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 ATF T-ULV Fluid

Article No.:
1211146

UFI:
YX05-PP4G-W4GX-QVME

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

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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 pro cedure
Aspiration hazard *(Asp. Tox. 1)*	H304: May be fatal if swallowed and enters airways.	Calculation method.
Acute toxicity (inhalative) *(Acute Tox. 4)*	H332: Harmful if inhaled.	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

GHS08
Health hazard

Signal word: Danger

Hazard components for labelling:
Dec-1-ene, dimers, hydrogenated; Dec-1-ene, Trimere, hydrated; bis(nonylphenyl)amine; Isomer mixture of C7-9-alkyl-3- (3,5-di-trans-butyl-4-hydroxyphenyl) propionate

hazard statements for health hazards	
H304	May be fatal if swallowed and enters airways.
H332	Harmful if inhaled.

Hazard statements for environmental hazards	
H412	Harmful to aquatic life with long lasting effects.

Supplemental hazard information	
EUH208	Contains 4,4'-thiodiethylene hydrogen -2-octadecenylsuccinate. May produce an allergic reaction.

Precautionary statements	
P102	Keep out of reach of children.

Precautionary statements Prevention	
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.

Precautionary statements Response	
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor/Emergency telephone number.
P312	Call a POISON CENTER/doctor/Emergency telephone number if you feel unwell.
P331	Do NOT induce vomiting.

Precautionary statements Storage	
P405	Store locked up.

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]	Concen-tration
CAS No.: 68649-11-6 **EC No.:** 500-228-5 **REACH No.:** 01-2119493069-28	**Dec-1-ene, dimers, hydrogenated** Acute Tox. 4 (H332), Asp. Tox. 1 (H304) **Danger**	30 – < 55 weight-%
CAS No.: 157707-86-3 **EC No.:** 500-393-3	**Dec-1-ene, Trimere, hydrated** Asp. Tox. 1 (H304) **Danger**	15 – < 30 weight-%
CAS No.: 36878-20-3 **EC No.:** 253-249-4 **REACH No.:** 01-2119488911-28	**bis(nonylphenyl)amine** Aquatic Chronic 4 (H413)	0 – < 1.5 weight-%
CAS No.: 125643-61-0 **EC No.:** 406-040-9 **REACH No.:** 01-0000015551-76	**Isomer mixture of C7-9-alkyl-3- (3,5-di-trans-butyl-4-hydroxyphenyl) propionate** Aquatic Chronic 4 (H413)	0 – < 1.5 weight-%
EC No.: 424-820-7 **REACH No.:** 01-0000017126-75	**Reaction product of alkylthioalcohol and substituted phoshorus compound** Acute Tox. 4 (H312), Aquatic Acute 1 (H400), Aquatic Chronic 1 (H410), Skin Corr. 1B (H314) **Danger** M-factor (acute): 10 M-factor (chronic): 10	0 – < 0.24 weight-%

product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]	Concen-tration
CAS No.: 192268-65-8 **EC No.:** 421-820-9	**Mixture of: triphenylthio-phosphate and tertiary butylated phenyl derivatives** Aquatic Chronic 4 (H413), Repr. 2 (H361d) **Warning**	0 – < 0.15 weight-%
CAS No.: 93882-40-7 **EC No.:** 299-434-3 **REACH No.:** 01-2120735527-50	**4,4'-thiodiethylene hydrogen -2-octadecenylsuccinate** Aquatic Chronic 2 (H411), Eye Irrit. 2 (H319), Skin Sens. 1 (H317) **Warning**	0 – < 0.15 weight-%
CAS No.: 91-20-3 **EC No.:** 202-049-5	**naphthalene** Acute Tox. 4 (H302), Aquatic Acute 1 (H400), Aquatic Chronic 1 (H410), Carc. 2 (H351) **Warning**	0 – < 0.001 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

Harmful by inhalation. Pulmonary oedema.
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.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:
Co-ordinate fire-fighting measures to the fire surroundings.
Carbon dioxide (CO2)
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 (CO2), Nitrogen oxides (NOx), 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.

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.

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/m³ ② 20 mg/m³ ⑤ (alveolengängige Fraktion)
SI	Dec-1-ene, dimers, hydrogenated CAS No.: 68649-11-6 EC No.: 500-228-5	① 5 mg/m³ ② 20 mg/m³ ⑤ (alveolarna frakcija)
CH	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 10 ppm (50 mg/m³) ⑤ (kann über die Haut aufgenommen werden)
BE	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 10 ppm (53 mg/m³) ② 15 ppm (80 mg/m³) ⑤ (peut être absorbé par la peau)
CZ	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 9.4 ppm (50 mg/m³) ② 18.8 ppm (100 mg/m³)
PL	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 20 mg/m³ ② 50 mg/m³ ⑤ (może przenikać przez skórę do organizmu)
NO	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 10 ppm (50 mg/m³)
IE	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 10 ppm (50 mg/m³)
HTP (FI)	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 1 ppm (5 mg/m³) ② 2 ppm (10 mg/m³)
LT	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 10 ppm (50 mg/m³) ⑤ (Kancerogeninės)
SE	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 10 ppm (50 mg/m³) ③ 15 ppm (80 mg/m³)

