

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878 Issue date: 10/12/2012 Revision date: 04/04/2023 Supersedes version of: 23/03/2023 Version: 4.1

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture

Product name : 42550 - ENGINE OIL HDX 10W-40

Product code : 42550

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

1.2.1. Relevant identified uses

Intended for general public

Main use category : Industrial use, Professional use, Consumer use

Function or use category : Lubricants and additives

1.2.2. Uses advised against

No additional information available

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	Organisation/Company	Address	Emergency number	Comment
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Guy's & St Thomas' Hospital Trust	Avonley Road SE14 5ER	+44 20 7188 7188	
United Kingdom	National Poisons Information Service (Belfast Centre) Royal Victoria Hospital	Grosvenor Road BT12 6BA	0344 892 0111	Only for healthcare professionals

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

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

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.

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2.3. Other hazards

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

Component	
phenol, (tetrapropenyl) derivatives (74499-35-7)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

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		
phenol, (tetrapropenyl) derivatives(74499-35-7)	The substance is 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	

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil substance with a Community workplace exposure limit	CAS-No.: 72623-87-1 EC-No.: 276-738-4 EC Index-No.: 649-483-00-5 REACH-no: 01-2119474889- 13	≥ 45 – < 55	Asp. Tox. 1, H304
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based substance with national workplace exposure limit(s) (BE, BG, CZ, DK, ES, FI, GR, HU, IE, LT, LV, NL, PL, PT, SE, SK, IS, NO, CH); substance with a Community workplace exposure limit	CAS-No.: 72623-86-0 EC-No.: 276-737-9 EC Index-No.: 649-482-00-X REACH-no: 01-2119474878-	≥ 25 – < 45	Asp. Tox. 1, H304
Distillates (petroleum), hydrotreated 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	CAS-No.: 64742-54-7 EC-No.: 265-157-1 EC Index-No.: 649-467-00-8 REACH-no: 01-2119484627- 25	≥ 5 – < 10	Not classified
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	CAS-No.: 64742-55-8 EC-No.: 265-158-7 EC Index-No.: 649-468-00-3 REACH-no: 01-2119487077-	≥3-<5	Not classified

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
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	CAS-No.: 64742-65-0 EC-No.: 265-169-7 EC Index-No.: 649-474-00-6 REACH-no: 01-2119471299- 27	≥1-<3	Not classified
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	CAS-No.: 64741-88-4 EC-No.: 265-090-8 EC Index-No.: 649-454-00-7 REACH-no: 01-2119488706- 23	≥ 0.3 – < 3	Not classified
Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligomerization, carbonates, calcium salts, overbased, sulfurized including distillates (petroleum), hydrotreated, solvent-refined, solvent-dewaxed, or catalytic dewaxed, light or heavy paraffinic C15-C50	EC-No.: 701-251-5 REACH-no: 01-2119524004- 56	≥ 0.3 – < 3	Aquatic Chronic 4, H413
Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts substance with national workplace exposure limit(s) (CZ, DE, SK)	CAS-No.: 84605-29-8 EC-No.: 283-392-8 REACH-no: 01-2119493626- 26	≥ 0.3 – < 1	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 2, H411
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-	≥ 0.3 – < 1	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 2, H411
Distillates (petroleum), solvent-dewaxed light paraffinic substance with national workplace exposure limit(s) (BE, BG, CZ, DK, ES, FI, GR, HU, IE, LT, LV, NL, PL, PT, RO, SE, SK, IS, NO, CH); substance with a Community workplace exposure limit	CAS-No.: 64742-56-9 EC-No.: 265-159-2 EC Index-No.: 649-469-00-9 REACH-no: 01-2119480132-	≥ 0.1 – < 1	Asp. Tox. 1, H304
phenol, (tetrapropenyl) derivatives substance listed as REACH Candidate (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)
diphenylamine substance with national workplace exposure limit(s) (AT, BE, BG, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, IE, IT, LT, PL, PT, RO, SE, SI, SK, IS, NO, CH, TR); substance with a Community workplace exposure limit	CAS-No.: 122-39-4 EC-No.: 204-539-4 EC Index-No.: 612-026-00-5 REACH-no: 01-2119488966- 13	< 0.1	Acute Tox. 3 (Inhalation), H331 Acute Tox. 3 (Dermal), H311 Acute Tox. 3 (Oral), H301 STOT RE 2, H373 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Specific concentration limits:		
Name	Product identifier	Specific concentration limits (%)
Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts	CAS-No.: 84605-29-8 EC-No.: 283-392-8 REACH-no: 01-2119493626- 26	(6.25 < C ≤ 100) Skin Irrit. 2, H315 (10 < C ≤ 12.5) Eye Irrit. 2, H319 (12.5 < C ≤ 100) Eye Dam. 1, H318

