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 VGO SAE 70W-80 LS

Article No.:
1221126

UFI:
QAJK-7CTA-CXFS-N2HQ

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: +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:
Polysulfides, di-tert-dodecyl; Polysulfides, di-tert-Bu; 3-(Diisobutoxythiophosphorylsulfanyl)-2-methylpropionsäure; N-isotridecyl-isotridecanaminium 3-[(diisobutoxyphosphorothioyl)thio]-2-methylpropanoate

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.

Precautionary statements Prevention	
P261	Avoid breathing vapours and spray.
P273	Avoid release to the environment.
P280	Wear protective gloves and eye protection/face protection.

Precautionary statements Response	
P302 + P352	IF ON SKIN: Wash with plenty of water and soap.
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**
CAS No.: 68037-01-4 EC No.: 500-183-1 REACH No.: 01-2119486452-34	**1-decene, homopolymer, hydrogenated** Asp. Tox. 1 (H304) Danger **Acute Toxicity Estimate** ATE (oral) > 5,000 mg/kg ATE (dermal) > 2,000 mg/kg ATE (inhalation, dust/mist) > 5 mg/L	20 – < 40 weight-%
CAS No.: 68649-11-6 EC No.: 500-228-5 CLP Reference No: 02-0000000000-04-2024 REACH No.: 01-2119493069-28	**Dec-1-ene, dimers, hydrogenated** Acute Tox. 4 (H332), Asp. Tox. 1 (H304) Danger **Acute Toxicity Estimate** ATE (oral) > 5,000 mg/kg ATE (dermal) > 3,000 mg/kg ATE (inhalation, dust/mist) > 1.81 mg/L	8 – < 16 weight-%
CAS No.: 68425-15-0 EC No.: 270-335-7 REACH No.: 01-2119540516-41	**Polysulfides, di-tert-dodecyl** Skin Sens. 1B (H317) Warning **Acute Toxicity Estimate** ATE (oral) > 2,000 mg/kg ATE (dermal) > 2,000 mg/kg ATE (inhalation, dust/mist) > 15.5 mg/L	0 – < 1.5 weight-%
CAS No.: 68937-96-2 EC No.: 273-103-3 REACH No.: 01-2119540515-43	**Polysulfides, di-tert-Bu** Aquatic Acute 1 (H400), Aquatic Chronic 1 (H410), Skin Sens. 1B (H317) Warning	0 – < 1.5 weight-%