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**
NPEL (SK)	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 10 ppm (50 mg/m³) ② 15 ppm (80 mg/m³)
TRGS 900 (DE)	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 0.4 ppm (2 mg/m³) ② 1.6 ppm (8 mg/m³) ⑤ (Aerosol und Dampf, kann über die Haut aufgenommen we rden)
DK	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 10 ppm (50 mg/m³) ② 20 ppm (100 mg/m³)
BG	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 50 mg/m³ ② 75 mg/m³
HR	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 10 ppm (50 mg/m³)
ES	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 10 ppm (53 mg/m³) ② 15 ppm (80 mg/m³) ⑤ (puede ser absorbido a través dérmica)
RO	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 10 ppm (50 mg/m³)
EE	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 10 ppm (50 mg/m³)
LV	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 10 ppm (50 mg/m³)
Alberta (CA)	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 10 ppm (52 mg/m³) ② 15 ppm (79 mg/m³)
BC (CA)	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 10 ppm ⑤ (may be absorbed through the skin)
MY	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 10 ppm (52 mg/m³)
IOELV (EU)	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 10 ppm (50 mg/m³)
VLA (FR)	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 10 ppm (50 mg/m³)
SI	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 50 mg/m³ ② 50 mg/m³ ⑤ (frakcija ki jo je mogoče vdihniti računati je treba z možnos tjo prodiranja skozi kožo)
TW	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 10 ppm (52 mg/m³)
KR	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 10 ppm (50 mg/m³) ② 15 ppm (75 mg/m³)
IS	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 10 ppm (50 mg/m³)

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
CN	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 50 mg/m³ ② 75 mg/m³ ⑤ (必须考虑到可能会经由皮肤吸收)
RU	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	③ 20 mg/m³
HU	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 50 mg/m³
GR	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 10 ppm (50 mg/m³)
NL	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 50 mg/m³ ② 80 mg/m³
MAK (AT)	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 10 ppm (50 mg/m³) ⑤ (kann über die Haut aufgenommen werden)
SI	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 10 ppm ② 10 ppm ⑤ (računati je treba z možnostjo prodiranja skozi kožo)
TR	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 10 ppm (50 mg/m³)
Québec (CA)	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 10 ppm (52 mg/m³) ② 15 ppm (79 mg/m³)
OSHA (US)	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 10 ppm (50 mg/m³)
NIOSH (US)	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 10 ppm (50 mg/m³) ② 15 ppm (75 mg/m³)
ACGIH (US)	naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	① 10 ppm (52 mg/m³) ② 15 ppm (79 mg/m³) ⑤ (may be absorbed through the skin)

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
Dec-1-ene, dimers, hydrogenated CAS No.: 68649-11-6 EC No.: 500-228-5	60 mg/m³	① DNEL worker ② Acute - inhalation, systemic effects
bis(nonylphenyl)amine CAS No.: 36878-20-3 EC No.: 253-249-4	5 mg/kg bw/ day	① DNEL worker ② Long-term - dermal, systemic effects
Isomer mixture of C7-9-alkyl-3- (3,5-di-trans-butyl-4-hydroxyphenyl) propionate CAS No.: 125643-61-0 EC No.: 406-040-9	2.33 mg/m³	① DNEL worker ② Long-term – inhalation, systemic effects
Reaction product of alkylthioalcohol and substitut ed phoshorus compound EC No.: 424-820-7	1.76 mg/m³	① DNEL worker ② Long-term – inhalation, systemic effects

Substance name	DNEL value	① DNEL type ② Exposure route
Reaction product of alkylthioalcohol and substituted phoshorus compound EC No.: 424-820-7	0.5 mg/kg bw/day	① DNEL worker ② Long-term - dermal, systemic effects
Mixture of: triphenylthio-phosphate and tertiary butylated phenyl derivatives CAS No.: 192268-65-8 EC No.: 421-820-9	1.2 mg/m³	① DNEL worker ② Long-term – inhalation, systemic effects
4,4'-thiodiethylene hydrogen -2-octadecenylsuccinate CAS No.: 93882-40-7 EC No.: 299-434-3	3.526 mg/m³	① DNEL worker ② Long-term – inhalation, systemic effects
4,4'-thiodiethylene hydrogen -2-octadecenylsuccinate CAS No.: 93882-40-7 EC No.: 299-434-3	2 mg/kg bw/day	① DNEL worker ② Long-term - dermal, systemic effects
naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	25 mg/m³	① DNEL worker ② Long-term – inhalation, systemic effects
naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	25 mg/m³	① DNEL worker ② Acute - inhalation, local effects