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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	

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 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 eye 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.

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

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.

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.

6.1.1. For non-emergency personnel

Protective equipment : Wear recommended personal protective equipment.

Emergency procedures : Ventilate spillage area.

6.1.2. For emergency responders

Protective equipment : Do not attempt to take action without suitable protective equipment. For further information

refer to section 8: "Exposure controls/personal protection".

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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.

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

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment. Avoid

contact with skin and eyes.

Handling temperature : $\leq 40 \, ^{\circ}\text{C}$

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the

oroduct.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Provide local exhaust or general room ventilation. Storage conditions : Store in a well-ventilated place. Keep cool.

Storage temperature : \leq 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.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

IOEL TWA

8.1.1 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/m³		
United Kingdom - Occupational Exposure Limits	United Kingdom - Occupational Exposure Limits		
WEL TWA (OEL TWA) [1] 5 mg/m³			
Distillates (petroleum), hydrotreated light paraffinic (64742-55-8)			
EU - Indicative Occupational Exposure Limit (IOEL)			
IOEL TWA	5 mg/m³		
United Kingdom - Occupational Exposure Limits			
NEL TWA (OEL TWA) [1] 5 mg/m³			
Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)			
EU - Indicative Occupational Exposure Limit (IOEL)			

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5 mg/m³

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Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)			
IOEL STEL	10 mg/m³		
United Kingdom - Occupational Exposure Limits			
WEL TWA (OEL TWA) [1]	5 mg/m³		
WEL STEL (OEL STEL)	10 mg/m³		
Distillates (petroleum), solvent-refined heavy	paraffinic (64741-88-4)		
EU - Indicative Occupational Exposure Limit (IOEL)			
IOEL TWA	5 mg/m³		
IOEL STEL	10 mg/m³		
United Kingdom - Occupational Exposure Limits			
WEL TWA (OEL TWA) [1]	5 mg/m³		
WEL STEL (OEL STEL)	10 mg/m³		
Distillates (petroleum), solvent-dewaxed light	Distillates (petroleum), solvent-dewaxed light paraffinic (64742-56-9)		
EU - Indicative Occupational Exposure Limit (IOEL)	EU - Indicative Occupational Exposure Limit (IOEL)		
IOEL TWA	5 mg/m³ ACGIH TLV (inhalable fraction)		
diphenylamine (122-39-4)			
EU - Indicative Occupational Exposure Limit (IOEL)			
IOEL TWA	10 mg/m³		
IOEL STEL	20 mg/m³		
United Kingdom - Occupational Exposure Limits			
WEL TWA (OEL TWA) [1]	10 mg/m³		
WEL STEL (OEL STEL)	20 mg/m³		
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (72623-86-0)			
EU - Indicative Occupational Exposure Limit (IOEL)			
IOEL TWA	5 mg/m³		
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil (72623-87-1)			
EU - Indicative Occupational Exposure Limit (IOEL)			
IOEL TWA	5 mg/m³		
IOEL STEL	10 mg/m³		

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

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8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment:

Gloves. Safety glasses. Protective clothing.