Product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]	Concentration
EC No.: 700-990-0 REACH No.: 01-2119519251-50-0002	**Reaction mass of p-t-butylphenyl diphenyl phosphate and bis (p-t-butylphenyl) phenyl phosphate and triphenyl phosphate [TPP = 2.5 <25%]** Aquatic Chronic 2 (H411) 	0 – < 1.5 weight-%
CAS No.: 268567-32-4 REACH No.: 01-2119658068-31	**3-(Diisobutoxythiophosphorylsulfanyl)-2-methylpropionsäure** Aquatic Chronic 3 (H412), Eye Dam. 1 (H318), Skin Sens. 1B (H317)  Danger **Acute Toxicity Estimate** ATE (oral) > 2,000 mg/kg ATE (dermal) > 2,000 mg/kg ATE (inhalation, dust/mist) > 5 mg/L	0 – < 1.5 weight-%
CAS No.: 1255680-66-0 REACH No.: 01-2120739320-64	**N-isotridecyl-isotridecanaminium 3-[(diisobutoxyphosphorothioyl)thio]-2-methylpropanoate** STOT RE 2 (H373), Skin Irrit. 2 (H315), Skin Sens. 1B (H317)  Warning	0 – < 1 weight-%
EC No.: 701-175-2 REACH No.: 01-2119456798-18	**Amines, C10-14-tert-alkyl** 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)  Danger M-factor (acute): 1 M-factor (chronic): 1 **Acute Toxicity Estimate** ATE (oral) 612 mg/kg ATE (dermal) 251 mg/kg ATE (inhalation, dust/mist) > 1.19 mg/L	0 – < 0.5 weight-%
EC No.: 948-020-7	**Reaction products of 2,5-dimercapto-1,3,4-thiadiazole, sodium salt, with 1-octanethiol and hydrogen peroxide** Acute Tox. 4 (H332), Aquatic Chronic 4 (H413), Skin Irrit. 2 (H315), Skin Sens. 1 (H317)  Warning **Acute Toxicity Estimate** ATE (oral) > 5,000 mg/kg ATE (dermal) > 2,000 mg/kg ATE (inhalation, dust/mist) > 3.08 mg/L	0 – < 0.5 weight-%
CAS No.: 74499-35-7 Index No.: 604-092-00-9	**Phenol, (tetrapropenyl) Derivate** *Candidate List of Substances of Very High Concern for Authorisation!* 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 **Acute Toxicity Estimate** ATE (oral) > 2,000 mg/kg ATE (dermal) > 2,000 mg/kg ATE (inhalation, dust/mist) > 5 mg/L **Additional information:** This substance has endocrine disrupting properties with respect to humans. This substance has endocrine disrupting properties with respect to non-target organisms.	0 – < 0.02 weight-%
CAS No.: 122-39-4 EC No.: 204-539-4 REACH No.: 01-2119488966-13	**diphenylamine** Acute Tox. 3 (H301, H311, H331), Aquatic Acute 1 (H400), Aquatic Chronic 1 (H410), Eye Irrit. 2 (H319)  Danger **Acute Toxicity Estimate** ATE (oral) 1,120 mg/kg ATE (dermal) 300 mg/kg ATE (inhalation, vapour) 3 mg/L ATE (inhalation, dust/mist) 0.5 mg/L	0 – < 0.005 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. 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 (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) from 1 Dec 2011	**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) Y, DFG
SI from 4 Dec 2018	**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) Y
CH from 1 Jan 2024	**Polysulfides, di-tert-dodecyl** CAS No.: 68425-15-0 EC No.: 270-335-7	① 10 mg/m³ ② 40 mg/m³ ⑤ (einatembare Fraktion) SSC
TRGS 900 (DE) from 7 Jun 2018	**Polysulfides, di-tert-dodecyl** CAS No.: 68425-15-0 EC No.: 270-335-7	① 5 mg/m³ ② 20 mg/m³ ⑤ (alveolengängige Fraktion) DFG, Y
CH from 1 Jan 2024	**diphenylamine** CAS No.: 122-39-4 EC No.: 204-539-4	① 10 mg/m³ ⑤ (einatembare Fraktion; Dampf und Aerosol; kann über die Haut aufgenommen werden) H SSC; Messmeth: NIOSH OSHA
BE	**diphenylamine** CAS No.: 122-39-4 EC No.: 204-539-4	① 10 mg/m³
CZ from 1 Mar 2020	**diphenylamine** CAS No.: 122-39-4 EC No.: 204-539-4	① 10 mg/m³ ② 20 mg/m³ ⑤ (může pronikat pokožkou) D
NO	**diphenylamine** CAS No.: 122-39-4 EC No.: 204-539-4	① 5 mg/m³
IE	**diphenylamine** CAS No.: 122-39-4 EC No.: 204-539-4	① 10 mg/m³ ② 20 mg/m³
MY from 1 Jan 2000	**diphenylamine** CAS No.: 122-39-4 EC No.: 204-539-4	① 10 mg/m³
HTP (FI)	**diphenylamine** CAS No.: 122-39-4 EC No.: 204-539-4	① 5 mg/m³ ② 10 mg/m³
LT	**diphenylamine** CAS No.: 122-39-4 EC No.: 204-539-4	① 4 mg/m³ ② 12 mg/m³ ⑤
SE	**diphenylamine** CAS No.: 122-39-4 EC No.: 204-539-4	① 4 mg/m³ ③ 12 mg/m³
MAK (AT)	**diphenylamine** CAS No.: 122-39-4 EC No.: 204-539-4	① 0.7 ppm (5 mg/m³) ⑤ (einatembare Fraktion, kann über die Haut aufgenommen werden) H
MAK (AT)	**diphenylamine** CAS No.: 122-39-4 EC No.: 204-539-4	② 1.4 ppm (10 mg/m³) ⑤ (einatembare Fraktion, max. 4x15 min./Schicht, kann über die Haut aufgenommen werden) H
DK	**diphenylamine** CAS No.: 122-39-4 EC No.: 204-539-4	① 5 mg/m³ ② 10 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
BG	**diphenylamine** CAS No.: 122-39-4 EC No.: 204-539-4	① 10 mg/m³
HR	**diphenylamine** CAS No.: 122-39-4 EC No.: 204-539-4	① 10 mg/m³ ② 20 mg/m³
RO	**diphenylamine** CAS No.: 122-39-4 EC No.: 204-539-4	① 4 mg/m³ ② 6 mg/m³
EE	**diphenylamine** CAS No.: 122-39-4 EC No.: 204-539-4	① 10 mg/m³
Alberta (CA)	**diphenylamine** CAS No.: 122-39-4 EC No.: 204-539-4	① 10 mg/m³
ES	**diphenylamine** CAS No.: 122-39-4 EC No.: 204-539-4	① 10 mg/m³ ⑤ s
BC (CA)	**diphenylamine** CAS No.: 122-39-4 EC No.: 204-539-4	① 10 mg/m³
VLA (FR)	**diphenylamine** CAS No.: 122-39-4 EC No.: 204-539-4	① 10 mg/m³
WEL (GB)	**diphenylamine** CAS No.: 122-39-4 EC No.: 204-539-4	① 10 mg/m³ ② 20 mg/m³
SI from 4 Dec 2018	**diphenylamine** CAS No.: 122-39-4 EC No.: 204-539-4	① 5 mg/m³ ② 10 mg/m³ ⑤ (frakcija ki jo je mogoče vdihniti, računati je treba z možnostjo prodiranja skozi kožo) K, Y
TW	**diphenylamine** CAS No.: 122-39-4 EC No.: 204-539-4	① 10 mg/m³
KR	**diphenylamine** CAS No.: 122-39-4 EC No.: 204-539-4	① 10 mg/m³
IS	**diphenylamine** CAS No.: 122-39-4 EC No.: 204-539-4	① 5 mg/m³
CN from 1 Jan 2007	**diphenylamine** CAS No.: 122-39-4 EC No.: 204-539-4	① 10 mg/m³
GR from 1 Oct 2016	**diphenylamine** CAS No.: 122-39-4 EC No.: 204-539-4	① 10 mg/m³ ② 20 mg/m³
TRGS 900 (DE) from 29 Mar 2019	**diphenylamine** CAS No.: 122-39-4 EC No.: 204-539-4	① 5 mg/m³ ② 10 mg/m³ ⑤ (kann über die Haut aufgenommen werden) DFG, Y, H
PL from 12 Jun 2018	**diphenylamine** CAS No.: 122-39-4 EC No.: 204-539-4	① 8 mg/m³ ⑤ (wdychalna frakcja)
CSV (JP) from 1 Apr 2024	**diphenylamine** CAS No.: 122-39-4 EC No.: 204-539-4	① 5 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
NIOSH (US)	**diphenylamine** CAS No.: 122-39-4 EC No.: 204-539-4	① 10 mg/m³
ACGIH (US)	**diphenylamine** CAS No.: 122-39-4 EC No.: 204-539-4	① 10 mg/m³
Québec (CA)	**diphenylamine** CAS No.: 122-39-4 EC No.: 204-539-4	① 10 mg/m³

