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## Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

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

#### 1.1. Product identifier

Trade name/designation:

RAVENOL SU5 ATF Fluid

Article No.:

1211122

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

Use of the substance/mixture:

Lubricant

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

Supplier (manufacturer/importer/only representative/downstream user/distributor):

Ravensberger Schmierstoffvertrieb GmbH

Produktsicherheit  
Jöllenbecker Str. 2  
33824 Werther  
Germany

Telephone: +49 5203 9719 0

Telefax: +49 5203 9719 40

E-mail: kontakt@ravenol.de

Website: www.ravenol.de

E-mail (competent person): sdb@ravenol.de

#### \* 1.4. Emergency telephone number

24 hr. emergency phone number, 24h: +49 700 24 112 112 (Contract ID: RAV) / +1 872 5888271  
(Contract ID: RAV)

### SECTION 2: Hazards identification

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

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

The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

#### \* 2.2. Label elements

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

According to EC directives or the corresponding national regulations the product does not have to be labelled.

Hazard statements: none

##### Supplemental hazard information

|        |  |
|--------|--|
| EUH208 | Contains 4,4'-thiodiethylene hydrogen -2-octadecenylsuccinate. May produce an allergic reaction. |
| EUH210 | Safety data sheet available on request.  |

Precautionary statements: none

#### \* 2.3. Other hazards

Other adverse effects:

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.



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## SECTION 3: Composition/information on ingredients

### \* 3.2. Mixtures

#### Hazardous ingredients / Hazardous impurities / Stabilisers:

| Product identifiers  | Substance name<br>Classification according to Regulation (EC) No 1272/2008 [CLP]  | Concentration         |
|--|---|-----------------------|
| CAS No.: 72623-87-1<br>EC No.: 276-738-4<br>REACH No.:<br>01-2119474889-13                             | <b>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based</b><br>Asp. Tox. 1 (H304)<br>Danger<br><b>Specific concentration limit (SCL)</b><br>Asp. Tox. 1; H304: 0% ≤ C < 100%  | 0 - < 1.5 weight-%    |
| CAS No.: 125643-61-0<br>EC No.: 406-040-9<br>Index No.: 607-530-00-7<br>REACH No.:<br>01-0000015551-76 | <b>Isomer mixture of C7-9-alkyl-3- (3,5-di-trans-butyl-4-hydroxyphenyl) propionate</b><br>Aquatic Chronic 4 (H413)  | 0 - < 1.5 weight-%    |
| EC No.: 424-820-7<br>REACH No.:<br>01-0000017126-75  | <b>Reaction product of alkylthioalcohol and substituted phosphorus compound</b><br>Acute Tox. 4 (H312), Aquatic Acute 1 (H400), Aquatic Chronic 1 (H410), Skin Corr. 1B (H314)<br>Danger<br>M-factor (acute): 10 M-factor (chronic): 10 | 0 - < 0.3 weight-%    |
| CAS No.: 93882-40-7<br>EC No.: 299-434-3<br>REACH No.:<br>01-2120735527-50                             | <b>4,4'-thiodiethylene hydrogen -2-octadecenylsuccinate</b><br>Aquatic Chronic 2 (H411), Eye Irrit. 2 (H319), Skin Sens. 1 (H317)<br>Warning  | 0 - < 0.15 weight-%   |
| CAS No.: 1189173-42-9<br>EC No.: 918-811-1<br>REACH No.:<br>01-2119463583-34                           | <b>Hydrocarbons, C10, aromatics, &lt;1% naphthalene</b><br>Aquatic Chronic 2 (H411), Asp. Tox. 1 (H304), STOT SE 3 (H336)<br>Danger   | 0 - < 0.02 weight-%   |
| CAS No.: 91-20-3<br>EC No.: 202-049-5<br>Index No.: 601-052-00-2                                       | <b>naphthalene</b><br>Acute Tox. 4 (H302), Aquatic Acute 1 (H400), Aquatic Chronic 1 (H410), Carc. 2 (H351)<br>Warning  | 0 - < 0.0002 weight-% |

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

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### General information:

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Remove victim out of the danger area. Remove contaminated, saturated clothing. If unconscious but breathing normally, place in recovery position and seek medical advice. Do not leave affected person unattended.

#### Following inhalation:

Provide fresh air. Consult a doctor immediately.

#### In case of skin contact:

After contact with skin, wash immediately with plenty of water and soap. Consult a doctor immediately.

#### After eye contact:

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

#### Following ingestion:

Rinse mouth thoroughly with water. Do NOT induce vomiting. Consult a doctor immediately.

#### Self-protection of the first aider:

Use personal protection equipment. No direct artificial respiration to be given by first aider.

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

Contains 4,4'-thiodiethylene hydrogen -2-octadecenylsuccinate. May produce an allergic reaction.

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

Treat symptomatically. Observe risk of aspiration if vomiting occurs.



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## SECTION 5: Firefighting measures

### \* 5.1. Extinguishing media

#### Suitable extinguishing media:

Co-ordinate fire-fighting measures to the fire surroundings.

Carbon dioxide (CO<sub>2</sub>)

Extinguishing powder

alcohol resistant foam

Use water spray jet to protect personnel and to cool endangered containers.

#### Unsuitable extinguishing media:

Full water jet

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

During heating or in case of fire, toxic gases is possible.

The formation of combustible vapours is possible at temperatures above: Flash point

#### Hazardous combustion products:

Carbon monoxide, Carbon dioxide (CO<sub>2</sub>), Nitrogen oxides (NO<sub>x</sub>),

During heating or in case of fire, toxic gases is possible.

### 5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus. Protective clothing.

### 5.4. Additional information

Do not inhale explosion and combustion gases. Move undamaged containers from immediate hazard area if it can be done safely. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

## SECTION 6: Accidental release measures

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

#### 6.1.1. For non-emergency personnel

##### Personal precautions:

Use personal protection equipment. Special danger of slipping by leaking/spilling product.

##### Protective equipment:

Personal protection equipment: see section 8

##### Emergency procedures:

Eliminate all ignition sources if safe to do so. Remove persons to safety. Provide adequate ventilation.

#### 6.1.2. For emergency responders

##### Personal protection equipment:

Use personal protection equipment.

### 6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains. Prevent spread over a wide area (e.g. by containment or oil barriers). In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

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

#### For containment:

Suitable material for taking up: Sand, Kieselguhr, Universal binder, Chemical binding agents, containing acids

Prevent spread over a wide area (e.g. by containment or oil barriers).

#### For cleaning up:

Remove from the water surface (e.g. skimming, sucking). Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

#### Other information:

Treat the recovered material as prescribed in the section on waste disposal.

### 6.4. Reference to other sections

Safe handling: see section 7

Disposal: see section 13

Personal protection equipment: see section 8

### 6.5. Additional information

Clear spills immediately. Use appropriate container to avoid environmental contamination.



