

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Product form : Mixture
Product name : 42460 - ENGINE OIL SHPD 10W-40
Product code : 42460

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

Intended for general public
Main use category : Industrial use, Professional use, Consumer use
Function or use category : Lubricants and additives

1.3. Details of the supplier of the safety data sheet

77 Lubricants B.V.
NL 1761 JA
The Netherlands
T +31 (0)78 6527652
technical@77lubricants.nl, www.77lubricants.nl

1.4. Emergency telephone number

Country/Area	Organisation/Company	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals- 24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****Classification according to Regulation (EC) No. 1272/2008 [CLP]**

Hazardous to the aquatic environment – Chronic Hazard, H412
Category 3
Full text of H- and EUH-statements: see section 16

Adverse physicochemical, human health and environmental effects

Harmful to aquatic life with long lasting effects.

2.2. Label elements**Labelling according to Regulation (EC) No. 1272/2008 [CLP]**

Signal word (CLP) : -
Hazard statements (CLP) : H412 - Harmful to aquatic life with long lasting effects.
Precautionary statements (CLP) : P101 - If medical advice is needed, have product container or label at hand.
P102 - Keep out of reach of children.
P103 - Read carefully and follow all instructions.
P273 - Avoid release to the environment.
P501 - Dispose of contents and container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards

Contains no PBT and/or vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

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Component	
Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII	phenol, (tetrapropenyl) derivatives (74499-35-7)(¹)
Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII	phenol, (tetrapropenyl) derivatives (74499-35-7)(¹)

(¹) Substance(s) in concentration below 0.1 % and displayed on a voluntary basis

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or substance(s) are not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at a concentration equal to or greater than 0,1 %

Component	
Substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605	phenol, (tetrapropenyl) derivatives (74499-35-7)(¹)

(¹) Substance(s) in concentration below 0.1 % and displayed on a voluntary basis

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Distillates (petroleum), hydrotreated heavy paraffinic substance with national workplace exposure limit(s) (AT, BE, BG, CZ, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IT, LT, LV, NL, PL, PT, RO, SE, SI, SK, IS, NO, CH, TR); substance with a Community workplace exposure limit (Note L)	CAS-No.: 64742-54-7 EC-No.: 265-157-1 EC Index-No.: 649-467-00-8 REACH-no: 01-2119484627-25	≥ 55 – < 75	Not classified
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil substance with a Community workplace exposure limit (Note L)	CAS-No.: 72623-87-1 EC-No.: 276-738-4 EC Index-No.: 649-483-00-5 REACH-no: 01-2119474889-13	≥ 10 – < 15	Asp. Tox. 1, H304
Distillates (petroleum), solvent-dewaxed heavy paraffinic substance with national workplace exposure limit(s) (AT, BE, BG, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IT, LT, LV, NL, PL, PT, RO, SE, SI, SK, IS, NO, CH, TR); substance with a Community workplace exposure limit (Note L)	CAS-No.: 64742-65-0 EC-No.: 265-169-7 EC Index-No.: 649-474-00-6 REACH-no: 01-2119471299-27	≥ 1 – < 5	Asp. Tox. 1, H304
Distillates (petroleum), hydrotreated light paraffinic substance with national workplace exposure limit(s) (AT, BE, BG, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IT, LT, LV, NL, PL, PT, RO, SE, SI, SK, IS, NO, CH); substance with a Community workplace exposure limit (Note L)	CAS-No.: 64742-55-8 EC-No.: 265-158-7 EC Index-No.: 649-468-00-3 REACH-no: 01-2119487077-29	≥ 1 – < 5	Asp. Tox. 1, H304
Alkyl esters of alkyl phenate alkanolic acid	-	≥ 0.5 – < 3	Aquatic Chronic 4, H413