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
Polysulfides, di-tert-dodecyl CAS No.: 68425-15-0 EC No.: 270-335-7	32.9 mg/m³	① DNEL worker ② Long-term – inhalation, systemic effects
Polysulfides, di-tert-dodecyl CAS No.: 68425-15-0 EC No.: 270-335-7	5.8 mg/m³	① DNEL Consumer ② Long-term – inhalation, systemic effects
Polysulfides, di-tert-dodecyl CAS No.: 68425-15-0 EC No.: 270-335-7	46.7 mg/kg bw/day	① DNEL worker ② Long-term - dermal, systemic effects
Polysulfides, di-tert-dodecyl CAS No.: 68425-15-0 EC No.: 270-335-7	16.7 mg/m³	① DNEL Consumer ② Long-term - dermal, systemic effects
Polysulfides, di-tert-dodecyl CAS No.: 68425-15-0 EC No.: 270-335-7	1.7 mg/kg bw/day	① DNEL Consumer ② Long-term - oral, systemic effects
Polysulfides, di-tert-Bu CAS No.: 68937-96-2 EC No.: 273-103-3	14.5 mg/m³	① DNEL worker ② Long-term – inhalation, systemic effects
Polysulfides, di-tert-Bu CAS No.: 68937-96-2 EC No.: 273-103-3	1.66 mg/kg bw/day	① DNEL worker ② Long-term - dermal, systemic effects
Reaction mass of p-t-butylphenyl diphenyl phosphate and bis (p-t-butylphenyl) phenyl phosphate and triphenyl phosphate [TPP = 2.5 <25%] EC No.: 700-990-0	7.58 mg/m³	① DNEL worker ② Long-term – inhalation, systemic effects
Reaction mass of p-t-butylphenyl diphenyl phosphate and bis (p-t-butylphenyl) phenyl phosphate and triphenyl phosphate [TPP = 2.5 <25%] EC No.: 700-990-0	1.87 mg/m³	① DNEL Consumer ② Long-term – inhalation, systemic effects
Reaction mass of p-t-butylphenyl diphenyl phosphate and bis (p-t-butylphenyl) phenyl phosphate and triphenyl phosphate [TPP = 2.5 <25%] EC No.: 700-990-0	10.75 mg/kg bw/day	① DNEL worker ② Long-term - dermal, systemic effects
Reaction mass of p-t-butylphenyl diphenyl phosphate and bis (p-t-butylphenyl) phenyl phosphate and triphenyl phosphate [TPP = 2.5 <25%] EC No.: 700-990-0	5.375 mg/kg bw/day	① DNEL Consumer ② Long-term - dermal, systemic effects