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## SECTION 7: Handling and storage

### \* 7.1. Precautions for safe handling

#### Protective measures

##### Advices on safe handling:

Personal protection equipment: see section 8.

When using do not eat, drink, smoke, sniff. Wash hands before breaks and after work. Do not put any product-impregnated cleaning rags into your trouser pockets. Clear spills immediately. Use appropriate container to avoid environmental contamination.

##### Fire prevent measures:

No special fire protection measures are necessary.

##### Environmental precautions:

Shafts and sewers must be protected from entry of the product.

##### Advices on general occupational hygiene

Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500.

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

#### Technical measures and storage conditions:

Keep container tightly closed in a cool, well-ventilated place.

#### Requirements for storage rooms and vessels:

Suitable container/equipment material: Floors should be impervious, resistant to liquids and easy to clean. Shafts and sewers must be protected from entry of the product.

Keep/Store only in original container.

#### Hints on storage assembly:

not required

**Storage class (TRGS 510, Germany):** 10 - Combustible liquids that cannot be assigned to any of the above storage classes

#### Further information on storage conditions:

Store in a cool dry place. Keep away from heat.

### 7.3. Specific end use(s)

#### Recommendation:

Observe technical data sheet.

## SECTION 8: Exposure controls/personal protection

### \* 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<br>② Short-term occupational exposure limit value<br>③ Instantaneous value<br>④ Monitoring and observation processes<br>⑤ Remark |
|--------------------------------------|---|--|
| PL<br>from 12 Jun 2018               | <b>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based</b><br>CAS No.: 72623-87-1<br>EC No.: 276-738-4 | ① 5 mg/m <sup>3</sup><br>⑤ (Mgła olejowa mineralny)  |
| MAK (AT)                             | <b>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based</b><br>CAS No.: 72623-87-1<br>EC No.: 276-738-4 | ① 5 mg/m <sup>3</sup><br>⑤ (Ölnebel, mineralisch (einatembare Fraktion))   |
| BE                                   | <b>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based</b><br>CAS No.: 72623-87-1<br>EC No.: 276-738-4 | ① 5 mg/m <sup>3</sup><br>⑤ (Brouillard d'huile minéral)  |
| Québec (CA)                          | <b>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based</b><br>CAS No.: 72623-87-1<br>EC No.: 276-738-4 | ① 5 mg/m <sup>3</sup><br>② 10 mg/m <sup>3</sup><br>⑤ (Oil mist mineral)  |



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|--------------------------------------|---|--|
| HU<br>from 28 May 2022               | <b>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based</b><br>CAS No.: 72623-87-1<br>EC No.: 276-738-4 | ① 5 mg/m <sup>3</sup><br>⑤ (Olajköd ásványi) T   |
| SE                                   | <b>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based</b><br>CAS No.: 72623-87-1<br>EC No.: 276-738-4 | ① 1 mg/m <sup>3</sup><br>② 3 mg/m <sup>3</sup><br>⑤ (Oljeånga eller rök)   |
| ES                                   | <b>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based</b><br>CAS No.: 72623-87-1<br>EC No.: 276-738-4 | ① 5 mg/m <sup>3</sup><br>② 10 mg/m <sup>3</sup><br>⑤ (Niebla de aceite mineral) am   |
| NL                                   | <b>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based</b><br>CAS No.: 72623-87-1<br>EC No.: 276-738-4 | ① 5 mg/m <sup>3</sup><br>⑤ (Olienevel mineraal)  |
| OSHA (US)                            | <b>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based</b><br>CAS No.: 72623-87-1<br>EC No.: 276-738-4 | ① 5 mg/m <sup>3</sup><br>⑤ (Oil mist mineral)  |
| NIOSH (US)                           | <b>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based</b><br>CAS No.: 72623-87-1<br>EC No.: 276-738-4 | ① 5 mg/m <sup>3</sup><br>② 10 mg/m <sup>3</sup><br>⑤ (Oil mist mineral)  |
| ACGIH (US)<br>from 1 Jan 2010        | <b>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based</b><br>CAS No.: 72623-87-1<br>EC No.: 276-738-4 | ① 5 mg/m <sup>3</sup><br>⑤ (Oil mist mineral, inhalable fraction)  |
| CZ                                   | <b>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based</b><br>CAS No.: 72623-87-1<br>EC No.: 276-738-4 | ① 5 mg/m <sup>3</sup><br>② 10 mg/m <sup>3</sup><br>⑤ (Rozprášený olej (olejová mlhovina) minerální)  |
| NO                                   | <b>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based</b><br>CAS No.: 72623-87-1<br>EC No.: 276-738-4 | ① 1 mg/m <sup>3</sup><br>⑤ (Oljetåke mineralsk)  |
| NPEL (SK)<br>from 23 Nov 2011        | <b>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based</b><br>CAS No.: 72623-87-1<br>EC No.: 276-738-4 | ① 5 ppm (1 mg/m <sup>3</sup> )<br>② 15 ppm (3 mg/m <sup>3</sup> )<br>⑤ (Olejová hmlovina minerálny)  |
| Alberta (CA)                         | <b>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based</b><br>CAS No.: 72623-87-1<br>EC No.: 276-738-4 | ① 5 mg/m <sup>3</sup><br>② 10 mg/m <sup>3</sup><br>⑤ (Oil mist mineral)  |
| HTP (FI)                             | <b>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based</b><br>CAS No.: 72623-87-1<br>EC No.: 276-738-4 | ① 5 mg/m <sup>3</sup><br>⑤ (Öljysumu)  |
| LT                                   | <b>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based</b><br>CAS No.: 72623-87-1<br>EC No.: 276-738-4 | ① 1 mg/m <sup>3</sup><br>② 3 mg/m <sup>3</sup><br>⑤ (Tepalo rūkas arba dūmai)  |
| BC (CA)<br>from 1 Jan 2007           | <b>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based</b><br>CAS No.: 72623-87-1<br>EC No.: 276-738-4 | ① 0.2 mg/m <sup>3</sup><br>⑤ (Oil mist mineral) 1  |
| MY<br>from 1 Jan 2000                | <b>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based</b><br>CAS No.: 72623-87-1<br>EC No.: 276-738-4 | ① 5 mg/m <sup>3</sup><br>⑤ (Kabus minyak mineral)  |