Personal protective equipment symbol(s):







8.2.2.1. Eye and face protection

Eye protection:

Safety glasses

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

8.2.2.2. Skin protection

Skin and body protection:

Wear suitable protective clothing

Hand protection:

Protective gloves

Hand protection					
Туре	Material	Permeation	Thickness (mm)	Penetration	Standard
	Nitrile rubber (NBR), Neoprene rubber (HNBR)	5 (> 240 minutes)	0.7	3 (> 0.65)	EN ISO 374

8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

8.2.2.4. Thermal hazards

No additional information available

8.2.3. 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
Odour threshold : characteristic.
Melting point : Not available
Freezing point : -36 °C (ASTM D7346)

Boiling point : Not available

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Flammability : Non flammable.

Lower explosion limit : Not available

Upper explosion limit : Not available

Flash point : 230 °C (ASTM D92)

Auto-ignition temperature : Not available

Decomposition temperature : Not available

pH : Not available

Viscosity, kinematic : 91 mm²/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 : 857 kg/m³ @ 15°C (ASTM D4052)

Relative density : Not available
Relative vapour density at 20°C : Not available
Particle characteristics : Not applicable

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

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

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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 bodyweight 401 Acute Oral Toxicity Test	
LD50 dermal (rabbit)	> 2000 mg/kg 402 Acute Dermal Toxicity Test	
LC50 inhalation (rat) (mg/l)	> 5000 mg/l/4h	

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Distillates (petroleum), hydrotreated heavy pa	araffinic (64742-54-7)		
LC50 inhalation (rat) (Dust/Mist - mg/l/4h)	> 5.53 mg/l/4h 403 Acute Inhalation Toxicity Test		
Distillates (petroleum), hydrotreated light par	affinic (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		
LC50 inhalation (rat) (Dust/Mist - mg/l/4h)	> 5.53 mg/l/4h 403 Acute Inhalation Toxicity Test		
Distillates (petroleum), solvent-dewaxed heav	y paraffinic (64742-65-0)		
LD50 oral (rat)	> 5000 mg/kg bodyweight 401 Acute Oral Toxicity Test		
LD50 dermal (rabbit)	> 5000 mg/kg 402 Acute Dermal Toxicity Test		
LC50 inhalation (rat) (Vapours - mg/l/4h)	> 5.53 mg/l/4h 403 Acute Inhalation Toxicity Test		
Distillates (petroleum), solvent-refined heavy	paraffinic (64741-88-4)		
LD50 oral (rat)	> 5000 mg/kg		
LD50 dermal (rabbit)	> 2000 mg/kg		
LC50 inhalation (rat) (mg/l)	> 5000 mg/m³		
LC50 inhalation (rat) (Vapours - mg/l/4h)	5.53 mg/l/4h		
carbonates, calcium salts, overbased, sulfuri	Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligomerization, carbonates, calcium salts, overbased, sulfurized including distillates (petroleum), hydrotreated, solvent-refined, solvent-dewaxed, or catalytic dewaxed, light or heavy paraffinic C15-C50		
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)		
Phosphorodithioic acid, mixed O,O-bis(1,3-di	methylbutyl and iso-Pr) esters, zinc salts (84605-29-8)		
LD50 oral (rat)	3100 mg/kg OECD 401		
LD50 dermal (rat)	> 2002 mg/kg OECD 402		
LC50 inhalation (rat) (Vapours - mg/l/4h)	> 2.3 mg/l/4h OECD 403		
Phosphorodithioic acid, mixed O,O-bis(2-ethy	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) (Vapours - mg/l/4h)	> 2.3 mg/l/4h OECD Guideline 403		
Distillates (petroleum), solvent-dewaxed light	paraffinic (64742-56-9)		
LD50 oral (rat)	> 5000 mg/kg bodyweight		
LD50 dermal (rat)	> 5000 mg/kg		
LC50 inhalation (rat) (Vapours - mg/l/4h)	> 2.18 mg/l/4h		
phenol, (tetrapropenyl) derivatives (74499-35-	.7)		
LD50 oral (rat)	2200 mg/kg 401 Acute Oral Toxicity Test		
LD50 dermal (rabbit)	15000 mg/kg 402 Acute Dermal Toxicity Test		