Substance name	DNEL value	① DNEL type ② Exposure route
Reaction mass of p-t-butylphenyl diphenyl phosphate and bis (p-t-butylphenyl) phenyl phosphate and triphenyl phosphate [TPP = 2.5 <25%] EC No.: 700-990-0	5.375 mg/kg bw/day	① DNEL Consumer ② Long-term - oral, systemic effects
Amines, C10-14-tert-alkyl EC No.: 701-175-2	2.5 mg/m³	① DNEL Consumer ② Long-term – inhalation, systemic effects
Amines, C10-14-tert-alkyl EC No.: 701-175-2	12.1 mg/m³	① DNEL worker ② Long-term – inhalation, local effects
Amines, C10-14-tert-alkyl EC No.: 701-175-2	1.2 mg/m³	① DNEL Consumer ② Long-term – inhalation, local effects
Reaction products of 2,5-dimercapto-1,3,4-thiadiazole, sodium salt, with 1-octanethiol and hydrogen peroxide EC No.: 948-020-7	5.43 mg/m³	① DNEL worker ② Long-term – inhalation, systemic effects
Reaction products of 2,5-dimercapto-1,3,4-thiadiazole, sodium salt, with 1-octanethiol and hydrogen peroxide EC No.: 948-020-7	1.54 mg/kg bw/day	① DNEL worker ② Long-term - dermal, systemic effects

Substance name	PNEC Value	① PNEC type
Polysulfides, di-tert-dodecyl CAS No.: 68425-15-0 EC No.: 270-335-7	3.85 mg/kg	① PNEC sediment, freshwater
Polysulfides, di-tert-dodecyl CAS No.: 68425-15-0 EC No.: 270-335-7	0.385 mg/kg	① PNEC sediment, marine water
Reaction mass of p-t-butylphenyl diphenyl phosphate and bis (p-t-butylphenyl) phenyl phosphate and triphenyl phosphate [TPP = 2.5 <25%] EC No.: 700-990-0	3.99 µg/L	① PNEC aquatic, freshwater
Reaction mass of p-t-butylphenyl diphenyl phosphate and bis (p-t-butylphenyl) phenyl phosphate and triphenyl phosphate [TPP = 2.5 <25%] EC No.: 700-990-0	0.798 µg/L	① PNEC aquatic, freshwater
Reaction mass of p-t-butylphenyl diphenyl phosphate and bis (p-t-butylphenyl) phenyl phosphate and triphenyl phosphate [TPP = 2.5 <25%] EC No.: 700-990-0	399 µg/L	① PNEC aquatic, marine water
Reaction mass of p-t-butylphenyl diphenyl phosphate and bis (p-t-butylphenyl) phenyl phosphate and triphenyl phosphate [TPP = 2.5 <25%] EC No.: 700-990-0	0.08 µg/L	① PNEC aquatic, marine water
Reaction mass of p-t-butylphenyl diphenyl phosphate and bis (p-t-butylphenyl) phenyl phosphate and triphenyl phosphate [TPP = 2.5 <25%] EC No.: 700-990-0	3.12 mg/kg bw/day	① PNEC sediment, freshwater