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|--------------------------------------|---|--|
| BC (CA)<br>from 1 Jan 2007           | <b>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based</b><br>CAS No.: 72623-87-1<br>EC No.: 276-738-4 | ① 1 mg/m <sup>3</sup><br>⑤ (Oil mist mineral, severely refined)  |
| TW                                   | <b>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based</b><br>CAS No.: 72623-87-1<br>EC No.: 276-738-4 | ① 5 mg/m <sup>3</sup><br>⑤ (## ##)   |
| GR<br>from 1 Oct 2016                | <b>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based</b><br>CAS No.: 72623-87-1<br>EC No.: 276-738-4 | ① 5 mg/m <sup>3</sup><br>⑤ (Εκκνέφωμα λαδιού, ορυκτό)  |
| MY<br>from 1 Jan 2000                | <b>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based</b><br>CAS No.: 72623-87-1<br>EC No.: 276-738-4 | ① 10 mg/m <sup>3</sup><br>⑤ (Kabus minyak, vegetal)  |
| RO<br>from 21 Aug 2018               | <b>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based</b><br>CAS No.: 72623-87-1<br>EC No.: 276-738-4 | ① 5 mg/m <sup>3</sup><br>② 10 mg/m <sup>3</sup><br>⑤ (Ceata uleioasa mineral)  |
| CH<br>from 1 Jan 2022                | <b>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based</b><br>CAS No.: 72623-87-1<br>EC No.: 276-738-4 | ① 5 mg/m <sup>3</sup><br>⑤ (einatembare Fraktion) C2; Tox: Lunge; Messmeth: NIOSH DFG  |
| LV<br>from 12 Jul 2018               | <b>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based</b><br>CAS No.: 72623-87-1<br>EC No.: 276-738-4 | ① 5 mg/m <sup>3</sup><br>⑤ (Eļļas migla)   |
| JP                                   | <b>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based</b><br>CAS No.: 72623-87-1<br>EC No.: 276-738-4 | ① 3 mg/m <sup>3</sup><br>⑤ (##### ##)  |
| IDLH (US)<br>from 1 Jan 1994         | <b>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based</b><br>CAS No.: 72623-87-1<br>EC No.: 276-738-4 | ① 2,500 mg/m <sup>3</sup>  |
| IE<br>from 1 Apr 2016                | <b>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based</b><br>CAS No.: 72623-87-1<br>EC No.: 276-738-4 | ① 5 mg/m <sup>3</sup><br>⑤ (Oil mist mineral, inhalable fraction)  |
| CH<br>from 1 Jan 2022                | <b>naphthalene</b><br>CAS No.: 91-20-3<br>EC No.: 202-049-5   | ① 10 ppm (50 mg/m <sup>3</sup> )<br>⑤ (Dampf und Aerosol; kann über die Haut aufgenommen werden) H C2; Tox: Blut OAW Auge; Messmeth: NIOSH OSHA                                |
| BE                                   | <b>naphthalene</b><br>CAS No.: 91-20-3<br>EC No.: 202-049-5   | ① 10 ppm (53 mg/m <sup>3</sup> )<br>② 15 ppm (80 mg/m <sup>3</sup> )<br>⑤ (peut être absorbé par la peau) D  |
| CZ<br>from 1 Mar 2020                | <b>naphthalene</b><br>CAS No.: 91-20-3<br>EC No.: 202-049-5   | ① 9.4 ppm (50 mg/m <sup>3</sup> )<br>② 18.8 ppm (100 mg/m <sup>3</sup> )   |
| PL<br>from 12 Jun 2018               | <b>naphthalene</b><br>CAS No.: 91-20-3<br>EC No.: 202-049-5   | ① 20 mg/m <sup>3</sup><br>② 50 mg/m <sup>3</sup><br>⑤ (może przenikać przez skórę do organizmu) skóra  |
| NO                                   | <b>naphthalene</b><br>CAS No.: 91-20-3<br>EC No.: 202-049-5   | ① 10 ppm (50 mg/m <sup>3</sup> )<br>⑤ E  |
| IE<br>from 17 Jan 2020               | <b>naphthalene</b><br>CAS No.: 91-20-3<br>EC No.: 202-049-5   | ① 10 ppm (50 mg/m <sup>3</sup> )<br>⑤ IOELV  |



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|--------------------------------------|---|--|
| HTP (FI)                             | <b>naphthalene</b><br>CAS No.: 91-20-3<br>EC No.: 202-049-5 | ① 1 ppm (5 mg/m <sup>3</sup> )<br>② 2 ppm (10 mg/m <sup>3</sup> )  |
| LT                                   | <b>naphthalene</b><br>CAS No.: 91-20-3<br>EC No.: 202-049-5 | ① 10 ppm (50 mg/m <sup>3</sup> )<br>⑤ (Kancerogeninés) K   |
| SE                                   | <b>naphthalene</b><br>CAS No.: 91-20-3<br>EC No.: 202-049-5 | ① 10 ppm (50 mg/m <sup>3</sup> )<br>③ 15 ppm (80 mg/m <sup>3</sup> )   |
| NPEL (SK)<br>from 23 Nov 2011        | <b>naphthalene</b><br>CAS No.: 91-20-3<br>EC No.: 202-049-5 | ① 10 ppm (50 mg/m <sup>3</sup> )<br>② 15 ppm (80 mg/m <sup>3</sup> )<br>⑤ K  |
| TRGS 900 (DE)<br>from 23 Jun 2022    | <b>naphthalene</b><br>CAS No.: 91-20-3<br>EC No.: 202-049-5 | ① 0.4 ppm (2 mg/m <sup>3</sup> )<br>② 1.6 ppm (8 mg/m <sup>3</sup> )<br>⑤ (Aerosol und Dampf, kann über die Haut aufgenommen werden) AGS, H, Y, EU, 11, 27                     |
| DK                                   | <b>naphthalene</b><br>CAS No.: 91-20-3<br>EC No.: 202-049-5 | ① 10 ppm (50 mg/m <sup>3</sup> )<br>② 20 ppm (100 mg/m <sup>3</sup> )<br>⑤ EK  |
| BG                                   | <b>naphthalene</b><br>CAS No.: 91-20-3<br>EC No.: 202-049-5 | ① 50 mg/m <sup>3</sup><br>② 75 mg/m <sup>3</sup>   |
| HR                                   | <b>naphthalene</b><br>CAS No.: 91-20-3<br>EC No.: 202-049-5 | ① 10 ppm (50 mg/m <sup>3</sup> )   |
| ES                                   | <b>naphthalene</b><br>CAS No.: 91-20-3<br>EC No.: 202-049-5 | ① 10 ppm (53 mg/m <sup>3</sup> )<br>② 15 ppm (80 mg/m <sup>3</sup> )<br>⑤ (puede ser absorbido a través dérmica) vía dérmica, VLI  |
| RO<br>from 21 Aug 2018               | <b>naphthalene</b><br>CAS No.: 91-20-3<br>EC No.: 202-049-5 | ① 10 ppm (50 mg/m <sup>3</sup> )<br>⑤ C2   |
| EE                                   | <b>naphthalene</b><br>CAS No.: 91-20-3<br>EC No.: 202-049-5 | ① 10 ppm (50 mg/m <sup>3</sup> )   |
| LV                                   | <b>naphthalene</b><br>CAS No.: 91-20-3<br>EC No.: 202-049-5 | ① 10 ppm (50 mg/m <sup>3</sup> )   |
| Alberta (CA)<br>from 1 Dec 2021      | <b>naphthalene</b><br>CAS No.: 91-20-3<br>EC No.: 202-049-5 | ① 10 ppm (52 mg/m <sup>3</sup> )<br>② 15 ppm (79 mg/m <sup>3</sup> )<br>⑤ (may be absorbed through the skin) 1   |
| BC (CA)<br>from 1 Jun 2018           | <b>naphthalene</b><br>CAS No.: 91-20-3<br>EC No.: 202-049-5 | ① 10 ppm<br>⑤ (may be absorbed through the skin) Skin; 2B  |
| MY<br>from 1 Jan 2000                | <b>naphthalene</b><br>CAS No.: 91-20-3<br>EC No.: 202-049-5 | ① 10 ppm (52 mg/m <sup>3</sup> )   |
| IOELV (EU)                           | <b>naphthalene</b><br>CAS No.: 91-20-3<br>EC No.: 202-049-5 | ① 10 ppm (50 mg/m <sup>3</sup> )   |
| VLA (FR)                             | <b>naphthalene</b><br>CAS No.: 91-20-3<br>EC No.: 202-049-5 | ① 10 ppm (50 mg/m <sup>3</sup> )   |