Substance name	PNEC Value	① PNEC type
bis(nonylphenyl)amine CAS No.: 36878-20-3 EC No.: 253-249-4	412 µg/l	① PNEC aquatic, freshwater
bis(nonylphenyl)amine CAS No.: 36878-20-3 EC No.: 253-249-4	41.2 µg/l	① PNEC aquatic, marine water
bis(nonylphenyl)amine CAS No.: 36878-20-3 EC No.: 253-249-4	1 mg/l	① PNEC aquatic, intermittent release
Reaction product of alkylthioalcohol and substituted phoshorus compound EC No.: 424-820-7	0.9 µg/l	① PNEC aquatic, freshwater
Reaction product of alkylthioalcohol and substituted phoshorus compound EC No.: 424-820-7	0.09 µg/l	① PNEC aquatic, marine water
Reaction product of alkylthioalcohol and substituted phoshorus compound EC No.: 424-820-7	5 mg/l	① PNEC sewage treatment plant
Reaction product of alkylthioalcohol and substituted phoshorus compound EC No.: 424-820-7	0.159 mg/kg bw/day	① PNEC sediment, freshwater
Reaction product of alkylthioalcohol and substituted phoshorus compound EC No.: 424-820-7	0.0159 mg/kg bw/day	① PNEC sediment, marine water
4,4'-thiodiethylene hydrogen -2-octadecenylsuccinate CAS No.: 93882-40-7 EC No.: 299-434-3	9.5 µg/l	① PNEC aquatic, freshwater
4,4'-thiodiethylene hydrogen -2-octadecenylsuccinate CAS No.: 93882-40-7 EC No.: 299-434-3	0.95 µg/l	① PNEC aquatic, marine water
4,4'-thiodiethylene hydrogen -2-octadecenylsuccinate CAS No.: 93882-40-7 EC No.: 299-434-3	100 mg/l	① PNEC sewage treatment plant
4,4'-thiodiethylene hydrogen -2-octadecenylsuccinate CAS No.: 93882-40-7 EC No.: 299-434-3	95 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.

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		at °C	Method	Remark
pH	*not applicable*			
Melting point	*not determined*			
Freezing point	*not determined*			
Initial boiling point and boiling range	*not determined*			
Decomposition temperature	*not applicable*			
Flash point	164 °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	822 kg/m³	15 °C		
Relative density	*not applicable*			
Bulk density	*not applicable*			
Water solubility	The study does not need to be conducted because the substance is known to be insoluble in water.			

parameter		at °C	Method	Remark
Partition coefficient: n-octanol/ water	*not applicable*			
Dynamic viscosity	*not determined*			
Kinematic viscosity	12.04 mm²/s			

* **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, 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
Dec-1-ene, dimers, hydrogenated CAS No.: 68649-11-6 EC No.: 500-228-5	**LD_{50} oral:** >2,000 – <5,000 mg/kg (Rat) **LD_{50} dermal:** >2,000 mg/kg (Rabbit) **LC_{50} Acute inhalation toxicity (dust/mist):** >1.1 – <1.4 mg/l 4 h (Rat)
Dec-1-ene, Trimere, hydrated CAS No.: 157707-86-3 EC No.: 500-393-3	**LD_{50} oral:** >5,000 mg/kg (Rat) **LD_{50} dermal:** >2,000 mg/kg (Rabbit) **LC_{50} Acute inhalation toxicity (dust/mist):** >5 mg/l 4 h (Rat)
bis(nonylphenyl)amine CAS No.: 36878-20-3 EC No.: 253-249-4	**LD_{50} oral:** >5,000 mg/kg (Rat) **LD_{50} dermal:** >2,000 mg/kg (Rabbit) **LC_{50} Acute inhalation toxicity (dust/mist):** >5 mg/l
Isomer mixture of C7-9-alkyl-3- (3,5-di-trans-butyl-4-hydroxyphenyl) propionate CAS No.: 125643-61-0 EC No.: 406-040-9	**LD_{50} dermal:** >2,000 mg/kg (Ratte) **LD_{50} oral:** >2,000 mg/kg (Ratte)
Reaction product of alkylthioalcohol and substituted phoshorus compound EC No.: 424-820-7	**LD_{50} oral:** 2,000 mg/kg (rat) **LD_{50} dermal:** 500 mg/kg (rabbit)

Substance name	Toxicological information
4,4'-thiodiethylene hydrogen -2-octadecenylsuccinate CAS No.: 93882-40-7 EC No.: 299-434-3	**LD_{50} oral:** 10,000 mg/kg (rat) **LD_{50} dermal:** 3,160 mg/kg (rabbit)
naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	**LD_{50} oral:** >533 mg/kg (Mouse) **LC_{50} Acute inhalation toxicity (dust/mist):** >0.4 mg/l 4 h (Rat) **LD_{50} dermal:** >16,000 mg/kg (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:
Harmful by inhalation.