Substance name	PNEC Value	① PNEC type
Reaction mass of p-t-butylphenyl diphenyl phosphate and bis (p-t-butylphenyl) phenyl phosphate and triphenyl phosphate [TPP = 2.5 <25%] EC No.: 700-990-0	0.96 mg/kg	① PNEC sediment, freshwater
Reaction mass of p-t-butylphenyl diphenyl phosphate and bis (p-t-butylphenyl) phenyl phosphate and triphenyl phosphate [TPP = 2.5 <25%] EC No.: 700-990-0	0.312 mg/kg bw/day	① PNEC sediment, marine water
Reaction mass of p-t-butylphenyl diphenyl phosphate and bis (p-t-butylphenyl) phenyl phosphate and triphenyl phosphate [TPP = 2.5 <25%] EC No.: 700-990-0	0.09 mg/kg	① PNEC sediment, marine water
Reaction mass of p-t-butylphenyl diphenyl phosphate and bis (p-t-butylphenyl) phenyl phosphate and triphenyl phosphate [TPP = 2.5 <25%] EC No.: 700-990-0	0.252 mg/kg	① PNEC soil
Reaction mass of p-t-butylphenyl diphenyl phosphate and bis (p-t-butylphenyl) phenyl phosphate and triphenyl phosphate [TPP = 2.5 <25%] EC No.: 700-990-0	2.02 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
Form: Liquid
Colour: tawny
Odour: characteristic
flammability: Yes

Safety relevant basis data

Parameter	Value	at °C	① Method ② Remark
pH	*not applicable*		
Melting point	*No data available*		
Freezing point	*No data available*		
Initial boiling point and boiling range	*No data available*		
Flash point	198 °C		
Evaporation rate	*No data available*		
Auto-ignition temperature	*No data available*		
Upper/lower flammability or explosive limits	*No data available*		
Vapour pressure	*No data available*		
Vapour density	*No data available*		
Density	852 kg/m³	15 °C	
Bulk density	*not applicable*		
Water solubility	practically insoluble		
Dynamic viscosity	*No data available*		
Kinematic viscosity	48 mm²/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, Oxidizing agent, Reducing agent

10.6. Hazardous decomposition products

Hazardous combustion products: Carbon monoxide, Carbon dioxide (CO2), Nitrogen oxides (NOx), During heating or in case of fire, toxic gases is possible.

Further information

No information available.

SECTION 11: Toxicological information

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

Toxicological information

Acute Toxicity Estimate for Mixtures
ATE (dermal): 38,225.8 mg/kg
ATE (inhalation, dust/mist): 12.059 mg/L

1-decene, homopolymer, hydrogenated CAS No.: 68037-01-4 EC No.: 500-183-1
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)
Dec-1-ene, dimers, hydrogenated CAS No.: 68649-11-6 EC No.: 500-228-5
LD_{50} oral: >5,000 mg/kg (Rat)
LD_{50} dermal: >3,000 mg/kg (Rabbit)
LC_{50} Acute inhalation toxicity (dust/mist): >1.81 mg/L (Rat)
Polysulfides, di-tert-dodecyl CAS No.: 68425-15-0 EC No.: 270-335-7
LD_{50} oral: >2,000 mg/kg (Rat)
LD_{50} dermal: >2,000 mg/kg (Rat) OECD-402
LC_{50} Acute inhalation toxicity (dust/mist): >15.5 mg/L 4 h (Rat)
Reaction mass of p-t-butylphenyl diphenyl phosphate and bis (p-t-butylphenyl) phenyl phosphate and triphenyl phosphate [TPP = 2.5 <25%] EC No.: 700-990-0
LD_{50} oral: 5,000 mg/kg (Rat)
LD_{50} dermal: 2,000 mg/kg (Rabbit)
LC_{50} Acute inhalation toxicity (dust/mist): 400 mg/L 6 h (Rat)
3-(Diisobutoxythiophosphorylsulfanyl)-2-methylpropionsäure CAS No.: 268567-32-4
LD_{50} oral: >2,000 mg/kg (Rat)
LD_{50} dermal: >2,000 mg/kg (Rat)
LC_{50} Acute inhalation toxicity (dust/mist): >5 mg/L
Amines, C10-14-tert-alkyl EC No.: 701-175-2
LD_{50} oral: 612 mg/kg (Rat) OECD TG 401
LD_{50} dermal: 251 mg/kg (Rabbit) OECD TG 402
LC_{50} Acute inhalation toxicity (dust/mist): >1.19 mg/L 4 h (Rat)
Reaction products of 2,5-dimercapto-1,3,4-thiadiazole, sodium salt, with 1-octanethiol and hydrogen peroxide EC No.: 948-020-7
ATE (inhalation, dust/mist): >3.08 mg/L
LD_{50} oral: >5,000 mg/kg (Rat)
LD_{50} dermal: >2,000 mg/kg (Rabbit)
Phenol, (tetrapropenyl) Derivate CAS No.: 74499-35-7
LD_{50} oral: >2,000 mg/kg (Rat)
LD_{50} dermal: >2,000 mg/kg
LC_{50} Acute inhalation toxicity (dust/mist): >5 mg/L
diphenylamine CAS No.: 122-39-4 EC No.: 204-539-4
LD_{50} oral: 1,120 mg/kg