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|---|---|--|
| SI<br>from 4 Dec 2018                   | <b>naphthalene</b><br>CAS No.: 91-20-3<br>EC No.: 202-049-5 | ① 50 mg/m <sup>3</sup><br>② 50 mg/m <sup>3</sup><br>⑤ (frakcija ki jo je mogoče vdihniti računati je treba z možnostjo prodiranja skozi kožo) K, Y, EU0                        |
| TW                                      | <b>naphthalene</b><br>CAS No.: 91-20-3<br>EC No.: 202-049-5 | ① 10 ppm (52 mg/m <sup>3</sup> )   |
| KR                                      | <b>naphthalene</b><br>CAS No.: 91-20-3<br>EC No.: 202-049-5 | ① 10 ppm (50 mg/m <sup>3</sup> )<br>② 15 ppm (75 mg/m <sup>3</sup> )   |
| IS                                      | <b>naphthalene</b><br>CAS No.: 91-20-3<br>EC No.: 202-049-5 | ① 10 ppm (50 mg/m <sup>3</sup> )   |
| CN<br>from 1 Apr 2020                   | <b>naphthalene</b><br>CAS No.: 91-20-3<br>EC No.: 202-049-5 | ① 50 mg/m <sup>3</sup><br>② 75 mg/m <sup>3</sup><br>⑤ (#####)  |
| RU                                      | <b>naphthalene</b><br>CAS No.: 91-20-3<br>EC No.: 202-049-5 | ③ 20 mg/m <sup>3</sup>   |
| HU                                      | <b>naphthalene</b><br>CAS No.: 91-20-3<br>EC No.: 202-049-5 | ① 50 mg/m <sup>3</sup><br>⑤ i  |
| GR<br>from 1 Oct 2016                   | <b>naphthalene</b><br>CAS No.: 91-20-3<br>EC No.: 202-049-5 | ① 10 ppm (50 mg/m <sup>3</sup> )   |
| NL                                      | <b>naphthalene</b><br>CAS No.: 91-20-3<br>EC No.: 202-049-5 | ① 50 mg/m <sup>3</sup><br>② 80 mg/m <sup>3</sup>   |
| NL<br>from 1 Jan 2023                   | <b>naphthalene</b><br>CAS No.: 91-20-3<br>EC No.: 202-049-5 | ① 10 ppm (50 mg/m <sup>3</sup> )<br>② 16 ppm (80 mg/m <sup>3</sup> )   |
| MAK (AT)                                | <b>naphthalene</b><br>CAS No.: 91-20-3<br>EC No.: 202-049-5 | ① 10 ppm (50 mg/m <sup>3</sup> )<br>⑤ (kann über die Haut aufgenommen werden) III B, H   |
| SI<br>from 4 Dec 2018                   | <b>naphthalene</b><br>CAS No.: 91-20-3<br>EC No.: 202-049-5 | ① 10 ppm<br>② 10 ppm<br>⑤ (računati je treba z možnostjo prodiranja skozi kožo) K, Y, EU0  |
| TR                                      | <b>naphthalene</b><br>CAS No.: 91-20-3<br>EC No.: 202-049-5 | ① 10 ppm (50 mg/m <sup>3</sup> )   |
| IDLH (US)<br>from 1 Jan 1994            | <b>naphthalene</b><br>CAS No.: 91-20-3<br>EC No.: 202-049-5 | ① 250 ppm  |
| Québec (CA)<br>from 1 Apr 2022          | <b>naphthalene</b><br>CAS No.: 91-20-3<br>EC No.: 202-049-5 | ① 10 ppm<br>⑤ (may be absorbed through the skin)   |
| OSHA (US)                               | <b>naphthalene</b><br>CAS No.: 91-20-3<br>EC No.: 202-049-5 | ① 10 ppm (50 mg/m <sup>3</sup> )   |
| NIOSH (US)                              | <b>naphthalene</b><br>CAS No.: 91-20-3<br>EC No.: 202-049-5 | ① 10 ppm (50 mg/m <sup>3</sup> )<br>② 15 ppm (75 mg/m <sup>3</sup> )   |
| ACGIH (US)                              | <b>naphthalene</b><br>CAS No.: 91-20-3<br>EC No.: 202-049-5 | ① 10 ppm (52 mg/m <sup>3</sup> )<br>② 15 ppm (79 mg/m <sup>3</sup> )<br>⑤ (may be absorbed through the skin)   |





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### 8.1.2. Biological limit values