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LD50 darinal (rabbt) > 800 mg/kg LD50 darmal (rabbt) > 5000 mg/kg LD50 darmal (rabbt) > 5000 mg/kg bodyweight 401 Acute Craft Toxicity Test LD50 darmal (rabbt) > 5000 mg/kg bodyweight 401 Acute Craft Toxicity Test LD50 darmal (rabbt) > 5000 mg/kg bodyweight 401 Acute Craft Toxicity Test LD50 darmal (rabbt) > 5000 mg/kg 402 Acute Dermal Toxicity Test LD50 darmal (rabbt) > 5000 mg/kg 402 Acute Dermal Toxicity Test LD50 darmal (rabbt) > 55000 mg/kg 402 Acute Dermal Toxicity Test LD50 darmal (rabbt) > 55000 mg/kg LD50 darmal (rabbt) > 5500 mg/kg LD50 darmal (rabbt) > 5000 mg/kg LD50 darmal (rabbt) > 5500 mg/kg LD50 darmal (rabbt) / 5500	diphenylamine (122-39-4)	
LUSio dermal (rabbit) > 5000 mg/kg Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (72623-86-0) LUSio oral (rat) > 5000 mg/kg bodyweight 401 Acute Oral Toxicity Test LUSio inhaliation (rat) (Dust/Mist - mg/l/4h) > 5530 mg/k4 402 Acute Dermal Toxicity Test LUSio inhaliation (rat) (Dust/Mist - mg/l/4h) > 5.53 mg/l/4h 403 Acute Inhaliation Toxicity Test LUSio inhaliation (rat) (Dust/Mist - mg/l/4h) > 5.53 mg/l/4h 403 Acute Inhaliation Toxicity Test LUDicating oils (petroleum), C20-50, hydrotreated neutral oil (72623-87-1) LUSio dermal (rabbit) > 2000 mg/kg LUSio dermal (rabbit) > 2000 mg/kg LUSio dermal (rabbit) > 5000 mg/kg LUSio dermal (rabbit) > 5000 mg/kg LUSio dermal (rabbit) > 5.53 mg/l/4h Skin corresioniritation : Not classified Serious eye damage/irritation : Not classified Serious eye damage/irritation : Not classified Serious eye damage/irritation : Not classified Germ cell multagenicity : Not classified Serious eye damage/irritation : Not classified Serious eye damage/		. 000
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (72623-86-0) LD50 oral (rat)	. ,	
LD50 aral (rat)	LD50 dermal (rabbit)	> 5000 mg/kg
LD50 demail (rabbit) LC50 inhalation (rat) (Dust/Mist - mg/l4h) > 5.53 mg/l4h 403 Acute Inhalation Toxicity Test Lubricating oils (petroleum), C20-50, hydrotreated neutral oil (72623-87-1) LD50 demail (rabbit) LD50 demail (rabbit) > 5000 mg/kg LD50 demail (rabbit) > 2000 mg/kg LD50 demail (rabbit) > 1. Not classified Serious eye damage/irritation : Not classified Serious eye damage/irritation : Not classified Germ call mutagenicity : Not classified Reproductive toxicity : Not classified Reproductive toxicity : Not classified STOT-single exposure : Not classified STOT-single 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 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 Repealed Dose 90-Day Oral Toxicity in Rodents) Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0) LOAEL (oral, rat, 90 days) 125 mg/kg bodyweight/day Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 Repealed Dose 90-Day Oral Toxicity in Rodents) 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 Repealed Dose 90-Day Oral Toxicity in Rodents) Distillates (petroleum), volvent-dewaxed light or heavy paraffinic (64742-65-0) LOAEL (oral, rat, 90 days) 200 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 422 (Combined Repealed Dose Toxicity Study with the Reproduction / Developmental Toxicity Streening Test) NOAEL (dermal, rat/rabbit 90 days) 200 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Study with the Reproduction / Developmental Toxicity S	Lubricating oils (petroleum), C15-30, hydrotre	eated neutral oil-based (72623-86-0)
LC50 inhalation (rat) (DustMist - mg/l4h) > 5.53 mg/l4h 403 Acute Inhalation Toxicity Test Lubricating oils (petroleum), C20-50, hydrotroated neutral oil (72623-87-1) LD50 oral (rat) > 5000 mg/kg LD50 dermal (rabbit) > 2000 mg/kg LC50 inhalation (rat) (DustMist - mg/l4h) > 5.53 mg/l4h Serious eye damage/irritation : Not classified Serious eye damage/irritation : Not classified Germ cell mutagenicity : Not classified Germ cell mutagenicity : Not classified Garcinogenicity : Not classified Carcinogenicity : Not classified STOT-repeated exposure : Not classified STOT-geted exposure : Not classified STOT-repeated exposure : Not classified Distillates (petroleum), hydrotreated light paraffinic (64742-55-8) LOAEL (oral, rat, 90 days)	LD50 oral (rat)	> 5000 mg/kg bodyweight 401 Acute Oral Toxicity Test
