposure

No information.

#### Organisational measures to prevent exposure

If this product contains ingredients with exposure limits, personal, workplace atmosphere monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protection.

#### Technical measures to prevent exposure

Provide good ventilation and local exhaust in areas with increased concentration.

#### Personal protective equipment

##### Eye and face protection

If there is risk of splashing into eyes, wear safety glasses with side shields (BS EN ISO 16321-1:2022).

##### Hand protection

Protective gloves (BS EN ISO 374). The product consists of various substances, therefore the resistance of gloves can not be calculated and has to be tested before use.

#### Appropriate materials

##### Skin protection

Cotton protective clothing and shoes that cover the entire foot (EN ISO 20345:2022). Protective antistatic clothing BS EN 1149 (1:2006, 2:1997 and 3:2004, 5:2018), protective antistatic shoes (BS EN ISO 20345:2022). Choose body protection according to the activity and possible exposure.

##### Respiratory protection

Wear suitable protective breathing mask (BS EN 136) with filter A2-P2 (BS EN 14387). For dust/gas/ vapor concentrations above the applicable filter limit, in case of oxygen concentrations below 17% or in vague conditions, autonomous self-contained breathing apparatus should be used, according to standard BS EN 137, BS EN 138.

#### Thermal hazards

No information.

#### Environmental exposure controls

##### Substance/mixture related measures to prevent exposure

No information.

**Instruction measures to prevent exposure**

No information.

**Organisational measures to prevent exposure**

No information.

**Technical measures to prevent exposure**

Prevent release into the environment.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES****9.1 Information on basic physical and chemical properties****Physical state**

liquid - aerosol

**Colour**

colourless

**Odour**

No information.

**Important health, safety and environmental information**

Odour threshold	No information.
Melting point/Freezing point	No information.
Boiling point or initial boiling point and boiling range	No information.
Flammability	No information.
Lower and upper explosion limit	1.5 — 10.9 vol %
Flash point	No information.
Auto-ignition temperature	No information.
Decomposition temperature	No information.
pH	No information.
Viscosity	No information.
Solubility	No information.
Partition coefficient	No information.
Vapour pressure	< 70 hPa at 20 °C
Density and/or relative density	Density: 0.7018 g/cm <sup>3</sup>
Relative vapour density	No information.
Particle characteristics	No information.

**9.2 OTHER INFORMATION**

Explosive properties	No information.
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**SECTION 10: STABILITY AND REACTIVITY****10.1 Reactivity**

Stable under recommended transport or storage conditions.

**10.2 Chemical stability**

Product is stable under normal conditions of use, recommended handling and storage conditions.

**10.3 Possibility of hazardous reactions**



It may form explosive peroxides.

#### 10.4 Conditions to avoid

Avoid all possible sources of ignition (spark or flame). Do not expose to heat and direct sunlight.

#### 10.5 Incompatible materials

Oxidants.

#### 10.6 Hazardous decomposition products

Under normal use conditions no hazardous decomposition products are expected. In case of fire/explosion vapours/gases that pose a health hazard are released.

## SECTION 11: TOXICOLOGICAL INFORMATION

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

#### (a) Acute toxicity

##### For components

Name	Exposure route	Type	Species	Time	value	Method	Remark
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	oral	LD <sub>50</sub>	rat	/	> 5840 mg/kg bw	/	/
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	dermal	LD <sub>50</sub>	rat	24 h	> 2920 mg/kg bw	/	/
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	inhalation (vapours)	LC <sub>50</sub>	rat	4 h	> 23300 mg/m <sup>3</sup>	OECD 403	/
diethyl ether	oral	LD <sub>50</sub>	rat	/	200 - 2000 mg/kg	/	Literature study
diethyl ether	inhalation	LC <sub>50</sub>	rat	4 h	> 20 mg/l	/	Literature study

#### Additional information

Harmful if swallowed.

#### (b) Skin corrosion/irritation

##### For components

Name	Species	Time	result	Method	Remark
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	/	/	Irritating.	/	/
diethyl ether	rabbit	/	Mild irritating.	/	Literature

#### Additional information

Causes skin irritation.

