



Revision date: 5 Nov 2021 Version: 4 Print date: 5 Nov 2021

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 AWD-H Fluid

Article No.:

1211140

UFI:

1D9J-R59W-ERSK-KE28

**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]:

Hazard classes and hazard categories	Hazard statements	Classification procedure
Respiratory or skin sensitisation (Skin Sens. 1)	H317: May cause an allergic skin reaction.	Calculation method.
Serious eye damage/eye irritation (Eye Irrit. 2)	H319: Causes serious eye irritation.	Calculation method.
Hazardous to the aquatic environment (Aquatic Chronic 3)	H412: Harmful to aquatic life with long lasting effects.	Calculation method.

\* **2.2. Label elements**

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

Hazard pictograms:



GHS07

Exclamation mark

Signal word: Warning

Hazard components for labelling:

Mixture of: triphenylthio-phosphate and tertiary butylated phenyl derivatives; Amines, C10-14-tert-alkyl; zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate)



Revision date: 5 Nov 2021 Version: 4 Print date: 5 Nov 2021

**hazard statements for health hazards**

H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.

**Hazard statements for environmental hazards**

H412	Harmful to aquatic life with long lasting effects.
------	--

**Supplemental hazard information: -**

**Precautionary statements Prevention**

P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.

**Precautionary statements Response**

P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
P337 + P313	If eye irritation persists: Get medical advice/attention.

**Precautionary statements Disposal**

P501	Dispose of contents/container to an appropriate recycling or disposal facility.
------	---

\* **2.3. Other hazards**

**Other adverse effects:**

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

**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
<b>CAS No.:</b> 68037-01-4 <b>EC No.:</b> 500-183-1 <b>REACH No.:</b> 01-2119486452-34	<b>1-decene, homopolymer, hydrogenated</b> Asp. Tox. 1 (H304) <b>Danger</b>	30 - < 60 weight-%
<b>CAS No.:</b> 68649-11-6 <b>EC No.:</b> 500-228-5	<b>Dec-1-ene, dimers, hydrogenated</b> Acute Tox. 4 (H332), Asp. Tox. 1 (H304) <b>Danger</b>	5 - < 15 weight-%
<b>CAS No.:</b> 4259-15-8 <b>EC No.:</b> 224-235-5 <b>REACH No.:</b> 01-2119493635-27	<b>zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate)</b> Aquatic Chronic 2 (H411), Eye Dam. 1 (H318) <b>Danger</b>	0 - < 2 weight-%
<b>CAS No.:</b> 192268-65-8 <b>EC No.:</b> 421-820-9	<b>Mixture of: triphenylthio-phosphate and tertiary butylated phenyl derivatives</b> Aquatic Chronic 4 (H413), Repr. 2 (H361d) <b>Warning</b>	0 - < 2 weight-%
<b>EC No.:</b> 701-175-2 <b>REACH No.:</b> 01-2119456798-18	<b>Amines, C10-14-tert-alkyl</b> Acute Tox. 2 (H330), Acute Tox. 3 (H311), Acute Tox. 4 (H302), Aquatic Acute 1 (H400), Aquatic Chronic 1 (H410), Eye Dam. 1 (H318), Skin Corr. 1B (H314), Skin Sens. 1A (H317) <b>Danger</b> M-factor (acute): 1 M-factor (chronic): 1	0 - < 0.5 weight-%
<b>CAS No.:</b> 68784-26-9 <b>EC No.:</b> 701-251-5 <b>REACH No.:</b> 01-2119524004-56	<b>Phenol, dodecyl-, sulfurized, carbonates, calcium salts, overbased</b> Aquatic Chronic 4 (H413), Repr. 1B (H360) <b>Danger</b>	0 - < 0.15 weight-%

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



Revision date: 5 Nov 2021 Version: 4 Print date: 5 Nov 2021

## 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. Causes serious eye irritation.

#### 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

May produce an allergic reaction. Serious eye damage/eye irritation.

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

Treat symptomatically. Observe risk of aspiration if vomiting occurs.

## 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

When hot, product develops flammable vapours.

#### Hazardous combustion products:

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

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.



Revision date: 5 Nov 2021 Version: 4 Print date: 5 Nov 2021

### 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.

## 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.



Revision date: 5 Nov 2021 Version: 4 Print date: 5 Nov 2021

## 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
TRGS 900 (DE)	Dec-1-ene, dimers, hydrogenated CAS No.: 68649-11-6 EC No.: 500-228-5	① 5 mg/m <sup>3</sup> ② 20 mg/m <sup>3</sup> ⑤ (alveolengängige Fraktion)
SI	Dec-1-ene, dimers, hydrogenated CAS No.: 68649-11-6 EC No.: 500-228-5	① 5 mg/m <sup>3</sup> ② 20 mg/m <sup>3</sup> ⑤ (alveolarna frakcija)