No data available

### 8.1.3. DNEL-/PNEC-values

| Substance name  | DNEL value              | ① DNEL type<br>② Exposure route                             |
|---|-------------------------|---|
| <b>Isomer mixture of C7-9-alkyl-3- (3,5-di-trans-butyl-4-hydroxyphenyl) propionate</b><br>CAS No.: 125643-61-0<br>EC No.: 406-040-9 | 2.33 mg/m <sup>3</sup>  | ① DNEL worker<br>② Long-term - inhalation, systemic effects |
| <b>Reaction product of alkylthioalcohol and substituted phosphorus compound</b><br>EC No.: 424-820-7                                | 1.76 mg/m <sup>3</sup>  | ① DNEL worker<br>② Long-term - inhalation, systemic effects |
| <b>Reaction product of alkylthioalcohol and substituted phosphorus compound</b><br>EC No.: 424-820-7                                | 0.5 mg/kg bw/day        | ① DNEL worker<br>② Long-term - dermal, systemic effects     |
| <b>4,4'-thiodiethylene hydrogen -2-octadecenylsuccinate</b><br>CAS No.: 93882-40-7<br>EC No.: 299-434-3                             | 3.526 mg/m <sup>3</sup> | ① DNEL worker<br>② Long-term - inhalation, systemic effects |
| <b>4,4'-thiodiethylene hydrogen -2-octadecenylsuccinate</b><br>CAS No.: 93882-40-7<br>EC No.: 299-434-3                             | 2 mg/kg bw/day          | ① DNEL worker<br>② Long-term - dermal, systemic effects     |
| <b>naphthalene</b><br>CAS No.: 91-20-3<br>EC No.: 202-049-5   | 25 mg/m <sup>3</sup>    | ① DNEL worker<br>② Long-term - inhalation, systemic effects |
| <b>naphthalene</b><br>CAS No.: 91-20-3<br>EC No.: 202-049-5   | 25 mg/m <sup>3</sup>    | ① DNEL worker<br>② Long-term - inhalation, local effects    |
| <b>naphthalene</b><br>CAS No.: 91-20-3<br>EC No.: 202-049-5   | 3.57 mg/kg bw/day       | ① DNEL worker<br>② Long-term - dermal, systemic effects     |

| Substance name  | PNEC Value          | ① PNEC type                   |
|---|---------------------|-------------------------------|
| <b>Reaction product of alkylthioalcohol and substituted phosphorus compound</b><br>EC No.: 424-820-7    | 0.9 µg/L            | ① PNEC aquatic, freshwater    |
| <b>Reaction product of alkylthioalcohol and substituted phosphorus compound</b><br>EC No.: 424-820-7    | 0.09 µg/L           | ① PNEC aquatic, marine water  |
| <b>Reaction product of alkylthioalcohol and substituted phosphorus compound</b><br>EC No.: 424-820-7    | 5 mg/L              | ① PNEC sewage treatment plant |
| <b>Reaction product of alkylthioalcohol and substituted phosphorus compound</b><br>EC No.: 424-820-7    | 0.159 mg/kg bw/day  | ① PNEC sediment, freshwater   |
| <b>Reaction product of alkylthioalcohol and substituted phosphorus compound</b><br>EC No.: 424-820-7    | 0.0159 mg/kg bw/day | ① PNEC sediment, marine water |
| <b>4,4'-thiodiethylene hydrogen -2-octadecenylsuccinate</b><br>CAS No.: 93882-40-7<br>EC No.: 299-434-3 | 9.5 µg/L            | ① PNEC aquatic, freshwater    |
| <b>4,4'-thiodiethylene hydrogen -2-octadecenylsuccinate</b><br>CAS No.: 93882-40-7<br>EC No.: 299-434-3 | 0.95 µg/L           | ① PNEC aquatic, marine water  |



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| Substance name  | PNEC Value | ① PNEC type                          |
|---|------------|--------------------------------------|
| <b>4,4'-thiodiethylene hydrogen -2-octadecenylsuccinate</b><br>CAS No.: 93882-40-7<br>EC No.: 299-434-3 | 100 mg/L   | ① PNEC sewage treatment plant        |
| <b>4,4'-thiodiethylene hydrogen -2-octadecenylsuccinate</b><br>CAS No.: 93882-40-7<br>EC No.: 299-434-3 | 95 µg/L    | ① PNEC aquatic, intermittent release |
| <b>naphthalene</b><br>CAS No.: 91-20-3<br>EC No.: 202-049-5   | 2.4 µg/L   | ① PNEC aquatic, freshwater           |
| <b>naphthalene</b><br>CAS No.: 91-20-3<br>EC No.: 202-049-5   | 2.4 µg/L   | ① PNEC aquatic, marine water         |
| <b>naphthalene</b><br>CAS No.: 91-20-3<br>EC No.: 202-049-5   | 2.9 mg/L   | ① PNEC sewage treatment plant        |
| <b>naphthalene</b><br>CAS No.: 91-20-3<br>EC No.: 202-049-5   | 20 µg/L    | ① PNEC aquatic, intermittent release |

## 8.2. Exposure controls

### 8.2.1. Appropriate engineering controls

See section 7. No additional measures necessary.

### 8.2.2. Personal protection equipment



#### Eye/face protection:

During transfer: Eye glasses with side protection  
Wear eye/face protection. EN 166

#### Skin protection:

Hand protection

Suitable material: NBR (Nitrile rubber), PVC (polyvinyl chloride), CR (polychloroprene, chloroprene rubber)

Thickness of the glove material:  $\geq 0,4$  mm

Breakthrough time: 480 min

Breakthrough times and swelling properties of the material must be taken into consideration.

The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Tested protective gloves must be worn: EN ISO 374

Suitable protective clothing: Protective clothing

#### Respiratory protection:

Usually no personal respiratory protection necessary.

### 8.2.3. Environmental exposure controls

See section 7. No additional measures necessary.

## SECTION 9: Physical and chemical properties

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

#### Appearance

**Physical state:** Liquid

**Colour:** red

**Odour:** characteristic

#### Safety relevant basis data

| Parameter     | Value                 | at °C | ① Method<br>② Remark |
|---------------|-----------------------|-------|----------------------|
| pH            | <i>not applicable</i> |       |                      |
| Melting point | <i>not determined</i> |       |                      |



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| Parameter                                    | Value                 | at °C | ① Method<br>② Remark |
|--|-----------------------|-------|----------------------|
| Freezing point                               | not determined        |       |                      |
| Initial boiling point and boiling range      | not determined        |       |                      |
| Decomposition temperature                    | not determined        |       |                      |
| Flash point                                  | 218 °C                |       |                      |
| Evaporation rate                             | not determined        |       |                      |
| Auto-ignition temperature                    | not determined        |       |                      |
| Upper/lower flammability or explosive limits | not determined        |       |                      |
| Vapour pressure                              | not determined        |       |                      |
| Vapour density                               | not determined        |       |                      |
| Density                                      | 841 kg/m <sup>3</sup> | 15 °C |                      |
| Relative density                             | not determined        |       |                      |
| Bulk density                                 | not determined        |       |                      |
| Water solubility                             | practically insoluble |       |                      |
| Partition coefficient: n-octanol/water       | not determined        |       |                      |
| Dynamic viscosity                            | not determined        |       |                      |
| Kinematic viscosity                          | 29 mm <sup>2</sup> /s | 40 °C |                      |

\* **9.2. Other information**

Not applicable

**SECTION 10: Stability and reactivity****10.1. Reactivity**

No known hazardous reactions. Risk of explosion if heated under confinement.

