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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 DFE SAE 0W-20

Article No.:

1111109

#### 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 Benzenesulfonic acid, methyl-, mono-C20-24-branched alkyl derivs., Calcium salts. 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 Classification according to Regulation (EC) No 1272/2008 [CLP]	Concentration
CAS No.: 68037-01-4 EC No.: 500-183-1 REACH No.: 01-2119486452-34	<b>1-decene, homopolymer, hydrogenated</b> The substance is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP].	45 - < 65 weight-%
CAS No.: 64742-54-7 EC No.: 265-157-1 REACH No.: 01-2119484627-25	<b>Distillates (petroleum), hydrotreated heavy paraffinic; Base oil - not specified</b> Asp. Tox. 1 (H304) Danger	1 - < 2 weight-%
CAS No.: 72623-86-0 EC No.: 276-737-9 REACH No.: 01-2119474878-16	<b>Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based</b> Asp. Tox. 1 (H304) Danger	< 1.5 weight-%
CAS No.: 72623-87-1 EC No.: 276-738-4 REACH No.: 01-2119474889-13	<b>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil</b> Asp. Tox. 1 (H304) Danger <b>Specific concentration limit (SCL)</b> Asp. Tox. 1; H304: 0% ≤ C < 100%	< 1 weight-%
CAS No.: 722503-68-6 EC No.: 682-816-2	<b>Benzenesulfonic acid, methyl-, mono-C20-24-branched alkyl derivs., Calcium salts</b> Skin Sens. 1B (H317) Warning	0 - < 0.22 weight-%
CAS No.: 121158-58-5 EC No.: 310-154-3 Index No.: 604-092-00-9 REACH No.: 01-2119513207-49	<b>Phenol, dodecyl-, branched</b> <i>Candidate List of Substances of Very High Concern for Authorisation!</i> Aquatic Acute 1 (H400), Aquatic Chronic 1 (H410), Eye Dam. 1 (H318), Repr. 1B (H360F), Skin Corr. 1C (H314) Danger M-factor (acute): 10 M-factor (chronic): 10 <b>Additional information:</b> This substance has endocrine disrupting properties with respect to humans. This substance has endocrine disrupting properties with respect to non-target organisms.	< 0.03 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

**[P:34583125-7301-47ff-bd6f-3b93e9353122\](#)**

### 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:

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



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



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BC (CA) from 1 Jan 2007	<b>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil</b> CAS No.: 72623-87-1 EC No.: 276-738-4	① 1 mg/m <sup>3</sup> ⑤ (Oil mist mineral, severely refined)
TW	<b>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil</b> CAS No.: 72623-87-1 EC No.: 276-738-4	① 5 mg/m <sup>3</sup> ⑤ (## ##)
GR from 1 Oct 2016	<b>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil</b> CAS No.: 72623-87-1 EC No.: 276-738-4	① 5 mg/m <sup>3</sup> ⑤ (Εκκνέφωμα λαδιού, ορυκτό)
MY from 1 Jan 2000	<b>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil</b> CAS No.: 72623-87-1 EC No.: 276-738-4	① 10 mg/m <sup>3</sup> ⑤ (Kabus minyak, vegetal)
RO from 21 Aug 2018	<b>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil</b> CAS No.: 72623-87-1 EC No.: 276-738-4	① 5 mg/m <sup>3</sup> ② 10 mg/m <sup>3</sup> ⑤ (Ceata uleioasa mineral)
CH from 1 Jan 2022	<b>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil</b> CAS No.: 72623-87-1 EC No.: 276-738-4	① 5 mg/m <sup>3</sup> ⑤ (einatembare Fraktion) C2; Tox: Lunge; Messmeth: NIOSH DFG
LV from 12 Jul 2018	<b>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil</b> CAS No.: 72623-87-1 EC No.: 276-738-4	① 5 mg/m <sup>3</sup> ⑤ (Eļļas migla)
JP	<b>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil</b> CAS No.: 72623-87-1 EC No.: 276-738-4	① 3 mg/m <sup>3</sup> ⑤ (##### ##)
IDLH (US) from 1 Jan 1994	<b>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil</b> CAS No.: 72623-87-1 EC No.: 276-738-4	① 2,500 mg/m <sup>3</sup>
IE from 1 Apr 2016	<b>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil</b> CAS No.: 72623-87-1 EC No.: 276-738-4	① 5 mg/m <sup>3</sup> ⑤ (Oil mist mineral, inhalable fraction)
CH from 1 Jan 2022	<b>diphenylamine</b> CAS No.: 122-39-4 EC No.: 204-539-4	① 10 mg/m <sup>3</sup> ⑤ (einatembare Fraktion; Dampf und Aerosol; kann über die Haut aufgenommen werden) H SSC; Tox: Niere Blut Leber; Messmeth: NIOSH OSHA
BE	<b>diphenylamine</b> CAS No.: 122-39-4 EC No.: 204-539-4	① 10 mg/m <sup>3</sup>
CZ from 1 Mar 2020	<b>diphenylamine</b> CAS No.: 122-39-4 EC No.: 204-539-4	① 10 mg/m <sup>3</sup> ② 20 mg/m <sup>3</sup> ⑤ (může pronikat pokožkou) D
NO	<b>diphenylamine</b> CAS No.: 122-39-4 EC No.: 204-539-4	① 5 mg/m <sup>3</sup>
IE	<b>diphenylamine</b> CAS No.: 122-39-4 EC No.: 204-539-4	① 10 mg/m <sup>3</sup> ② 20 mg/m <sup>3</sup>
MY from 1 Jan 2000	<b>diphenylamine</b> CAS No.: 122-39-4 EC No.: 204-539-4	① 10 mg/m <sup>3</sup>