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Distillates (petroleum), solvent-refined heavy paraffinic substance with national workplace exposure limit(s) (BE, BG, CZ, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, LT, LV, NL, PL, PT, RO, SE, SI, SK, IS, NO, CH); substance with a Community workplace exposure limit (Note L)	CAS-No.: 64741-88-4 EC-No.: 265-090-8 EC Index-No.: 649-454-00-7 REACH-no: 01-2119488706-23	≥ 0.5 – < 3	Not classified
Phenol, dodecyl-, sulfurized, carbonates, calcium salts, overbased	CAS-No.: 122384-87-6 EC-No.: 701-251-5 REACH-no: 01-2119524004-56	≥ 0.5 – < 3	Aquatic Chronic 4, H413
Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts substance with national workplace exposure limit(s) (DE, SK)	CAS-No.: 85940-28-9 EC-No.: 288-917-4 REACH-no: 01-2119521201-61	≥ 0.3 – < 1	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 2, H411
phenol, (tetrapropenyl) derivatives substance listed on REACH Candidate List (Phenol, alkylation products (mainly in para position) with C12-rich branched alkyl chains from oligomerisation, covering any individual isomers and/ or combinations thereof (PDDP))	CAS-No.: 74499-35-7 EC-No.: 310-154-3 EC Index-No.: 604-092-00-9	< 0.1	Repr. 1B, H360F Skin Corr. 1C, H314 Eye Dam. 1, H318 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=10)

Specific concentration limits:

Name	Product identifier	Specific concentration limits (%)
Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts	CAS-No.: 85940-28-9 EC-No.: 288-917-4 REACH-no: 01-2119521201-61	(15 ≤ C < 100) Skin Irrit. 2; H315 (15 ≤ C < 20) Eye Irrit. 2; H319 (20 ≤ C < 100) Eye Dam. 1; H318

Note L: The harmonised classification as a carcinogen applies unless it can be shown that the substance contains less than 3 % of dimethyl sulphoxide extract as measured by IP 346 ("Determination of polycyclic aromatics in unused lubricating base oils and asphaltene free petroleum fractions – Dimethyl sulphoxide extraction refractive index method" Institute of Petroleum, London), in which case a classification in accordance with Title II of this Regulation shall be performed also for that hazard class.

Full text of H- and EUH-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: If you feel unwell, seek medical advice.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact	: Wash skin with plenty of water.
First-aid measures after eye contact	: Rinse eyes with water as a precaution.
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects	: After adequate first aid, no further treatment is required unless symptoms reappear.
Symptoms/effects after inhalation	: After adequate first aid, no further treatment is required unless symptoms reappear.
Symptoms/effects after skin contact	: After adequate first aid, no further treatment is required unless symptoms reappear.
Symptoms/effects after eye contact	: After adequate first aid, no further treatment is required unless symptoms reappear.
Symptoms/effects after ingestion	: After adequate first aid, no further treatment is required unless symptoms reappear.

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

Treat symptomatically.

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SECTION 5: Firefighting measures

5.1. Extinguishing media

- | | |
|--------------------------------|---|
| Suitable extinguishing media | : Water spray. Dry powder. Foam. Carbon dioxide. |
| Unsuitable extinguishing media | : Do not use a water jet since it may cause the fire to spread. |

5.2. Special hazards arising from the substance or mixture

- | | |
|--|--------------------------------|
| Fire hazard | : No fire hazard. |
| Explosion hazard | : No direct explosion hazard. |
| Hazardous decomposition products in case of fire | : Toxic fumes may be released. |

5.3. Advice for firefighters

- | | |
|--------------------------------|--|
| Precautionary measures fire | : Exercise caution when fighting any chemical fire. |
| Firefighting instructions | : Use water spray or fog for cooling exposed containers. Do not enter fire area without proper protective equipment, including respiratory protection. |
| Protection during firefighting | : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing. |

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- | | |
|------------------|--|
| General measures | : Avoid spilling the product, as this might cause falls. Stop leak if safe to do so. Notify authorities if product enters sewers or public waters. Absorb spillage to prevent material damage. |
|------------------|--|

For non-emergency personnel

- | | |
|----------------------|---|
| Protective equipment | : Wear recommended personal protective equipment. |
| Emergency procedures | : Ventilate spillage area. |

For emergency responders

- | | |
|----------------------|--|
| Protective equipment | : Do not attempt to take action without suitable protective equipment. Wear suitable protective clothing, gloves and eye/face protection. For further information refer to section 8: "Exposure controls/personal protection". |
| Emergency procedures | : Evacuate unnecessary personnel. Stop leak if safe to do so. |