**10.2. Chemical stability**

The mixture is chemically stable under recommended conditions of storage, use and temperature.

**10.3. Possibility of hazardous reactions**

No hazardous reaction when handled and stored according to provisions.

**10.4. Conditions to avoid**

To avoid thermal decomposition do not overheat.

**10.5. Incompatible materials**

Materials to avoid: Acid, Oxidising agent, Reducing agent

\* **10.6. Hazardous decomposition products**Hazardous combustion products: Carbon monoxide, Carbon dioxide (CO<sub>2</sub>), Nitrogen oxides (NO<sub>x</sub>),  
During heating or in case of fire, toxic gases is possible.**SECTION 11: Toxicological information****11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**

|  |                      |                   |
|--|----------------------|-------------------|
| <b>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based</b>            | CAS No.: 72623-87-1  | EC No.: 276-738-4 |
| <b>LD<sub>50</sub> oral:</b>   | ≥5,000 mg/kg         |                   |
| <b>LD<sub>50</sub> dermal:</b>   | ≥2,000 mg/kg         |                   |
| <b>LC<sub>50</sub> Acute inhalation toxicity (dust/mist):</b>                          | ≥5 mg/L              |                   |
| <b>Isomer mixture of C7-9-alkyl-3- (3,5-di-trans-butyl-4-hydroxyphenyl) propionate</b> | CAS No.: 125643-61-0 | EC No.: 406-040-9 |
| <b>LD<sub>50</sub> oral:</b>   | >2,000 mg/kg (Ratte) |                   |
| <b>LD<sub>50</sub> dermal:</b>   | >2,000 mg/kg (Ratte) |                   |
| <b>LC<sub>50</sub> Acute inhalation toxicity (dust/mist):</b>                          | >5 mg/L              |                   |
| <b>Reaction product of alkylthioalcohol and substituted phosphorus compound</b>        | EC No.: 424-820-7    |                   |
| <b>LD<sub>50</sub> oral:</b>   | 2,000 mg/kg (rat)    |                   |
| <b>LD<sub>50</sub> dermal:</b>   | 500 mg/kg (rabbit)   |                   |



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|   |
|---|
| <b>4,4'-thiodiethylene hydrogen -2-octadecenylsuccinate</b> CAS No.: 93882-40-7 EC No.: 299-434-3 |
| <b>LD<sub>50</sub> oral:</b> 10,000 mg/kg (rat)   |
| <b>LD<sub>50</sub> dermal:</b> 3,160 mg/kg (rabbit)   |
| <b>Hydrocarbons, C10, aromatics, &lt;1% naphthalene</b> CAS No.: 1189173-42-9 EC No.: 918-811-1   |
| <b>LD<sub>50</sub> oral:</b> =6,318 mg/kg (rats) OECD TG 401                                      |
| <b>LD<sub>50</sub> dermal:</b> >2,000 mg/kg (rabbits) OECD TG 402                                 |
| <b>LC<sub>50</sub> Acute inhalation toxicity (vapour):</b> >4.688 mg/L (rats) OECD TG 403         |
| <b>naphthalene</b> CAS No.: 91-20-3 EC No.: 202-049-5   |
| <b>LD<sub>50</sub> oral:</b> >533 mg/kg (Mouse)   |
| <b>LD<sub>50</sub> dermal:</b> >16,000 mg/kg (Rat)  |
| <b>LC<sub>50</sub> Acute inhalation toxicity (vapour):</b> >0.4 mg/L 4 h (rat)                    |
| <b>LC<sub>50</sub> Acute inhalation toxicity (dust/mist):</b> >0.4 mg/L 4 h (Rat)                 |

**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:**

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

**Serious eye damage/irritation:**

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

**Respiratory or skin sensitisation:**

Contains 4,4'-thiodiethylene hydrogen -2-octadecenylsuccinate. 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:**

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

**STOT-repeated exposure:**

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

**Aspiration hazard:**

Observe risk of aspiration if vomiting occurs.  
 For viscosity data, see section 9.

**Additional information:**

Frequently or prolonged contact with skin may cause dermal irritation.

**11.2. Information on other hazards**

**Endocrine disrupting properties:**

This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

**Other information:**

No data available.

**SECTION 12: Ecological information**

\* **12.1. Toxicity**

|   |
|---|
| <b>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based</b> CAS No.: 72623-87-1 EC No.: 276-738-4 |
| <b>LC<sub>50</sub>:</b> ≥100 mg/L 4 d (fish)  |
| <b>EC<sub>50</sub>:</b> ≥10,000 mg/L 2 d (crustaceans)  |
| <b>NOEC:</b> ≥10 mg/L 21 d (crustaceans)  |
| <b>ErC<sub>50</sub>:</b> ≥100 mg/L 3 d (Algae/water plant)  |



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|  |
|--|
| <b>Isomer mixture of C7-9-alkyl-3- (3,5-di-trans-butyl-4-hydroxyphenyl) propionate</b> CAS No.: 125643-61-0<br>EC No.: 406-040-9 |
|--|

|   |
|---|
| <b>EC<sub>50</sub></b> : >100 mg/L 2 d (crustaceans, Daphnie) |
|---|

|   |
|---|
| <b>NOEC</b> : >3 mg/L 3 d (Algae/water plant, Alge) |
|---|

|   |
|---|
| <b>Reaction product of alkylthioalcohol and substituted phosphorus compound</b> EC No.: 424-820-7 |
|---|

|  |
|--|
| <b>LC<sub>50</sub></b> : 1.5 mg/L 4 d (fish) |
|--|

|  |
|--|
| <b>EC<sub>50</sub></b> : 0.09 mg/L 2 d (crustaceans) |
|--|

|  |
|--|
| <b>EC<sub>50</sub></b> : 0.31 mg/L 3 d (Algae/water plant) |
|--|

|   |
|---|
| <b>4,4'-thiodiethylene hydrogen -2-octadecenylsuccinate</b> CAS No.: 93882-40-7 EC No.: 299-434-3 |
|---|

|  |
|--|
| <b>LC<sub>50</sub></b> : 100 mg/L 4 d (fish) |
|--|

|   |
|---|
| <b>EC<sub>50</sub></b> : 9.5 mg/L 2 d (crustaceans) |
|---|

|  |
|--|
| <b>NOEC</b> : 100 mg/L 3 d (Algae/water plant) |
|--|

|   |
|---|
| <b>Hydrocarbons, C10, aromatics, &lt;1% naphthalene</b> CAS No.: 1189173-42-9 EC No.: 918-811-1 |
|---|

|   |
|---|
| <b>LC<sub>50</sub></b> : ≥2 - ≤5 mg/L 4 d (fish, rainbow trout) |
|---|

|   |
|---|
| <b>LC<sub>50</sub></b> : ≥3 - ≤10 mg/L 2 d (crustaceans, Daphnia magna) |
|---|