#### (c) Serious eye damage/irritation

##### For components

Name	Exposure route	Species	Time	result	Method	Remark
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	/	/	/	Not classified.	/	/
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	/	/	/	Contact with eyes may cause irritation.	/	/

diethyl ether	/	rabbit	/	Moderately irritating.	/	Literature
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## (d) Respiratory or skin sensitisation

For components

Name	Exposure route	Species	Time	result	Method	Remark
diethyl ether	-	guinea pig	/	Non sensitising.	Maximisation test	Literature

## (e) (Germ cell) mutagenicity

For components

Name	Type	Species	Time	result	Method	Remark
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Genotoxicity	/	/	Negative.	/	/
diethyl ether	in-vitro mutagenicity	Salmonella typhimurium	/	Negative with metabolic activation, negative without metabolic activation.	Ames test	Literature

## (f) Carcinogenicity

For components

Name	Exposure route	Type	Species	Time	value	result	Method	Remark
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	/	/	/	/	/	Substance is not classified as carcinogenic.	/	/

## (g) Reproductive toxicity

For components

Name	Reproductive toxicity type	Type	Species	Time	value	result	Method	Remark
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Reproductive toxicity	-	rat	/	/	The results of animal studies gave no indication of a fertility impairing effect.	/	/
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Developmental toxicity	/	rat	/	/	Did not show teratogenic effects in animal experiments.	/	/
n-hexane	Reproductive toxicity	-	/	/	/	Suspected of damaging fertility.	/	/

## Summary of evaluation of the CMR properties

No information.

## (h) STOT-single exposure

For components

Name	Exposure route	Type	Species	Time	Exposure	organ	value	result	Method	Remark
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	inhalation	-	/	/	/	/	/	May cause effects on the central nervous system.	/	high vapours concentrations
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	inhalation	-	/	/	/	/	/	Symptoms: nausea, unconsciousness.	/	high vapours concentrations
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	inhalation	-	/	/	/	/	/	Symptoms: mucous membrane irritation.	/	high vapours concentrations

hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	inhalation	-	/	/	/	/	/	May cause respiratory irritation.	/	high vapours concentrations
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	oral	-	/	/	/	/	/	May cause irritation of the digestive tract.	/	/
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	-	-	/	/	/	/	/	May cause drowsiness or dizziness.	/	/

**Additional information**

May cause drowsiness or dizziness.

**(i) STOT-repeated exposure**

No information.

**(j) Aspiration hazard****For components**

Name	result	Method	Remark
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	Aspiration into the lungs can cause lung damage.	/	The exposed person should be kept under medical surveillance for 48 hours.
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	May be fatal if swallowed and enters airways.	/	/

**Additional information**

May be fatal if swallowed and enters airways.

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

No information.

**Interactive effects**

No information.

**11.2 Information on other hazards****Endocrine disrupting properties**

No information.

**Other information**

No information.

**SECTION 12: ECOLOGICAL INFORMATION****12.1 Toxicity****Acute (short-term) toxicity****For components**

Name	Type	value	Exposure time	Species	organism	Method	Remark
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	EL <sub>50</sub>	10 - 30 mg/L	72 h	algae	<i>Selenastrum capricornutum</i>	/	/
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	ErL <sub>50</sub>	10 - 30 mg/L	72 h	algae	<i>Pseudokirchneriella subcapitata</i>	OECD 201	/

hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	EbL50	10 - 30 mg/L	72 h	algae	<i>Pseudokirchneriella subcapitata</i>	OECD 201	/
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	EL <sub>50</sub>	3 mg/L	48 h	crustacea	<i>Daphnia magna</i>	OECD 202	/
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	LL <sub>50</sub>	> 13.4 mg/L	96 h	fish	<i>Oncorhynchus mykiss</i>	OECD 203	/
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	NOELR	6.3 mg/L	72 h	algae	<i>Pseudokirchneriella subcapitata</i>	OECD 201	/
diethyl ether	LC <sub>50</sub>	> 100 mg/L	48 h	fish	<i>Leuciscus idus</i>	/	static test, literature value
diethyl ether	EC <sub>50</sub>	> 100 mg/L	48 h	crustacea	<i>Daphnia magna</i>	/	static test, literature value

### Chronic (long-term) toxicity For components

Name	Type	value	Exposure time	Species	organism	Method	Remark
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	NOELR	1 mg/l	21 days	crustacea	<i>Daphnia magna</i>	OECD 211	/
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	NOELR	1.53 mg/l	28 days	fish	<i>Oncorhynchus mykiss</i>	/	QSAR Petrotox

## 12.2 Persistence and degradability

### Abiotic degradation, physical- and photo-chemical elimination

No information.