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:
Causes serious eye irritation.

Respiratory or skin sensitisation:
May cause an allergic skin reaction.

Germ cell mutagenicity:
Based on available data, the classification criteria are not met.

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

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

STOT-single exposure:
Based on available data, the classification criteria are not met.

STOT-repeated exposure:
Based on available data, the classification criteria are not met.

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

Additional information:
Frequently or prolonged contact with skin may cause dermal irritation.

11.2. Information on other hazards

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

Other information:
No data available.

SECTION 12: Ecological information

12.1. Toxicity

1-decene, homopolymer, hydrogenated CAS No.: 68037-01-4 EC No.: 500-183-1
LC_{50}: >750 mg/L 4 d (fish)
EC_{50}: 190 mg/L 2 d (crustaceans, Daphnia pulex (water flea))
EC_{50}: >1,000 mg/L 3 d (Algae/water plant)
Dec-1-ene, dimers, hydrogenated CAS No.: 68649-11-6 EC No.: 500-228-5
LC_{50}: >1,000 mg/L (fish)
EC_{50}: >1,000 mg/L (crustaceans)
EC_{50}: >1,000 mg/L (Algae/water plant)
Polysulfides, di-tert-dodecyl CAS No.: 68425-15-0 EC No.: 270-335-7
LC_{50}: >100 mg/L 4 d (fish, Danio rerio)
NOEC: <0.08 mg/L 3 d (Algae/water plant, Pseudokirchneriella subcapitata)
Polysulfides, di-tert-Bu CAS No.: 68937-96-2 EC No.: 273-103-3
EC_{50}: 63 mg/L 2 d (crustaceans)
EC_{50}: >100 mg/L 3 d (Algae/water plant)
Reaction mass of p-t-butylphenyl diphenyl phosphate and bis (p-t-butylphenyl) phenyl phosphate and triphenyl phosphate [TPP = 2.5 <25%] EC No.: 700-990-0
LC_{50}: 0.8 mg/L 4 d (fish)
LC_{50}: 0.202 mg/L 2 d (crustaceans)
LC_{50}: 42.3 mg/L 4 d (fish, Pimephales promelas (fathead minnow))
LC_{50}: 3.4 mg/L 4 d (fish, Oncorhynchus mykiss (Rainbow trout))
EC_{50}: 0.202 mg/L 2 d (crustaceans)
EC_{50}: 1.4 mg/L 3 d (Algae/water plant)
EC_{50}: 3.9 mg/L 2 d (crustaceans, Daphnia magna (Big water flea))
NOEC: 0.093 mg/L 56 d (fish)
NOEC: 0.05 mg/L 3 d (Algae/water plant)
NOEC: 0.036 mg/L 28 d (crustaceans)
LOEC: 0.1 mg/L 21 d (crustaceans)
3-(Diisobutoxythiophosphorylsulfanyl)-2-methylpropionsäure CAS No.: 268567-32-4
LC_{50}: >38 mg/L 4 d (fish)
EC_{50}: >53 mg/L 2 d (crustaceans)
EC_{50}: >79 mg/L 3 d (Algae/water plant)
Amines, C10-14-tert-alkyl EC No.: 701-175-2
LC_{50}: 1.3 mg/L 4 d (fish, rainbow trout)
EC_{50}: 2.5 mg/L 2 d (crustaceans, Daphnia magna)
EC_{50}: 0.435 mg/L 3 d (Algae/water plant, Selenastrum capricornutum)
NOEC: 0.078 mg/L 56 d (fish, rainbow trout)
NOEC: 0.05 mg/L 3 d (Algae/water plant, Selenastrum capricornutum)