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HTP (FI)	<b>diphenylamine</b> CAS No.: 122-39-4 EC No.: 204-539-4	① 5 mg/m <sup>3</sup> ② 10 mg/m <sup>3</sup>
LT	<b>diphenylamine</b> CAS No.: 122-39-4 EC No.: 204-539-4	① 4 mg/m <sup>3</sup> ② 12 mg/m <sup>3</sup> ⑤
SE	<b>diphenylamine</b> CAS No.: 122-39-4 EC No.: 204-539-4	① 4 mg/m <sup>3</sup> ③ 12 mg/m <sup>3</sup>
MAK (AT)	<b>diphenylamine</b> CAS No.: 122-39-4 EC No.: 204-539-4	① 0.7 ppm (5 mg/m <sup>3</sup> ) ⑤ (einatembare Fraktion, kann über die Haut aufgenommen werden) H
MAK (AT)	<b>diphenylamine</b> CAS No.: 122-39-4 EC No.: 204-539-4	② 1.4 ppm (10 mg/m <sup>3</sup> ) ⑤ (einatembare Fraktion, max. 4x15 min./Schicht, kann über die Haut aufgenommen werden) H
DK	<b>diphenylamine</b> CAS No.: 122-39-4 EC No.: 204-539-4	① 5 mg/m <sup>3</sup> ② 10 mg/m <sup>3</sup>
BG	<b>diphenylamine</b> CAS No.: 122-39-4 EC No.: 204-539-4	① 10 mg/m <sup>3</sup>
HR	<b>diphenylamine</b> CAS No.: 122-39-4 EC No.: 204-539-4	① 10 mg/m <sup>3</sup> ② 20 mg/m <sup>3</sup>
RO	<b>diphenylamine</b> CAS No.: 122-39-4 EC No.: 204-539-4	① 4 mg/m <sup>3</sup> ② 6 mg/m <sup>3</sup>
EE	<b>diphenylamine</b> CAS No.: 122-39-4 EC No.: 204-539-4	① 10 mg/m <sup>3</sup>
Alberta (CA)	<b>diphenylamine</b> CAS No.: 122-39-4 EC No.: 204-539-4	① 10 mg/m <sup>3</sup>
ES	<b>diphenylamine</b> CAS No.: 122-39-4 EC No.: 204-539-4	① 10 mg/m <sup>3</sup> ⑤ s
BC (CA)	<b>diphenylamine</b> CAS No.: 122-39-4 EC No.: 204-539-4	① 10 mg/m <sup>3</sup>
VLA (FR)	<b>diphenylamine</b> CAS No.: 122-39-4 EC No.: 204-539-4	① 10 mg/m <sup>3</sup>
WEL (GB)	<b>diphenylamine</b> CAS No.: 122-39-4 EC No.: 204-539-4	① 10 mg/m <sup>3</sup> ② 20 mg/m <sup>3</sup>
SI from 4 Dec 2018	<b>diphenylamine</b> CAS No.: 122-39-4 EC No.: 204-539-4	① 5 mg/m <sup>3</sup> ② 10 mg/m <sup>3</sup> ⑤ (frakcija ki jo je mogoče vdihniti, računati je treba z možnostjo prodiranja skozi kožo) K, Y
TW	<b>diphenylamine</b> CAS No.: 122-39-4 EC No.: 204-539-4	① 10 mg/m <sup>3</sup>
KR	<b>diphenylamine</b> CAS No.: 122-39-4 EC No.: 204-539-4	① 10 mg/m <sup>3</sup>