### Biodegradation

#### For components

Name	Type	Rate	Time	Evaluation	Method	Remark
hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	biodegradability	98 %	28 days	readily biodegradable	OECD 301F	/
diethyl ether	aerobic	/	/	readily biodegradable	/	literature

## 12.3 Bioaccumulative potential

### Partition coefficient

#### For components

Name	Media	value	Temperature °C	pH	Concentration	Method
diethyl ether	Log Pow	≤ 4	/	/	/	/

### Bioconcentration factor (BCF)

No information.

## 12.4 Mobility in soil

### Known or predicted distribution to environmental compartments

No information.

### Surface tension

No information.

**Adsorption/Desorption**

No information.

**12.5 Results of PBT and vPvB assessment**

No evaluation.

**12.6 Endocrine disrupting properties**

No information.

**12.7 Other adverse effects**

No information.

**12.8 Additional information****For product**

Toxic to aquatic life with long lasting effects. Water hazard class (WGK): 3 (Self-assessment), very hazardous for water. Avoid release to the environment.

**For components****hydrocarbons, C7, n-alkanes, isoalkanes, cyclics**

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB).

**diethyl ether**

Bioaccumulation is not expected. This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB).

**SECTION 13: DISPOSAL CONSIDERATIONS****13.1 Waste treatment methods****Product / Packaging disposal****Waste chemical**

Avoid release to the environment. Product and container must be disposed of safely. Dispose of in accordance with applicable waste disposal regulation. Disposal must be made according to official regulations: deliver it to authorised collector/remover/transformer of hazardous waste.

**Waste codes / waste designations according to LoW**

16 05 04\* - gases in pressure containers (including halons) containing dangerous substances

**Packaging**

Uncleaned containers should not be perforated, cut or welded. Pressurized container. Do not pierce or burn, even after use. Dispose of in accordance with applicable waste disposal regulation. Deliver completely emptied containers to approved waste disposal authorities.

**Waste codes / waste designations according to LoW**

15 01 11\* - metallic packaging containing a dangerous solid porous matrix (for example asbestos), including empty pressure containers

**Waste treatment-relevant information**

No information.









**Sewage disposal-relevant information**

No information.

**Other disposal recommendations**

No information.

## SECTION 14: TRANSPORT INFORMATION

ADR/RID	IMDG	IATA	ADN
14.1 UN number or ID number			
UN 1950	UN 1950	UN 1950	UN 1950
14.2 UN proper shipping name			
AEROSOLS	AEROSOLS (hydrocarbons, C7, n-alkanes, isoalkanes, cyclics)	AEROSOLS	AEROSOLS
14.3 Transport hazard class(es)			
2	2	2	2
 	 	 	 
14.4 Packing group			
Not given/not applicable	Not given/not applicable	Not given/not applicable	Not given/not applicable
14.5 Environmental hazards			
YES	Marine pollutant	YES	YES
14.6 Special precautions for user			
Limited quantities 1 L Special provisions 190, 327, 344, 625 Packing Instructions P207, LP200 Special packing provisions PP87, RR6, L2 Transport category 2 Tunnel restriction code (D) Classification code 5F	Limited quantities 1 L EmS F-D, S-U	Limited Quantity, Packing Instructions (Ltd Qty, Pkg Inst) Y203 Limited Quantity, Maximum Net Quantity/Package (Ltd Qty, Max Net Qty/Pkg) 30 kg G Packing Instructions (Pkg Inst) 203 Maximum Net Quantity/Package (Max Net Qty/Pkg) 25 kg Special provisions A145, A167, A802	Limited quantities 1 L
14.7 Maritime transport in bulk according to IMO instruments			
	Goods may not be carried in bulk in bulk containers, containers or vehicles.		

## SECTION 15: REGULATORY INFORMATION

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

- Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (including last amendment Commission Regulation (EU) 2020/878)

- Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

Information according 2004/42/EC about limitation of emissions of volatile organic compounds (VOC-guideline)  
not applicable

Ingredients according to Regulation (EC) No 648/2004 on detergents

No information.

#### Special instructions

Seveso III, P3a: flammable aerosols. Seveso III, E2: hazardous to the aquatic environment. -

### 15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

## SECTION 16: OTHER INFORMATION

### Indication of changes

#### 2.2 Label elements

### Key literature references and sources for data

No information.