|  |
|--|
| <b>EC<sub>50</sub></b> : ≥1 - ≤3 mg/L 3 d (Algae/water plant, Pseudokirchneriella subcapitata) |
|--|

|  |
|--|
| <b>NOEC</b> : =0.441 mg/L 28 d (fish, rainbow trout) |
|--|

|   |
|---|
| <b>NOEC</b> : =0.771 mg/L 21 d (crustaceans, Daphnia magna) |
|---|

|  |
|--|
| <b>NOEC</b> : ≈1 mg/L 3 d (Algae/water plant, Pseudokirchneriella subcapitata) |
|--|

|   |
|---|
| <b>LC<sub>50</sub></b> : ≥2 - ≤5 mg/L 4 d (fish, Oncorhynchus mykiss (Rainbow trout)) |
|---|

|  |
|--|
| <b>EC<sub>50</sub></b> : ≥3 - ≤10 mg/L 2 d (crustaceans, Daphnia magna (Big water flea)) |
|--|

|   |
|---|
| <b>naphthalene</b> CAS No.: 91-20-3 EC No.: 202-049-5 |
|---|

|  |
|--|
| <b>LC<sub>50</sub></b> : 6.08 mg/L 3 d (fish, Pimephales promelas) |
|--|

|  |
|--|
| <b>LC<sub>50</sub></b> : 1.2 mg/L 4 d (fish, Oncorhynchus gorboscha) |
|--|

|  |
|--|
| <b>LC<sub>50</sub></b> : 6.35 mg/L 2 d (fish, Pimephales promelas) |
|--|

|   |
|---|
| <b>EC<sub>50</sub></b> : >2.96 mg/L 4 d (Algae/water plant) |
|---|

|  |
|--|
| <b>EC<sub>50</sub></b> : 2.16 mg/L 2 d (crustaceans, Daphnia magna) OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test) |
|--|

|   |
|---|
| <b>NOEC</b> : 0.12 mg/L 40 d (fish, Oncorhynchus gorboscha) |
|---|

|   |
|---|
| <b>LOEC</b> : 0.38 mg/L 40 d (fish, Oncorhynchus gorboscha) |
|---|

**Aquatic toxicity:**

Test results offset the calculated involvement of the reaction product comprised of alkyl thio-alcohol and a substituted phosphorous compound (EG 424-820-7), this substance being a tested mixture of "alkyl phosphite". Water tests for Acute and Chronic toxicities, which have been conducted with a mixture of "alkyl phosphite", result in a classification of Acute Aquatic 3. The classification of the product is then determined applying the Acute Aquatic 3 classification method and the weight percentage of the "alkyl phosphite mixture" as well as the classification and percentage by weight of the other substances with an aquatic classification present in the product.

**Assessment/classification:**

The substance/mixture does not fulfill the criteria of the acute aquatic toxicity according to Regulation (EC) No 1272/2008 [CLP], Annex I.

**Additional ecotoxicological information:**

Do not allow uncontrolled discharge of product into the environment.

\* **12.2. Persistence and degradability**

|   |
|---|
| <b>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based</b> CAS No.: 72623-87-1 EC No.: 276-738-4 |
| <b>Biodegradation:</b> Yes, slowly  |

**Biodegradation:**

Not readily biodegradable (according to OECD criteria)

\* **12.3. Bioaccumulative potential**

|   |
|---|
| <b>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based</b> CAS No.: 72623-87-1 EC No.: 276-738-4 |
| <b>Log K<sub>ow</sub></b> : 6   |
| <b>naphthalene</b> CAS No.: 91-20-3 EC No.: 202-049-5   |
| <b>Log K<sub>ow</sub></b> : 3.7   |
| <b>Bioconcentration factor (BCF)</b> : 168  |



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**Accumulation / Evaluation:**

The product has not been tested.

**12.4. Mobility in soil**

The product has not been tested.

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

|   |
|---|
| <b>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based</b> CAS No.: 72623-87-1 EC No.: 276-738-4             |
| <b>Results of PBT and vPvB assessment:</b> This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.           |
| <b>Isomer mixture of C7-9-alkyl-3- (3,5-di-trans-butyl-4-hydroxyphenyl) propionate</b> CAS No.: 125643-61-0 EC No.: 406-040-9 |
| <b>Results of PBT and vPvB assessment:</b> This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.           |
| <b>Reaction product of alkylthioalcohol and substituted phosphorus compound</b> EC No.: 424-820-7                             |
| <b>Results of PBT and vPvB assessment:</b> This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.           |
| <b>4,4'-thiodiethylene hydrogen -2-octadecenylsuccinate</b> CAS No.: 93882-40-7 EC No.: 299-434-3                             |
| <b>Results of PBT and vPvB assessment:</b> This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.           |
| <b>Hydrocarbons, C10, aromatics, &lt;1% naphthalene</b> CAS No.: 1189173-42-9 EC No.: 918-811-1                               |
| <b>Results of PBT and vPvB assessment:</b> This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.           |
| <b>naphthalene</b> CAS No.: 91-20-3 EC No.: 202-049-5   |
| <b>Results of PBT and vPvB assessment:</b> This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.           |

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

\* **12.6. Endocrine disrupting properties**

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

**12.7. Other adverse effects**

No data available.

**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**

Dispose of waste according to applicable legislation.

**Waste treatment options**

**Appropriate disposal / Product:**

Dispose of waste according to applicable legislation.

**Appropriate disposal / Package:**

Non-contaminated packages may be recycled.

**Other disposal recommendations:**

Consult the appropriate local waste disposal expert about waste disposal.

**13.2. Additional information**

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

**SECTION 14: Transport information**

| Land transport (ADR/RID)                                   | Inland waterway craft (ADN)                                | Sea transport (IMDG)                                       | Air transport (ICAO-TI / IATA-DGR)                         |
|--|--|--|--|
| <b>14.1. UN number or ID number</b>                        |  |  |  |
| No dangerous good in sense of these transport regulations. | No dangerous good in sense of these transport regulations. | No dangerous good in sense of these transport regulations. | No dangerous good in sense of these transport regulations. |
| <b>14.2. UN proper shipping name</b>                       |  |  |  |
| No dangerous good in sense of these transport regulations. | No dangerous good in sense of these transport regulations. | No dangerous good in sense of these transport regulations. | No dangerous good in sense of these transport regulations. |
| <b>14.3. Transport hazard class(es)</b>                    |  |  |  |
| not relevant   | not relevant   | not relevant   | not relevant   |
| <b>14.4. Packing group</b>                                 |  |  |  |
| not relevant   | not relevant   | not relevant   | not relevant   |



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| Land transport (ADR/RID)                  | Inland waterway craft (ADN) | Sea transport (IMDG) | Air transport (ICAO-TI / IATA-DGR) |
|---|-----------------------------|----------------------|------------------------------------|
| <b>14.5. Environmental hazards</b>        |                             |                      |                                    |
| not relevant                              | not relevant                | not relevant         | not relevant                       |
| <b>14.6. Special precautions for user</b> |                             |                      |                                    |
| not relevant                              | not relevant                | not relevant         | not relevant                       |

**14.7. Maritime transport in bulk according to IMO instruments**  
 Not applicable

**SECTION 15: Regulatory information**

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

**15.1.1. EU legislation**

**Other regulations (EU):**

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances [Seveso-III-Directive]: This product is not assigned to a hazard category.  
 Safety data sheet available on request.