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IS	<b>diphenylamine</b> CAS No.: 122-39-4 EC No.: 204-539-4	① 5 mg/m <sup>3</sup>
CN from 1 Jan 2007	<b>diphenylamine</b> CAS No.: 122-39-4 EC No.: 204-539-4	① 10 mg/m <sup>3</sup>
GR from 1 Oct 2016	<b>diphenylamine</b> CAS No.: 122-39-4 EC No.: 204-539-4	① 10 mg/m <sup>3</sup> ② 20 mg/m <sup>3</sup>
TRGS 900 (DE) from 29 Mar 2019	<b>diphenylamine</b> CAS No.: 122-39-4 EC No.: 204-539-4	① 5 mg/m <sup>3</sup> ② 10 mg/m <sup>3</sup> ⑤ (kann über die Haut aufgenommen werden) DFG, Y, H
PL from 12 Jun 2018	<b>diphenylamine</b> CAS No.: 122-39-4 EC No.: 204-539-4	① 8 mg/m <sup>3</sup> ⑤ (wdychalna frakcja)
NIOSH (US)	<b>diphenylamine</b> CAS No.: 122-39-4 EC No.: 204-539-4	① 10 mg/m <sup>3</sup>
ACGIH (US)	<b>diphenylamine</b> CAS No.: 122-39-4 EC No.: 204-539-4	① 10 mg/m <sup>3</sup> ⑤ (A4)
Québec (CA)	<b>diphenylamine</b> CAS No.: 122-39-4 EC No.: 204-539-4	① 10 mg/m <sup>3</sup>

### 8.1.2. Biological limit values

No data available

### 8.1.3. DNEL-/PNEC-values

Substance name	DNEL value	① DNEL type ② Exposure route
<b>Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based</b> CAS No.: 72623-86-0 EC No.: 276-737-9	2.73 mg/m <sup>3</sup>	① DNEL worker ② Long-term - inhalation, systemic effects
<b>Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based</b> CAS No.: 72623-86-0 EC No.: 276-737-9	5.58	① DNEL worker ② Long-term - inhalation, local effects
<b>Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based</b> CAS No.: 72623-86-0 EC No.: 276-737-9	0.97 mg/kg	① DNEL worker ② Long-term - dermal, systemic effects
<b>Phenol, dodecyl-, branched</b> CAS No.: 121158-58-5 EC No.: 310-154-3	44.18 mg/m <sup>3</sup>	① DNEL worker ② Acute - inhalation, systemic effects
<b>Phenol, dodecyl-, branched</b> CAS No.: 121158-58-5 EC No.: 310-154-3	0.25 mg/kg	① DNEL worker ② Long-term - dermal, systemic effects



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Substance name	DNEL value	① DNEL type ② Exposure route
<b>Phenol, dodecyl-, branched</b> CAS No.: 121158-58-5 EC No.: 310-154-3	166 mg/kg	① DNEL worker ② Acute - dermal, systemic effects

Substance name	PNEC Value	① PNEC type
<b>Distillates (petroleum), solvent-refined heavy paraffinic</b> CAS No.: 64741-88-4 EC No.: 265-090-8	9.33 mg/kg	① PNEC secondary poisoning
<b>Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based</b> CAS No.: 72623-86-0 EC No.: 276-737-9	9.99 mg/kg	① PNEC secondary poisoning
<b>Phenol, dodecyl-, branched</b> CAS No.: 121158-58-5 EC No.: 310-154-3	0.074 µg/L	① PNEC aquatic, freshwater
<b>Phenol, dodecyl-, branched</b> CAS No.: 121158-58-5 EC No.: 310-154-3	0.0074 µg/L	① PNEC aquatic, marine water
<b>Phenol, dodecyl-, branched</b> CAS No.: 121158-58-5 EC No.: 310-154-3	100 mg/L	① PNEC sewage treatment plant
<b>Phenol, dodecyl-, branched</b> CAS No.: 121158-58-5 EC No.: 310-154-3	0.226 mg/kg	① PNEC sediment, freshwater
<b>Phenol, dodecyl-, branched</b> CAS No.: 121158-58-5 EC No.: 310-154-3	0.0266 mg/kg	① PNEC sediment, marine water
<b>Phenol, dodecyl-, branched</b> CAS No.: 121158-58-5 EC No.: 310-154-3	0.37 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: ≥ 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 respirative protection necessary.