### Abbreviations and acronyms

ATE - Acute Toxicity Estimate

ADR - Agreement concerning the International Carriage of Dangerous Goods by Road

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

CEN - European Committee for Standardisation

C&L - Classification and Labelling

CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008

CAS# - Chemical Abstracts Service number

CMR - Carcinogen, Mutagen, or Reproductive Toxicant

CSA - Chemical Safety Assessment

CSR - Chemical Safety Report

DMEL - Derived Minimal Effect Level

DNEL - Derived No Effect Level

DPD - Dangerous Preparations Directive 1999/45/EC

DSD - Dangerous Substances Directive 67/548/EEC

DU - Downstream User

EC - European Community

ECHA - European Chemicals Agency

EC-Number - EINECS and ELINCS Number (see also EINECS and ELINCS)

EEA - European Economic Area (EU + Iceland, Liechtenstein and Norway)

EEC - European Economic Community

EINECS - European Inventory of Existing Commercial Substances

ELINCS - European List of notified Chemical Substances

EN - European Standard

EQS - Environmental Quality Standard

EU - European Union

Euphrac - European Phrase Catalogue

EWC - European Waste Catalogue (replaced by LoW – see below)

GES - Generic Exposure Scenario

GHS - Globally Harmonized System

IATA - International Air Transport Association

ICAO-TI - Technical Instructions for the Safe Transport of Dangerous Goods by Air

IMDG - International Maritime Dangerous Goods

IMSBC - International Maritime Solid Bulk Cargoes

IT - Information Technology

IUCLID - International Uniform Chemical Information Database

IUPAC - International Union for Pure Applied Chemistry

JRC - Joint Research Centre  
 Kow - octanol-water partition coefficient  
 LC50 - Lethal Concentration to 50 % of a test population  
 LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose)  
 LE - Legal Entity  
 LoW - List of Wastes (see <http://ec.europa.eu/environment/waste/framework/list.htm>)  
 LR - Lead Registrant  
 M/I - Manufacturer / Importer  
 MS - Member States  
 MSDS - Material Safety Data Sheet  
 OC - Operational Conditions  
 OECD - Organization for Economic Co-operation and Development  
 OEL - Occupational Exposure Limit  
 OJ - Official Journal  
 OR - Only Representative  
 OSHA - European Agency for Safety and Health at work  
 PBT - Persistent, Bioaccumulative and Toxic substance  
 PEC - Predicted Effect Concentration  
 PNEC(s) - Predicted No Effect Concentration(s)  
 PPE - Personal Protection Equipment  
 (Q)SAR - Qualitative Structure Activity Relationship  
 REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006  
 RID - Regulations concerning the International Carriage of Dangerous Goods by Rail  
 RIP - REACH Implementation Project  
 RMM - Risk Management Measure  
 SCBA - Self-Contained Breathing Apparatus  
 SDS - Safety data sheet  
 SIEF - Substance Information Exchange Forum  
 SME - Small and Medium sized Enterprises  
 STOT - Specific Target Organ Toxicity  
 (STOT) RE - Repeated Exposure  
 (STOT) SE - Single Exposure  
 SVHC - Substances of Very High Concern  
 UN - United Nations  
 vPvB - Very Persistent and Very Bioaccumulative

#### List of relevant H phrases

H220 Extremely flammable gas.  
 H224 Extremely flammable liquid and vapour.  
 H225 Highly flammable liquid and vapour.  
 H280 Contains gas under pressure; may explode if heated.  
 H302 Harmful if swallowed.  
 H304 May be fatal if swallowed and enters airways.  
 H315 Causes skin irritation.  
 H336 May cause drowsiness or dizziness.  
 H361f Suspected of damaging fertility.  
 H373 May cause damage to organs through prolonged or repeated exposure.  
 H411 Toxic to aquatic life with long lasting effects.  
 EUH019 May form explosive peroxides.  
 EUH066 Repeated exposure may cause skin dryness or cracking.



- ☒ Provided correct labelling of the product
- ☒ Compliance with the local legislation
- ☒ Provided correct classification of the product
- ☒ Provided adequate transport data

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*The information of this SDS is based on the present state of our knowledge and meets the requirements of EU and national laws. The user's working conditions however, are beyond our knowledge and control. The product is not to be used for purposes other than those specified under section 1 without a written permission. It remains the responsibility of the user to ensure that the necessary steps are taken to meet the laws and regulations. Handling of the product may only be done by people above 18 years of age, who are satisfactorily informed of how to do the work, the hazardous properties and necessary safety precautions. The information given in this SDS is to describe the product only in terms of health and safety requirements and should not, therefore, be construed as guaranteeing specific properties.*