Reaction products of 2,5-dimercapto-1,3,4-thiadiazole, sodium salt, with 1-octanethiol and hydrogen peroxide EC No.: 948-020-7
LC_{50}: 100 mg/L 4 d (fish)
LC_{50}: 45 mg/L 2 d (crustaceans)
NOEC: 100 mg/L 3 d (Algae/water plant)
Phenol, (tetrapropenyl) Derivate CAS No.: 74499-35-7
LC_{50}: =40 mg/L 4 d (fish)
EC_{50}: =0.037 mg/L 2 d (crustaceans)
EC_{50}: =0.36 mg/L 3 d (Algae/water plant)
NOEC: =0.0037 mg/L 21 d (crustaceans)
NOEC: =0.07 mg/L 3 d (Algae/water plant)
diphenylamine CAS No.: 122-39-4 EC No.: 204-539-4
LC_{50}: 3.79 mg/L 4 d (fish)
LC_{50}: 2.2 mg/L 2 d (fish)
EC_{50}: 1.16 mg/L 2 d (crustaceans)
EC_{50}: 2.17 mg/L 3 d (Algae/water plant)
EC_{50}: 0.31 mg/L 2 d (crustaceans, Wasserfloh)
EC_{50}: 1.51 mg/L 3 d (Algae/water plant, Grünalgen)

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

Dec-1-ene, dimers, hydrogenated CAS No.: 68649-11-6 EC No.: 500-228-5
Biodegradation: Yes, slowly
Polysulfides, di-tert-dodecyl CAS No.: 68425-15-0 EC No.: 270-335-7
Biodegradation: Yes, slowly
Remark: OECD 301F 0%
Reaction mass of p-t-butylphenyl diphenyl phosphate and bis (p-t-butylphenyl) phenyl phosphate and triphenyl phosphate [TPP = 2.5 <25%] EC No.: 700-990-0
Biodegradation: Yes, rapidly
Amines, C10-14-tert-alkyl EC No.: 701-175-2
Biodegradation: Yes, slowly
Reaction products of 2,5-dimercapto-1,3,4-thiadiazole, sodium salt, with 1-octanethiol and hydrogen peroxide EC No.: 948-020-7
Biodegradation: Yes, slowly
Phenol, (tetrapropenyl) Derivate CAS No.: 74499-35-7
Biodegradation: Yes, slowly

Biodegradation:
Not readily biodegradable (according to OECD criteria)

12.3. Bioaccumulative potential

1-decene, homopolymer, hydrogenated CAS No.: 68037-01-4 EC No.: 500-183-1
Log K_{OW}: > 6.5
Dec-1-ene, dimers, hydrogenated CAS No.: 68649-11-6 EC No.: 500-228-5
Log K_{OW}: > 6.5
Polysulfides, di-tert-dodecyl CAS No.: 68425-15-0 EC No.: 270-335-7
Log K_{OW}: 6.2
Bioconcentration factor (BCF): 0.01
Polysulfides, di-tert-Bu CAS No.: 68937-96-2 EC No.: 273-103-3
Log K_{OW}: = 6
Reaction mass of p-t-butylphenyl diphenyl phosphate and bis (p-t-butylphenyl) phenyl phosphate and triphenyl phosphate [TPP = 2.5 <25%] EC No.: 700-990-0
Log K_{OW}: 4.68

Phenol, (tetrapropenyl) Derivate CAS No.: 74499-35-7
Bioconcentration factor (BCF): 1,601
diphenylamine CAS No.: 122-39-4 EC No.: 204-539-4
Log K_{OW}: 3.4

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

1-decene, homopolymer, hydrogenated CAS No.: 68037-01-4 EC No.: 500-183-1
Results of PBT and vPvB assessment: 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
Results of PBT and vPvB assessment: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
Polysulfides, di-tert-dodecyl CAS No.: 68425-15-0 EC No.: 270-335-7
Results of PBT and vPvB assessment: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
Polysulfides, di-tert-Bu CAS No.: 68937-96-2 EC No.: 273-103-3
Results of PBT and vPvB assessment: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
Reaction mass of p-t-butylphenyl diphenyl phosphate and bis (p-t-butylphenyl) phenyl phosphate and triphenyl phosphate [TPP = 2.5 <25%] EC No.: 700-990-0
Results of PBT and vPvB assessment: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
3-(Diisobutoxythiophosphorylsulfanyl)-2-methylpropionsäure CAS No.: 268567-32-4
Results of PBT and vPvB assessment: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
N-isotridecyl-isotridecanaminium 3-[(diisobutoxyphosphorothioyl)thio]-2-methylpropanoate CAS No.: 1255680-66-0
Results of PBT and vPvB assessment: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
Amines, C10-14-tert-alkyl EC No.: 701-175-2
Results of PBT and vPvB assessment: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
Reaction products of 2,5-dimercapto-1,3,4-thiadiazole, sodium salt, with 1-octanethiol and hydrogen peroxide EC No.: 948-020-7
Results of PBT and vPvB assessment: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
Phenol, (tetrapropenyl) Derivate CAS No.: 74499-35-7
Results of PBT and vPvB assessment: This substance does not meet the PBT/vPvB criteria of REACH, Annex XIII.
diphenylamine CAS No.: 122-39-4 EC No.: 204-539-4
Results of PBT and vPvB assessment: 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.