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil (72623-87-1) LD50 oral (rat)	LD50 dermal (rabbit)	> 5000 mg/kg 402 Acute Dermal Toxicity Test
LD50 oral (rat) > 5000 mg/kg LD50 dermal (rabbit) > 2000 mg/kg LD50 dermal (rabbit) > 2000 mg/kg LC50 inhalation (rat) (Dust/Mist - mg/l/4h) > 5.53 mg/l/4h Skin corrosion/irritation Not classified Respiratory or skin sensitisation Not classified Respiratory or skin sensitisation Not classified Respiratory or skin sensitisation Not classified Reproductive toxicity Not classified Reproductive toxicity Not classified Reproductive toxicity Not classified Reproductive toxicity Not classified STOT-single exposure Not classified Not classified STOT-single exposure Not classified Not classified STOT-single exposure Not classified Not classi	LC50 inhalation (rat) (Dust/Mist - mg/l/4h)	> 5.53 mg/l/4h 403 Acute Inhalation Toxicity Test
LD50 dermal (rabbit) > 2000 mg/kg LC50 inhalation (rat) (Dust/Mist - mg/l/4h) > 5.53 mg/ll/4h Skin corrosion/irritation : Not classified Seriorus eye damage/irritation : Not classified Respiratory or skin sensitisation : Not classified Germ cell mutagenicity : Not classified Germ cell mutagenicity : Not classified Germ cell mutagenicity : Not classified Reproductive toxicity : Not classified STOT-single exposure : Not classified STOT-single expos	Lubricating oils (petroleum), C20-50, hydrotre	ated neutral oil (72623-87-1)
LC50 inhalation (rat) (DustMist - mg/lu4h) > 5.5.3 mg/lu4h Skin corrosion/irritation : Not classified Serious eye damage/irritation : Not classified Serious eye damage/irritation : Not classified Respiratory or skin sensitisation : Not classified Rem cell mulagenicity : Not classified Regroductive toxicity : Not classified STOT-single 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 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) Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0) LOAEL (oral, rat, 90 days) 125 mg/kg bodyweight (C12 rich) derived from propene oligomerization, carbonates, calclum salts, overbased, sulfurized including distillates (petroleum), hydrotreated, solvent-refined, solvent-dewaxed, or catalytic dewaxed, light or heavy paraffinic C15-C50 NOAEL (oral, rat, 90 days) 200 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline 402 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test) NOAEL (dermal, rat/rabbit, 90 days) 200 mg/kg bodyweight Animal: rat, Cuideline: OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study) Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts (84605-29-8) NOAEL (subacute, oral, animal/male, 28 days) 160 mg/kg bodyweight 407 Repeated Dose 28-day Oral Toxicity Study in Rodents Distillates (petroleum), solvent-dewaxed light paraffinic (64742-56-9) LOAEL (oral, rat, 90 days) 125 mg/kg bodyweight 407 Repeated Dose 28-day Oral Toxicity Study in Rodents Distillates (petroleum), solvent-dewaxed ligh	LD50 oral (rat)	> 5000 mg/kg
Skin corrosion/irritation : Not classified Serious eye damage/irritation : Not classified Serious eye damage/irritation : Not classified Reprizatory or Skin sensitisation : Not classified Germ cell mutagenicity : Not classified STOT-repeated exposure : Not classified STOT-repeated 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 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) Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0) LOAEL (oral, rat, 90 days) 125 mg/kg bodyweight Phenol, paraelkylation products with C10-15 branched olefins (C12 rich) derived from propene oligomerization, carbonates, calcium salts, overbased, sulfurized including distillates (petroleum), hydrotreated, solvent-refined, solvent-dewaxed, or catalytic dewaxed, light or heavy paraffinic C15-C50 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) 200 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study) Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts (84605-29-8) NOAEL (subacute, oral, animal/male, 28 days) 160 mg/kg bodyweight 407 Repeated Dose 28-day Oral Toxicity Study in Rodents Distillates (petroleum), solvent-dewaxed light paraffinic (64742-56-9) LOAEL (oral, rat, 90 days) 125 mg/kg bodyweight OECD Guideline 408 (Repeated Dose 90-Day Oral T	LD50 dermal (rabbit)	> 2000 mg/kg