#### 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
zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) CAS No.: 4259-15-8 EC No.: 224-235-5	6.6 mg/m <sup>3</sup>	① DNEL worker ② Long-term - inhalation, systemic effects
Mixture of: triphenylthio-phosphate and tertiary butylated phenyl derivatives CAS No.: 192268-65-8 EC No.: 421-820-9	1.2 mg/m <sup>3</sup>	① DNEL worker ② Long-term - inhalation, systemic effects
Amines, C10-14-tert-alkyl EC No.: 701-175-2	2.5 mg/m <sup>3</sup>	① DNEL Consumer ② Long-term - inhalation, systemic effects
Amines, C10-14-tert-alkyl EC No.: 701-175-2	12.1 mg/m <sup>3</sup>	① DNEL worker ② Long-term - inhalation, local effects
Amines, C10-14-tert-alkyl EC No.: 701-175-2	1.2 mg/m <sup>3</sup>	① DNEL Consumer ② Long-term - inhalation, local effects

### 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



Revision date: 5 Nov 2021 Version: 4 Print date: 5 Nov 2021

**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:** light yellow**Odour:** characteristic**Safety relevant basis data**

parameter		at °C	Method	Remark
pH	<i>not applicable</i>			
Melting point	<i>not determined</i>			
Freezing point	<i>not determined</i>			
Initial boiling point and boiling range	<i>not determined</i>			
Decomposition temperature	<i>not applicable</i>			
Flash point	192 °C			
Evaporation rate	<i>not determined</i>			
Auto-ignition temperature	<i>not determined</i>			
Upper/lower flammability or explosive limits	<i>not determined</i>			
Vapour pressure	<i>not determined</i>			
Vapour density	<i>not determined</i>			
Density	858 kg/m <sup>3</sup>	15 °C		
Relative density	<i>not applicable</i>			
Bulk density	<i>not applicable</i>			
Water solubility	The study does not need to be conducted because the substance is known to be insoluble in water.			
Partition coefficient: n-octanol/water	<i>not applicable</i>			
Dynamic viscosity	<i>not determined</i>			
Kinematic viscosity	25 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.



Revision date: 5 Nov 2021 Version: 4 Print date: 5 Nov 2021

### 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, Oxidizing agent, Reducing agent

### 10.6. Hazardous decomposition products

Hazardous combustion products: Carbon dioxide Carbon monoxide Nitrogen oxides (NOx)

### Further information

No information available.

## SECTION 11: Toxicological information

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

Substance name	Toxicological information
1-decene, homopolymer, hydrogenated CAS No.: 68037-01-4 EC No.: 500-183-1	<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 mg/l 4 h (Rat)
zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) CAS No.: 4259-15-8 EC No.: 224-235-5	<b>LD<sub>50</sub> oral:</b> 3,100 mg/kg (rats) <b>LD<sub>50</sub> dermal:</b> >5,000 mg/kg (rabbits)
Amines, C10-14-tert-alkyl EC No.: 701-175-2	<b>LD<sub>50</sub> oral:</b> 612 mg/kg (Rat) OECD TG 401 <b>LD<sub>50</sub> dermal:</b> 251 mg/kg (Rabbit) OECD TG 402 <b>LC<sub>50</sub> Acute inhalation toxicity (dust/mist):</b> >1.19 mg/l 4 h (Rat)
Phenol, (tetrapropenyl) Derivate CAS No.: 74499-35-7	<b>LD<sub>50</sub> oral:</b> >2,000 mg/kg (Rat) <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

#### 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:

No irritant effect.

#### Serious eye damage/irritation:

Causes serious eye irritation.

#### Respiratory or skin sensitisation:

May cause an allergic skin reaction.

#### Germ cell mutagenicity:

No indications of human germ cell mutagenicity exist.

#### Carcinogenicity:

No indication of human carcinogenicity.

#### Reproductive toxicity:

No indications of human reproductive toxicity exist.





Revision date: 5 Nov 2021 Version: 4 Print date: 5 Nov 2021

**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.

**SECTION 12: Ecological information**\* **12.1. Toxicity**

Substance name	Toxicological information
1-decene, homopolymer, hydrogenated 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)
zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) CAS No.: 4259-15-8 EC No.: 224-235-5	<b>LC<sub>50</sub></b> : 4.4 mg/l 4 d (fish, rainbow trout) OECD 203 <b>LC<sub>50</sub></b> : 75 mg/l 2 d (crustaceans, Daphnia magna) OECD 202 <b>NOEC</b> : 32 mg/l 2 d (crustaceans, Daphnia magna) OECD 202 <b>NOEC</b> : 220 mg/l 3 d (Algae/water plant, Scenedesmus subspicatus) OECD 201 <b>ErC<sub>50</sub></b> : 410 mg/l 3 d (Algae/water plant, Scenedesmus subspicatus) OECD 201
Amines, C10-14-tert-alkyl EC No.: 701-175-2	<b>LC<sub>50</sub></b> : 1.3 mg/l 4 d (fish, rainbow trout) <b>NOEC</b> : 0.078 mg/l 56 d (fish, rainbow trout) <b>EC<sub>50</sub></b> : 2.5 mg/l 2 d (crustaceans, Daphnia magna) <b>NOEC</b> : 0.05 mg/l 3 d (Algae/water plant, Selenastrum capricornutum) <b>EC<sub>50</sub></b> : 0.435 mg/l 3 d (Algae/water plant, Selenastrum capricornutum)
Phenol, (tetrapropenyl) Derivate CAS No.: 74499-35-7	<b>LC<sub>50</sub></b> : =40 mg/l 4 d (fish) <b>EC<sub>50</sub></b> : =0.037 mg/l 2 d (crustaceans) <b>EC<sub>50</sub></b> : =0.36 mg/l 3 d (Algae/water plant) <b>NOEC</b> : =0.0037 mg/l 21 d (crustaceans) <b>NOEC</b> : =0.07 mg/l 3 d (Algae/water plant)