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 Directive 2008/98/EC (Waste Framework Directive)

HP 14	Ecotoxic

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)
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	not relevant	not relevant	not relevant
14.4. Packing group			
not relevant	not relevant	not relevant	not relevant
14.5. Environmental hazards			
not relevant	not relevant	not relevant	not relevant
14.6. Special precautions for user			
not relevant	not relevant	not relevant	not relevant

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

SECTION 15: Regulatory information

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

15.1.1. EU legislation
Other regulations (EU):
This product is not assigned to a hazard category.
Safety data sheet available on request.

15.1.2. National regulations
[DE] National regulations

Restrictions of occupation
Observe restrictions to employment for juveniles 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 (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

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)

[SK] National regulations

Other regulations, restrictions and prohibition regulations
Zákon č. 67/2010 Z.z., o podmienkach uvedenia chemických látok a chemických zmesí na trh a o zmene a doplnení niektorých zákonov (chemický zákon).
Zákon č. 124/2006 Z. z. o bezpečnosti a ochrane zdravia pri práci a o zmene a doplnení niektorých zákonov.
Zákon NR SR č. 355/2007 Z.z., o ochrane, podpore a rozvoji verejného zdravia a o zmene a doplnení niektorých zákonov, v znení neskorších predpisov.
Nariadenie vlády SR 471/2011 Z.z., ktorým sa mení nariadenie vlády Slovenskej republiky č. 355/2006 Z. z. o ochrane zamestnancov pred rizikami súvisiacimi s expozíciou chemickým faktorom pri práci, Príloha č.1.
Zákon č. 79/2015 Z.z. o odpadoch v znení neskorších predpisov.
Vyhláška MV SR č. 96/2004 Z.z., ktorou sa ustanovujú zásady protipožiarnej bezpečnosti pri manipulácii a skladovaní horľavých kvapalín, ťažkých vykurovacích olejov a rastlinných a živočíšnych tukov a olejov.
Zákon NR SR č. 137/2010 Z.z. o ovzduší v znení neskorších predpisov.
Zákon č. 319/2013 Z.z. o pôsobnosti orgánov štátnej správy pre sprístupňovanie biocídnych výrobkov na trh a ich používanie a o zmene a doplnení niektorých zákonov (biocídny zákon).

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

Not applicable

16.2. Abbreviations and acronyms

ACGIH	American Conference of Governmental Industrial Hygienists
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
BCF	Bioconcentration Factor
CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging
DNEL	derived no-effect level
EC_{50}	Effective Concentration 50%
ES	Exposure scenario
EWC	European Waste Catalogue
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
KG	body weight
LC_{50}	Lethal (fatal) Concentration 50%
LD_{50}	Lethal (fatal) Dose 50%
MAK	Maximum concentration in the workplace air (CH)
NFPA	National Fire Protection Association
NIOSH	National Institute for Occupational Safety & Health
NOEC	No Observed Effect Concentration
OECD	Organisation for Economic Cooperation and Development
OSHA	Occupational Safety & Health Administration
PBT	persistent and bioaccumulative and toxic
PNEC	Predicted No Effect Concentration
REACH	Registration, Evaluation and Authorization of Chemicals
RID	Dangerous goods regulations for transport by rail
TRGS	Technische Regeln für Gefahrstoffe
UN	United Nations

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

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]

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.

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

Hazard statements	
H301	Toxic if swallowed.
H302	Harmful if swallowed.

Hazard statements	
H304	May be fatal if swallowed and enters airways.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H360F	May damage fertility.
H373	May cause damage to organs through prolonged or repeated exposure.
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.
H412	Harmful 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.