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

- | | |
|-------------------------|---|
| For containment | : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Stop leak without risks if possible. |
| Methods for cleaning up | : Take up liquid spill into absorbent material. |
| Other information | : Dispose of materials or solid residues at an authorized site. |

6.4. Reference to other sections

For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- | | |
|-----------------------------------|--|
| Additional hazards when processed | : Not expected to present a significant hazard under anticipated conditions of normal use. |
| Precautions for safe handling | : Ensure good ventilation of the work station. Wear personal protective equipment. Avoid contact with skin and eyes. |
| Hygiene measures | : Do not eat, drink or smoke when using this product. Always wash hands after handling the product. |

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7.2. Conditions for safe storage, including any incompatibilities

Technical measures	: Provide local exhaust or general room ventilation.
Storage conditions	: Keep only in the original container in a cool, well ventilated place away from : Heat sources, Direct sunlight.
Storage temperature	: ≤ 40 °C
Storage area	: Store in a well-ventilated place. Store away from heat.
Special rules on packaging	: Keep only in original container. Store in a closed container.
Packaging materials	: Store always product in container of same material as original container.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

National occupational exposure and biological limit values

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA	5 mg/m ³
IOEL STEL	10 mg/m ³
Ireland - Occupational Exposure Limits	
OEL TWA	5 ppm Form: inhalable fraction
Distillates (petroleum), hydrotreated light paraffinic (64742-55-8)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA	5 mg/m ³
Ireland - Occupational Exposure Limits	
OEL TWA	5 ppm Form: Inhalable fraction
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil (72623-87-1)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA	5 mg/m ³
IOEL STEL	10 mg/m ³
Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA	5 mg/m ³
IOEL STEL	10 mg/m ³
Ireland - Occupational Exposure Limits	
OEL TWA	5 ppm Form: inhalable fraction
Distillates (petroleum), solvent-refined heavy paraffinic (64741-88-4)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA	5 mg/m ³
IOEL STEL	10 mg/m ³
Ireland - Occupational Exposure Limits	
OEL TWA	5 ppm Form: inhalable fraction

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8.2. Exposure controls

Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

Personal protection equipment

Personal protective equipment:

Gloves. Safety glasses. Protective clothing.

Personal protective equipment symbol(s):



Eye and face protection

Eye protection:

Safety glasses

Eye protection			
Type	Field of application	Characteristics	Standard
Safety glasses	Droplet	clear	EN 166

Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Protective gloves

Hand protection					
Type	Material	Permeation	Thickness (mm)	Penetration	Standard
	Nitrile rubber (NBR), Neoprene rubber (HNBR)	6 (> 480 minutes)	>0.35	3 (> 0.65)	EN ISO 374
	Polyvinylchloride (PVC)	2 (> 30 minutes)	0.4	3 (> 0.65)	EN ISO 374

Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Colour	: light brown.
Odour	: Not available
Odour threshold	: Not available
Melting point	: Not applicable
Freezing point	: -36 °C (ASTM D7346)
Boiling point	: Not available
Flammability	: Non flammable.
Lower explosion limit	: Not available
Upper explosion limit	: Not available

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Flash point	: > 201 °C (ASTM D92)
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
pH	: Not available
Viscosity, kinematic	: 98 mm ² /s @ 40°C (ASTM D7042)
Solubility	: insoluble in water.
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50°C	: Not available
Density	: 859 kg/m ³ @ 15°C (ASTM D4052)
Relative density	: Not available
Relative vapour density at 20°C	: Not available
Particle characteristics	: Not applicable

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

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

Acute toxicity (oral)	: Not classified
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)

LD50 oral (rat)	> 5000 mg/kg 401 Acute Oral Toxicity Test
LD50 dermal (rabbit)	> 5000 mg/kg 402 Acute Dermal Toxicity Test
LC50 inhalation (rat) (mg/l)	> mg/l
LC50 inhalation (rat) (Dust/Mist - mg/l/4h)	> 5 mg/l/4h 403 Acute Inhalation Toxicity Test

Distillates (petroleum), hydrotreated light paraffinic (64742-55-8)

LD50 oral (rat)	> 5000 mg/kg 401 Acute Oral Toxicity Test
LD50 dermal (rabbit)	> 5000 mg/kg 402 Acute Dermal Toxicity Test