**8.2.3. Environmental exposure controls**

See section 7. No additional measures necessary.



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## SECTION 9: Physical and chemical properties

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

#### Appearance

**Physical state:** Liquid

**Colour:** tawny

**Odour:** characteristic

#### Safety relevant basis data

Parameter	Value	at °C	① Method ② Remark
pH	<i>not applicable</i>		
Melting point	<i>No data available</i>		
Freezing point	<i>No data available</i>		
Initial boiling point and boiling range	<i>No data available</i>		
Decomposition temperature	<i>not applicable</i>		
Flash point	254 °C		
Evaporation rate	<i>No data available</i>		
Auto-ignition temperature	<i>No data available</i>		
Upper/lower flammability or explosive limits	<i>not applicable</i>		
Vapour pressure	<i>No data available</i>		
Vapour density	<i>not applicable</i>		
Density	844 kg/m <sup>3</sup>	15 °C	
Relative density	<i>not applicable</i>		
Bulk density	<i>not applicable</i>		
Water solubility	<i>No data available</i>		
Partition coefficient: n-octanol/water	<i>not applicable</i>		
Dynamic viscosity	<i>No data available</i>		
Kinematic viscosity	51 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.

### 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.

### Further information

No information available.



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## SECTION 11: Toxicological information

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

<b>Distillates (petroleum), hydrotreated heavy paraffinic; Base oil - not specified</b> CAS No.: 64742-54-7 EC No.: 265-157-1
<b>LD<sub>50</sub> oral:</b> 5,000 mg/kg (Rat) OECD 401
<b>LD<sub>50</sub> dermal:</b> 5,000 mg/kg (Rabbit) OECD 402
<b>LC<sub>50</sub> Acute inhalation toxicity (dust/mist):</b> 5.53 mg/L 4 h (Rat) OECD 403
<b>Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based</b> CAS No.: 72623-86-0 EC No.: 276-737-9
<b>LD<sub>50</sub> oral:</b> 5,000 mg/kg (Rat)
<b>LD<sub>50</sub> dermal:</b> >2,000 mg/kg (rabbit)
<b>LC<sub>50</sub> Acute inhalation toxicity (dust/mist):</b> >5.53 mg/L 4 h
<b>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil</b> CAS No.: 72623-87-1 EC No.: 276-738-4
<b>LD<sub>50</sub> oral:</b> >5,000 mg/kg (Rat) OECD 401
<b>LD<sub>50</sub> dermal:</b> >2,000 mg/kg (Rabbit) OECD 402
<b>LC<sub>50</sub> Acute inhalation toxicity (dust/mist):</b> >5 mg/L
<b>Phenol, dodecyl-, branched</b> CAS No.: 121158-58-5 EC No.: 310-154-3
<b>LD<sub>50</sub> oral:</b> 2,100 - 2,200 mg/kg (rat)
<b>LD<sub>50</sub> dermal:</b> 15,000 mg/kg (rabbit)

#### Acute oral toxicity:

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

#### Acute dermal toxicity:

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

#### Acute inhalation toxicity:

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

#### Skin corrosion/irritation:

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 Benzenesulfonic acid, methyl-, mono-C20-24-branched alkyl derivs., Calcium salts. 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. Based on available data, the classification criteria are not met.

#### Additional information:

Frequently or prolonged contact with skin may cause dermal irritation.

### 11.2. Information on other hazards

#### Endocrine disrupting properties:

This product contains a substance that has endocrine disrupting properties with respect to humans.



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## SECTION 12: Ecological information