Skin corrosion/irritation:
No irritant effect.

Serious eye damage/irritation:
No irritant effect.

Respiratory or skin sensitisation:
Contains 4,4'-thiodiethylene hydrogen -2-octadecenylsuccinate. May produce an allergic 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.

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:
May be fatal if swallowed and enters airways.

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
bis(nonylphenyl)amine CAS No.: 36878-20-3 EC No.: 253-249-4	**LC_{50}:** >100 mg/l 4 d (fish) **EC_{50}:** >100 mg/l 2 d (crustaceans) **EC_{50}:** 600 mg/l 3 d (Algae/water plant)
Isomer mixture of C7-9-alkyl-3- (3,5-di-trans-butyl-4-hydroxyphenyl) propionate CAS No.: 125643-61-0 EC No.: 406-040-9	**NOEC:** >3 mg/l 3 d (Algae/water plant, Alge) **EC_{50}:** >100 mg/l 2 d (crustaceans, Daphnie)
Reaction product of alkylthioalcohol and substituted phoshorus compound EC No.: 424-820-7	**LC_{50}:** 1.5 mg/l 4 d (fish) **EC_{50}:** 0.09 mg/l 2 d (crustaceans) **EC_{50}:** 0.31 mg/l 3 d (Algae/water plant)

Substance name	Toxicological information
4,4'-thiodiethylene hydrogen -2-octadecenylsuccinate CAS No.: 93882-40-7 EC No.: 299-434-3	**LC_{50}:** 100 mg/l 4 d (fish) **EC_{50}:** 9.5 mg/l 2 d (crustaceans) **NOEC:** 100 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
Dec-1-ene, dimers, hydrogenated CAS No.: 68649-11-6 EC No.: 500-228-5	Yes, rapidly	
bis(nonylphenyl)amine CAS No.: 36878-20-3 EC No.: 253-249-4	—	

Biodegradation:
Not readily biodegradable (according to OECD criteria)

12.3. Bioaccumulative potential

Substance name	Log K_{OW}	Bioconcentration factor (BCF)
Dec-1-ene, dimers, hydrogenated CAS No.: 68649-11-6 EC No.: 500-228-5	6.5	
bis(nonylphenyl)amine CAS No.: 36878-20-3 EC No.: 253-249-4	7.6	1,584.89

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
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.
Dec-1-ene, Trimere, hydrated CAS No.: 157707-86-3 EC No.: 500-393-3	This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
bis(nonylphenyl)amine CAS No.: 36878-20-3 EC No.: 253-249-4	This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
Isomer mixture of C7-9-alkyl-3- (3,5-di-trans-butyl-4-hydroxyphenyl) propionate CAS No.: 125643-61-0 EC No.: 406-040-9	This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
Reaction product of alkylthioalcohol and substituted phoshorus compound EC No.: 424-820-7	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.
4,4'-thiodiethylene hydrogen -2-octadecenylsuccinate CAS No.: 93882-40-7 EC No.: 299-434-3	This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
naphthalene CAS No.: 91-20-3 EC No.: 202-049-5	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 information 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.

Land transport (ADR/RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
14.1. UN number or ID number			
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.
14.2. UN proper shipping name			
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.
14.3. Transport hazard class(es)			
not relevant			
14.4. Packing group			
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.
14.5. Environmental hazards			
not relevant			
14.6. Special precautions for user			
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

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 (AltölV)

[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 vaere kraeftfremkaldende

[FR] National regulations

Other regulations, restrictions and prohibition regulations

Frankreich: Tableaux de maladies professionelles
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

Tactile warning according to EN/ISO 11683. Child-resistant fastenings (EN/862/ISO 8317).

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
2.2.	Label elements
3.2.	Mixtures
4.2.	Most important symptoms and effects, both acute and delayed
6.1.	Personal precautions, protective equipment and emergency procedures
8.1.	Control parameters
8.2.	Exposure controls
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
12.5.	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
15.3.	Additional information
16.1.	Indication of changes
16.5.	Relevant R-, H- and EUH-phrases (Number and full text)

16.2. Abbreviations and acronyms

See overview table at 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 pro cedure
Aspiration hazard *(Asp. Tox. 1)*	H304: May be fatal if swallowed and enters airways.	Calculation method.
Acute toxicity (inhalative) *(Acute Tox. 4)*	H332: Harmful if inhaled.	Calculation method.
Hazardous to the aquatic environment *(Aquatic Chronic 3)*	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.
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.
H332	Harmful if inhaled.
H351	Suspected of causing cancer. (...)
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.

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