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Distillates (petroleum), hydrotreated light paraffinic (64742-55-8)	
LC50 inhalation (rat) (Dust/Mist - mg/l/4h)	> 5.53 mg/l/4h 403 Acute Inhalation Toxicity Test
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil (72623-87-1)	
LD50 oral (rat)	> 5000 mg/kg
LD50 dermal (rabbit)	> 2000 mg/kg
LC50 inhalation (rat) (Dust/Mist - mg/l/4h)	> 5.53 mg/l/4h
Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)	
LD50 oral (rat)	> 5000 (<) mg/kg 401 Acute Oral Toxicity Test
LD50 dermal (rabbit)	> 5000 mg/kg 402 Acute Dermal Toxicity Test
LC50 inhalation (rat) (Dust/Mist - mg/l/4h)	> 5 mg/l/4h 403 Acute Inhalation Toxicity Test
Alkyl esters of alkyl phenate alkanolic acid	
LD50 oral (rat)	> 2000 mg/kg 401 Acute Oral Toxicity
LD50 dermal (rat)	> 2000 mg/kg 402 Acute Dermal Toxicity
Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts (85940-28-9)	
LD50 oral (rat)	3080 mg/kg OECD Guideline 401
LD50 dermal (rabbit)	> 20000 mg/kg OECD Guideline 402
LC50 inhalation (rat) (mg/l)	> 2.3 mg/l/4h
LC50 inhalation (rat) (Vapours - mg/l/4h)	> 2.3 mg/l/4h OECD Guideline 403
phenol, (tetrapropenyl) derivatives (74499-35-7)	
LD50 oral (rat)	2100 mg/kg 401 Acute Oral Toxicity Test
LD50 dermal (rabbit)	15000 mg/kg 402 Acute Dermal Toxicity Test
Distillates (petroleum), solvent-refined heavy paraffinic (64741-88-4)	
LD50 oral (rat)	> 5000 mg/kg 401 Acute Oral Toxicity
LD50 dermal (rabbit)	> 5000 mg/kg 402 Acute Dermal Toxicity
LC50 inhalation (rat) (Dust/Mist - mg/l/4h)	> 5.53 mg/l/4h 403 Acute Inhalation Toxicity
Phenol, dodecyl-, sulfurized, carbonates, calcium salts, overbased (122384-87-6)	
LD50 oral (rat)	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal (rabbit)	> 4000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LC50 inhalation (rat) (mg/l)	> 1.67 mg/l OECD 403 (1h)
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)	
LOAEL (oral, rat, 90 days)	125 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)

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Distillates (petroleum), hydrotreated light paraffinic (64742-55-8)	
LOAEL (oral, rat, 90 days)	125 mg/kg bodyweight/day Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil (72623-87-1)	
LOAEL (oral, rat, 90 days)	125 mg/kg bodyweight/day
Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)	
LOAEL (oral, rat, 90 days)	125 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
NOAEL (dermal, rat/rabbit, 90 days)	≈ 1000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study)
Alkyl esters of alkyl phenate alkanolic acid	
NOAEL (oral, rat, 90 days)	3 mg/kg bodyweight/day 408 Repeated Dose 90-Day Oral Toxicity Study in Rodents
Distillates (petroleum), solvent-refined heavy paraffinic (64741-88-4)	
LOAEL (oral, rat, 90 days)	125 mg/kg bodyweight/day
Phenol, dodecyl-, sulfurized, carbonates, calcium salts, overbased (122384-87-6)	
NOAEL (oral, rat, 90 days)	200 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
NOAEL (dermal, rat/rabbit, 90 days)	≈ 250 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study)

Aspiration hazard : Not classified

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Viscosity, kinematic	98 mm ² /s @ 40°C (ASTM D7042)
Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)	
Viscosity, kinematic	20.8 mm ² /s @ 40°C
Distillates (petroleum), hydrotreated light paraffinic (64742-55-8)	
Viscosity, kinematic	< 20.5 mm ² /s @40°C
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil (72623-87-1)	
Viscosity, kinematic	47 mm ² /s
Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)	
Viscosity, kinematic	150 (1.99 – 847) mm ² /s @40°C
Distillates (petroleum), solvent-refined heavy paraffinic (64741-88-4)	
Viscosity, kinematic	28.51 mm ² /s @40°C
Phenol, dodecyl-, sulfurized, carbonates, calcium salts, overbased (122384-87-6)	
Viscosity, kinematic	206820 mm ² /s Temp.: '20°C' Parameter: 'cSt'