**15.1.2. National regulations**

 **[DE] National regulations**

**Störfallverordnung (12. BlmschV)**

**for substances contained in the product:**

This product is not assigned to a hazard category.

**Technische Anleitung zur Reinhaltung der Luft (TA-Luft)**

**Remark:**

To follow: 5.2.5

**Water hazard class**

**WGK:**

2 - obviously hazardous to water

**Source:**

Self-classification (mixture; calculation rule).  
 Identification number 436

**Technische Regeln für Gefahrstoffe**

TRGS 510

TRGS 500

**Berufsgenossenschaftliche Vorschriften (DGUV-Vorschriften)**

Berufsgenossenschaftliche Informationen (DGUV-Informationen) 868  
 Berufsgenossenschaftliche Regeln (DGUV-Regeln) 189, 190, 192, 195

**Other regulations, restrictions and prohibition regulations**

Altöl-Verordnung (AltöIV)

 **[DK] National regulations**

**Other regulations, restrictions and prohibition regulations**


Dänemark: Bekendtgørelse af lov om arbejdsmiljø: Beskæftigelsesministeriets lovbekendtgørelse nr. 1072 af 7. september 2010

Lister over stoffer og processer, der anses for at være kræftfremkaldende

 **[FR] National regulations**

**Other regulations, restrictions and prohibition regulations**

Frankreich: Tableaux de maladies professionnelles  
 Nomenclature des installations classées pour la protection de l'environnement  
 Articles L. 4523-1 à L. 4523-17, L. 4611-1 à L. 4614-16, R. 4523-1 à R. 4523-17 et R. 4612-1 à R. 4615-21 du Code du travail

 **[NL] National regulations**

**Other regulations, restrictions and prohibition regulations**

Niederlande: Lijst vank kankerverwekkende, mutagene en voor de voortplanting giftige stoffen (SZW)  
 Algemeene beoordelingsmethodiek Water (ABM)  
 Nederlandse emissierichtlijn (NeR)  
 NIET-Limitatieve lijst an voor de voortplanting giftige stoffen - Borstvoeding  
 NIET-Limitatieve lijst an voor de voortplanting giftige stoffen - Vruchtbaarheid  
 NIET-Limitatieve lijst an voor de voortplanting giftige stoffen - Ontwikkeling



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SZW-lijst van kankerverwekkende stoffen  
 SZW-lijst van mutagene stoffen  
 Wet van 18 maart 1999, houdende bepalingen ter verbetering van de arbeidsomstandigheden (Arbeidsomstandighedenwet)  
 Wet op de ondernemingsraden 1971

**[CH] National regulations****Other regulations, restrictions and prohibition regulations**

Mengenschwelle (Schweiz - StFV)  
 Gefahrencode  
 Brandverhütung, BVD (Schweiz)

**15.2. Chemical Safety Assessment**

Chemical safety assessments for substances in this mixture were not carried out.

**15.3. Additional information**

No data available.

**SECTION 16: Other information****\* 16.1. Indication of changes**

|       |  |
|-------|--|
| 1.3.  | Details of the supplier of the safety data sheet   |
| 1.4.  | Emergency telephone number   |
| 2.1.  | Classification of the substance or mixture   |
| 2.2.  | Label elements   |
| 2.3.  | Other hazards  |
| 3.2.  | Mixtures   |
| 4.2.  | Most important symptoms and effects, both acute and delayed  |
| 5.1.  | Extinguishing media  |
| 7.1.  | Precautions for safe handling  |
| 8.1.  | Control parameters   |
| 9.1.  | Information on basic physical and chemical properties  |
| 9.2.  | Other information  |
| 10.6. | Hazardous decomposition products   |
| 12.1. | Toxicity   |
| 12.2. | Persistence and degradability  |
| 12.3. | Bioaccumulative potential  |
| 12.5. | Results of PBT and vPvB assessment   |
| 12.6. | Endocrine disrupting properties  |
| 15.1. | Safety, health and environmental regulations/legislation specific for the substance or mixture         |
| 16.1. | Indication of changes  |
| 16.4. | Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP] |
| 16.5. | Relevant R-, H- and EUH-phrases (Number and full text)   |

**16.2. Abbreviations and acronyms**

See overview table at [www.euphrac.eu](http://www.euphrac.eu)

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

**16.3. Key literature references and sources for data**

EC 1907/2006 - REACH Regulation

1272/2008 EC - Regulation on classification, labeling and packaging of substances and mixtures, and amending Directives 67/548/EEC and 1999/45/EC and Regulation (EC) No 1907/2006

Regulation (EC) No 1907/2006 (REACH), Annex II

European Chemicals Agency (ECHA), C & L classification and labeling inventory

European Chemicals Agency (ECHA), ECHA CHEM Registered substances

OECD The Global Portal to Information on Chemical Substances (ChemPortal)

Institute for Occupational Safety and Health of the German Social Accident Insurance (IFA): GESTIS substance database and International limit values for chemical substances





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Federal Environment Agency, Section IV 2.4: Documentation and Information Centre substances hazardous to water Rigoletto (catalog substances hazardous to water)

| Substance name                                       | Type  | source of supply   |
|--|---|--|
| naphthalene<br>CAS No.: 91-20-3<br>EC No.: 202-049-5 | LC <sub>50</sub> Acute inhalation toxicity (vapour); LC <sub>50</sub> ; EC <sub>50</sub> ; NOEC; LOEC | Source: European Chemicals Agency, <a href="http://echa.europa.eu/">http://echa.europa.eu/</a> |

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

The mixture is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].

\* **16.5. Relevant R-, H- and EUH-phrases (Number and full text)**

| Hazard statements |   |
|-------------------|---|
| 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.                |
| H317              | May cause an allergic skin reaction.                    |
| H319              | Causes serious eye irritation.                          |
| H336              | May cause drowsiness or dizziness.                      |
| H351              | Suspected of causing cancer.                            |
| 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.        |
| H413              | May cause long lasting harmful effects to aquatic life. |

**16.6. Training advice**

No data available

**16.7. Additional information**

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

\* Data changed compared with the previous version.