**Aquatic toxicity:**

Harmful to aquatic life with long lasting effects.

**Additional ecotoxicological information:**

Do not allow uncontrolled discharge of product into the environment.

\* **12.2. Persistence and degradability**

Substance name	Biodegradation	Remark
Amines, C10-14-tert-alkyl EC No.: 701-175-2	Yes, slowly	
Phenol, (tetrapropenyl) Derivate CAS No.: 74499-35-7	Yes, slowly	

**Biodegradation:**

Not readily biodegradable (according to OECD criteria)





Revision date: 5 Nov 2021 Version: 4 Print date: 5 Nov 2021

\* **12.3. Bioaccumulative potential**

Substance name	Log K <sub>OW</sub>	Bioconcentration factor (BCF)
Phenol, (tetrapropenyl) Derivate CAS No.: 74499-35-7		1,601

**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**

Substance name	Results of PBT and vPvB assessment
1-decene, homopolymer, hydrogenated CAS No.: 68037-01-4 EC No.: 500-183-1	This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
Dec-1-ene, dimers, hydrogenated CAS No.: 68649-11-6 EC No.: 500-228-5	This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) CAS No.: 4259-15-8 EC No.: 224-235-5	This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
Mixture of: triphenylthio-phosphate and tertiary butylated phenyl derivatives CAS No.: 192268-65-8 EC No.: 421-820-9	This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
Amines, C10-14-tert-alkyl EC No.: 701-175-2	This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
Phenol, (tetrapropenyl) Derivate CAS No.: 74499-35-7	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.

**13.1.1. Product/Packaging disposal**

Waste codes/waste designations according to EWC/AVV

**Waste code packaging:****Remark:**

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**

No dangerous good in sense of these transport regulations.



Revision date: 5 Nov 2021 Version: 4 Print date: 5 Nov 2021

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			
<b>14.4. Packing group</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>14.5. Environmental hazards</b>			
not relevant			
<b>14.6. Special precautions for user</b>			
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], Hazard categories:

- E1 Hazardous to the Aquatic Environment in Category Acute 1 or Chronic 1  
Safety data sheet available on request.

**15.1.2. National regulations**
 **[DE] National regulations**
**Restrictions of occupation**

Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

**Störfallverordnung****for substances contained in the product:**

This product is not assigned to a hazard category.

**for substances possibly developing during an incident:**

Hazard categories:

- E1 Hazardous to the Aquatic Environment in Category Acute 1 or Chronic 1

**Technische Anleitung Luft (TA-Luft)****Remark:**

To follow: 5.2.5

**Water hazard class****WGK:**

2 - deutlich wassergefährdend

**Source:**

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

Revision date: 5 Nov 2021 Version: 4 Print date: 5 Nov 2021

**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  
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**

1.1.	Product identifier
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
4.1.	Description of first aid measures
4.2.	Most important symptoms and effects, both acute and delayed
5.1.	Extinguishing media
6.1.	Personal precautions, protective equipment and emergency procedures



Revision date: 5 Nov 2021 Version: 4 Print date: 5 Nov 2021

8.1.	Control parameters
9.1.	Information on basic physical and chemical properties
9.2.	Other information
11.1.	Information on hazard classes as defined in Regulation (EC) No 1272/2008
11.2.	Information on other hazards
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

67/548/EEC - Dangerous Substances Directive 1999/45/EEC - Dangerous Preparations Directive 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]

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

Hazard classes and hazard categories	Hazard statements	Classification procedure
Respiratory or skin sensitisation ( <i>Skin Sens. 1</i> )	H317: May cause an allergic skin reaction.	Calculation method.
Serious eye damage/eye irritation ( <i>Eye Irrit. 2</i> )	H319: Causes serious eye irritation.	Calculation method.
Hazardous to the aquatic environment ( <i>Aquatic Chronic 3</i> )	H412: Harmful to aquatic life with long lasting effects.	Calculation method.

### \* 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.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H330	Fatal if inhaled.
H332	Harmful if inhaled.
H360	May damage fertility or the unborn child. (...)
H361d	Suspected of damaging the unborn child. (...)
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.



Revision date: 5 Nov 2021 Version: 4 Print date: 5 Nov 2021

### 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