11.2. Information on other hazards

Endocrine disrupting properties

Component	
phenol, (tetrapropenyl) derivatives (74499-35-7)	The substance is identified for having endocrine disrupting properties but there is no additional data available (see section 2.3)

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SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Harmful to aquatic life with long lasting effects.
Hazardous to the aquatic environment, short-term : Not classified
(acute)
Hazardous to the aquatic environment, long-term : Harmful to aquatic life with long lasting effects.
(chronic)

Distillates (petroleum), hydrotreated light paraffinic (64742-55-8)

LC50 - Fish [1]	> 100 mg/l Pimephales promelas (OECD 203)
EC50 - Crustacea [1]	> 1000 mg/l Daphnia magna (OECD 202)
EC50 72h - Algae [1]	> 100 mg/l Pseudokirchneriella subcapitata (OECD 201)
NOEC chronic fish	1000 mg/l Oncorhynchus mykiss (14d)
NOEC chronic crustacea	10 mg/l Daphnia magna (21d) (OECD 211)
NOEC chronic algae	100 mg/l Pseudokirchneriella subcapitata (72h) (OECD 201)

Lubricating oils (petroleum), C20-50, hydrotreated neutral oil (72623-87-1)

LC50 - Fish [1]	> 100 mg/l Pimephales promelas
EC50 - Crustacea [1]	> 10000 Daphnia magna
NOEC chronic fish	1000 mg/l Oncorhynchus mykiss (14d)
NOEC chronic crustacea	10 mg/l Daphnia magna (21d)
NOEC chronic algae	100 mg/l Pseudokirchneriella subcapitata (72h)

Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)

LC50 - Fish [1]	> 100 mg/l Pimephales promelas
EC50 - Crustacea [1]	> 1000 mg/l Daphnia magna
EC50 72h - Algae [1]	> 100 mg/l Pseudokirchneriella subcapitata (OECD 201)
NOEC chronic fish	> 1000 mg/l Oncorhynchus mykiss (14d)
NOEC chronic crustacea	10 mg/l Daphnia magna (21d)
NOEC chronic algae	100 mg/l Pseudokirchneriella subcapitata (72h)

Alkyl esters of alkyl phenate alkanolic acid

LC50 - Fish [1]	> 74 mg/l Danio rerio
EC50 - Crustacea [1]	> 0.9 mg/l Daphnia magna
EC50 72h - Algae [1]	> 3 mg/l Desmodesmus subspicatus
NOEC chronic fish	> 0.001 mg/l Danio rerio (36d)
NOEC chronic algae	> 3 mg/l Desmodesmus subspicatus (72h)

Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts (85940-28-9)

LC50 - Fish [1]	4.5 mg/l Oncorhynchus mykiss
EC50 - Crustacea [1]	5.4 mg/l Daphnia magna
EC50 96h - Algae [1]	2.1 mg/l Selenastrum capricornutum
NOEC chronic crustacea	0.4 mg/l Daphnia magna (21d)
NOEC chronic algae	1 mg/l Selenastrum capricornutum (96h)