### \* 12.1. Toxicity

<b>1-decene, homopolymer, hydrogenated</b> CAS No.: 68037-01-4 EC No.: 500-183-1
<b>LC<sub>50</sub>:</b> >750 mg/L 4 d (fish)
<b>EC<sub>50</sub>:</b> 190 mg/L 2 d (crustaceans, Daphnia pulex (water flea))
<b>EC<sub>50</sub>:</b> >1,000 mg/L 3 d (Algae/water plant)
<b>Distillates (petroleum), hydrotreated heavy paraffinic; Base oil - not specified</b> CAS No.: 64742-54-7 EC No.: 265-157-1
<b>LC<sub>50</sub>:</b> 100 mg/L 4 d (fish)
<b>LC<sub>50</sub>:</b> 10,000 mg/L 4 d (crustaceans)
<b>EC<sub>50</sub>:</b> 10,000 mg/L 2 d (crustaceans)
<b>NOEC:</b> 100 mg/L 4 d (fish)
<b>NOEC:</b> 100 mg/L 3 d (Algae/water plant)
<b>NOEC:</b> ≥100 mg/L 3 d (Algae/water plant, Algen)
<b>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil</b> CAS No.: 72623-87-1 EC No.: 276-738-4
<b>EC<sub>50</sub>:</b> >100 mg/L 2 d (Algae/water plant, Pseudokirchneriella subcapitata) OECD 201
<b>EC<sub>50</sub>:</b> >10,000 mg/L 2 d (crustaceans, Daphnia magna (Big water flea)) OECD 202
<b>NOEC:</b> 10 mg/L 21 d (crustaceans, Daphnia magna (Big water flea)) OECD 211
<b>NOEC:</b> >100 mg/L 3 d (Algae/water plant, Pseudokirchneriella subcapitata) OECD 201
<b>NOEC:</b> >100 mg/L 4 d (fish, Pimephales promelas (fathead minnow))
<b>Phenol, dodecyl-, branched</b> CAS No.: 121158-58-5 EC No.: 310-154-3
<b>LC<sub>50</sub>:</b> ≥40 mg/L 2 d (fish)
<b>LC<sub>50</sub>:</b> ≥0.58 - 0.58 mg/L 4 d (crustaceans)
<b>NOEC:</b> ≥0.07 mg/L 3 d (Algae/water plant)

#### Assessment/classification:

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

#### 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</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</b> CAS No.: 72623-87-1 EC No.: 276-738-4
<b>Log K<sub>ow</sub>:</b> 6
<b>Phenol, dodecyl-, branched</b> CAS No.: 121158-58-5 EC No.: 310-154-3
<b>Log K<sub>ow</sub>:</b> 7.14

#### Partition coefficient: n-octanol/water:

not applicable

#### 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>1-decene, homopolymer, hydrogenated</b> CAS No.: 68037-01-4 EC No.: 500-183-1
<b>Results of PBT and vPvB assessment:</b> This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
<b>Distillates (petroleum), hydrotreated heavy paraffinic; Base oil - not specified</b> CAS No.: 64742-54-7 EC No.: 265-157-1
<b>Results of PBT and vPvB assessment:</b> This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
<b>Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based</b> CAS No.: 72623-86-0 EC No.: 276-737-9
<b>Results of PBT and vPvB assessment:</b> This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.



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<b>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil</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>Benzenesulfonic acid, methyl-, mono-C20-24-branched alkyl derivs., Calcium salts</b> CAS No.: 722503-68-6 EC No.: 682-816-2
<b>Results of PBT and vPvB assessment:</b> This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
<b>Phenol, dodecyl-, branched</b> CAS No.: 121158-58-5 EC No.: 310-154-3
<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 contains a substance that has endocrine disrupting properties with respect to non-target organisms. This product contains a substance that has endocrine disrupting properties with respect to humans.

**12.7. Other adverse effects**

No information 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
<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



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## 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):

This product is not assigned to a hazard category.

#### 15.1.2. National regulations

##### [DE] National regulations

##### Störfallverordnung (12. BImSchV)

###### 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

TRGS 900

##### 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

[IP:ca19682f-639a-41b3-8f47-6f286be6adf7\](#)

##### [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 vankankerverwekkende, 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

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.



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### 15.3. Additional information

No data available.

## SECTION 16: Other information

### \* 16.1. Indication of changes

2.2.	Label elements
2.3.	Other hazards
3.2.	Mixtures
4.2.	Most important symptoms and effects, both acute and delayed
8.1.	Control parameters
8.2.	Exposure controls
8.3.	Additional information
9.1.	Information on basic physical and chemical properties
10.1.	Reactivity
11.1.	Information on hazard classes as defined in Regulation (EC) No 1272/2008
12.1.	Toxicity
12.3.	Bioaccumulative potential
12.5.	Results of PBT and vPvB assessment
15.1.	Safety, health and environmental regulations/legislation specific for the substance or mixture
16.1.	Indication of changes
16.5.	List of relevant hazard statements and/or precautionary statements from sections 2 to 15

### 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

Federal Environment Agency, Section IV 2.4: Documentation and Information Centre substances

hazardous to water Rigoletto (catalog substances hazardous to water)

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

Hazard statements	
H304	May be fatal if swallowed and enters airways.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H360F	May damage fertility.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

### 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



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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.