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phenol, (tetrapropenyl) derivatives (74499-35-7)	
LC50 - Fish [1]	40 mg/l Pimephales promelas
EC50 - Crustacea [1]	0.037 mg/l Daphnia magna
EC50 72h - Algae [1]	0.36 mg/l Desmodesmus subspicatus
NOEC chronic crustacea	0.0037 mg/l Daphnia magna - 21d
NOEC chronic algae	0.07 mg/l Desmodesmus subspicatus (72h)
Distillates (petroleum), solvent-refined heavy paraffinic (64741-88-4)	
LC50 - Fish [1]	> 100 mg/l Pimephales promelas
EC50 - Crustacea [1]	> 10000 mg/l Daphnia magna
NOEC chronic fish	1000 mg/l Oncorhynchus mykiss (14d)
NOEC chronic crustacea	10 mg/l Daphnia magna (21d)
NOEC chronic algae	≥ 100 mg/l Pseudokirchneriella subcapitata (72h)
Phenol, dodecyl-, sulfurized, carbonates, calcium salts, overbased (122384-87-6)	
LC50 - Fish [1]	> 1000 mg/l Pimephales promelas
EC50 - Crustacea [1]	> 1000 mg/l
EC50 72h - Algae [1]	> 500 mg/l
12.2. Persistence and degradability	
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Persistence and degradability	Rapidly degradable
Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)	
Persistence and degradability	Readily biodegradable.
Biodegradation	< 60 % OECD TG 301 F (28d)
Distillates (petroleum), hydrotreated light paraffinic (64742-55-8)	
Persistence and degradability	Inherently biodegradable.
Biodegradation	31 % OECD TG 301 F (28d)
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil (72623-87-1)	
Persistence and degradability	Rapidly degradable
Biodegradation	31 %
Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)	
Persistence and degradability	Readily biodegradable.
Biodegradation	< 60 % OECD TG 301 F (28d)
Alkyl esters of alkyl phenate alkanolic acid	
Persistence and degradability	Not readily biodegradable.
Biodegradation	2 % OECD 301B (28d)
Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts (85940-28-9)	
Persistence and degradability	Not readily biodegradable.
Biodegradation	1.5 % OECD 301B (28d)

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phenol, (tetrapropenyl) derivatives (74499-35-7)	
Persistence and degradability	Not readily biodegradable.
Biodegradation	6 – 25 % OECD 301B (28d)
Distillates (petroleum), solvent-refined heavy paraffinic (64741-88-4)	
Persistence and degradability	Not readily biodegradable.
Biodegradation	31 % OECD 301F (28d)
Phenol, dodecyl-, sulfurized, carbonates, calcium salts, overbased (122384-87-6)	
Persistence and degradability	Not readily biodegradable.
Biodegradation	13.4 % OECD 301B - 28d

12.3. Bioaccumulative potential

Distillates (petroleum), hydrotreated light paraffinic (64742-55-8)	
Partition coefficient n-octanol/water (Log Pow)	> 6
Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)	
Bioconcentration factor (BCF REACH)	260
Alkyl esters of alkyl phenate alkanolic acid	
Bioconcentration factor (BCF REACH)	260
Partition coefficient n-octanol/water (Log Pow)	9.2
Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts (85940-28-9)	
Partition coefficient n-octanol/water (Log Pow)	8.87 @ 20°C
phenol, (tetrapropenyl) derivatives (74499-35-7)	
Bioconcentration factor (BCF REACH)	289
Partition coefficient n-octanol/water (Log Pow)	7.14 @ 25°C
Bioaccumulative potential	Bioaccumulative potential.
Distillates (petroleum), solvent-refined heavy paraffinic (64741-88-4)	
Partition coefficient n-octanol/water (Log Pow)	3.9 – 6
Phenol, dodecyl-, sulfurized, carbonates, calcium salts, overbased (122384-87-6)	
Partition coefficient n-octanol/water (Log Pow)	9.5

12.4. Mobility in soil

Phenol, dodecyl-, sulfurized, carbonates, calcium salts, overbased (122384-87-6)	
Mobility in soil	3615000000000 Source: EPISUITE

12.5. Results of PBT and vPvB assessment

Component	
Substance(s) not meeting the PBT criteria of REACH regulation, in accordance with Annex XIII	phenol, (tetrapropenyl) derivatives (74499-35-7)(¹)
Substance(s) not meeting the vPvB criteria of REACH regulation, in accordance with Annex XIII	phenol, (tetrapropenyl) derivatives (74499-35-7)(¹)

(¹) Substance(s) in concentration below 0.1 % and displayed on a voluntary basis

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12.6. Endocrine disrupting properties

Component

phenol, (tetrapropenyl) derivatives (74499-35-7)

The substance is identified for having endocrine disrupting properties but there is no additional data available (see section 2.3)

12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional waste regulation	: Disposal must be done according to official regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Sewage disposal recommendations	: Disposal must be done according to official regulations.
Product/Packaging disposal recommendations	: Disposal must be done according to official regulations.
Additional information	: Do not re-use empty containers.
European List of Waste (LoW, EC 2000/532)	: 13 02 00 - waste engine, gear and lubricating oils

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / ADN / RID

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID number				
Not regulated for transport				
14.2. UN proper shipping name				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.4. Packing group				
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.5. Environmental hazards				
Dangerous for the environment: No	Dangerous for the environment: No Marine pollutant: No	Dangerous for the environment: No	Dangerous for the environment: No	Dangerous for the environment: No
No supplementary information available				

14.6. Special precautions for user

Overland transport

No data available

Transport by sea

No data available

Air transport

No data available

Inland waterway transport

No data available

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Rail transport

No data available

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

EU-Regulations

REACH Annex XVII (Restriction List)

Contains no substance(s) listed on REACH Annex XVII (Restriction Conditions)

REACH Annex XIV (Authorisation List)

Contains no substance(s) listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Contains substance(s) listed on the REACH Candidate List in concentrations $\geq 0.1\%$ or SCL: Phenol, alkylation products (mainly in para position) with C12-rich branched alkyl chains from oligomerisation, covering any individual isomers and/ or combinations thereof (PDDP) (EC 310-154-3, CAS 74499-35-7)

PIC Regulation (Prior Informed Consent)

Contains no substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals)

POP Regulation (Persistent Organic Pollutants)

Contains no substance(s) listed on the POP list (Regulation EU 2019/1021 on persistent organic pollutants)

Ozone Regulation (1005/2009)

Contains no substance(s) listed on the Ozone Depletion list (Regulation EU 1005/2009 on substances that deplete the ozone layer)

Council Regulation (EC) for the control of dual-use items

Contains no substance subject to the COUNCIL REGULATION (EC) for the control of dual-use items

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes

Section	Changed item	Comments
	Revision date	Modified
	Supersedes	Modified
1.1	Name	Added
2.1	Adverse physicochemical, human health and environmental effects	Modified
2.2	Precautionary statements (CLP)	Modified
2.3	Other hazards not contributing to the classification	Removed

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Indication of changes		
Section	Changed item	Comments
3	Composition/information on ingredients	Modified
4.1	First-aid measures general	Added
4.1	First-aid measures for first aider	Added
5.2	Explosion hazard	Added
5.2	Fire hazard	Added
5.3	Firefighting instructions	Modified
6.1	General measures	Modified
6.1	Emergency procedures	Added
6.3	For containment	Modified
7.1	Handling temperature	Removed
7.1	Additional hazards when processed	Added
7.2	Packaging materials	Added
7.2	Storage conditions	Modified
9	Freezing point	Modified
9	Viscosity, kinematic	Modified
9	Flash point	Modified
9	Density	Modified
12.1	Ecology - general	Modified
13.1	Regional waste regulation	Added
13.1	Additional information	Added
13.1	Sewage disposal recommendations	Added
13.1	Waste disposal recommendations	Added

Abbreviations and acronyms:	
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
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BLV	Biological limit value
BOD	Biochemical oxygen demand (BOD)
COD	Chemical oxygen demand (COD)
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC-No.	European Community number
EC50	Median effective concentration
EN	European Standard
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association

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Abbreviations and acronyms:

IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OECD	Organisation for Economic Co-operation and Development
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
STP	Sewage treatment plant
ThOD	Theoretical oxygen demand (ThOD)
TLM	Median Tolerance Limit
VOC	Volatile Organic Compounds
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disruptor

Full text of H- and EUH-statements:

Aquatic Acute 1	Hazardous to the aquatic environment – Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment – Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
Aquatic Chronic 4	Hazardous to the aquatic environment – Chronic Hazard, Category 4
Asp. Tox. 1	Aspiration hazard, Category 1
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H304	May be fatal if swallowed and enters airways.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H360F	May damage fertility.
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.

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Full text of H- and EUH-statements:

H412	Harmful to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.
Repr. 1B	Reproductive toxicity, Category 1B
Skin Corr. 1C	Skin corrosion/irritation, Category 1, Sub-Category 1C
Skin Irrit. 2	Skin corrosion/irritation, Category 2

Safety Data Sheet (SDS), EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.