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 Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7) LOAEL (oral, rat, 90 days)	LC50 inhalation (rat) (Dust/Mist - mg/l/4h)	> 5.53 mg/l/4h
Respiratory or skin sensitisation : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Not classified Reproductive toxicity : Not classified STOT-single exposure : Not classified STOT-single exposure : Not classified STOT-single exposure : Not classified STOT-tepated exposure : Not classified Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7) LOAEL (oral, rat, 90 days)	Skin corrosion/irritation :	Not classified
Germ cell mutagenicity : Not classified Carcinogenicity : Not classified Reproductive toxicity : Not classified STOT-single exposure : Not classified STOT-single 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 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) Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0) 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) Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0) LOAEL (oral, rat, 90 days) 125 mg/kg bodyweight Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligomerization, carbonates, calcium salts, overbased, sulfurized including distillates (petroleum), hydrotreated, solvent-refined, solvent-dewaxed, or catalytic dewaxed, light or heavy paraffinic C15-C50 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) 200 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 410 (Repeated Dose Dermal Toxicity, 2128-Day Study) Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts (84605-29-8) NOAEL (subacute, oral, animal/male, 28 days) 160 mg/kg bodyweight 407 Repeated Dose 28-day Oral Toxicity Study in Rodents Distillates (petroleum), solvent-dewaxed light paraffinic (64742-56-9) LOAEL (oral, rat, 90 days) 125 mg/kg bodyweight OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)		Not classified
Carcinogenicity : Not classified Reproductive toxicity : Not classified STOT-single exposure : 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 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) Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0) LOAEL (oral, rat, 90 days) 125 mg/kg bodyweight Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligomerization, carbonates, calcium salts, overbased, sulfurized including distillates (petroleum), hydrotreated, solvent-refined, solvent-dewaxed, or catalytic dewaxed, light or heavy paraffinic C15-C50 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, rati/rabbit, 90 days) 200 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study) Phosphorodithiolic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts (84605-29-8) NOAEL (subacute, oral, animal/male, 28 days) 160 mg/kg bodyweight 407 Repeated Dose 28-day Oral Toxicity Study in Rodents Distillates (petroleum), solvent-dewaxed light paraffinic (64742-56-9) LOAEL (oral, rat, 90 days) 125 mg/kg bodyweight OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)	•	Not classified
Reproductive toxicity : Not classified STOT-single exposure : Not classified STOT-single exposure : Not classified STOT-tepeated exposure : Not classified STOT-tepeated exposure : Not classified STOT-tepeated 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 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) Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0) LOAEL (oral, rat, 90 days) 125 mg/kg bodyweight Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligomerization, carbonates, calcium salts, overbased, sulfurized including distillates (petroleum), hydrotreated, solvent-refined, solvent-dewaxed, or catalytic dewaxed, light or heavy paraffinic C15-C50 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) Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts (84605-29-8) NOAEL (subacute, oral, animal/male, 28 days) 160 mg/kg bodyweight 407 Repeated Dose 28-day Oral Toxicity Study in Rodents Distillates (petroleum), solvent-dewaxed light paraffinic (64742-56-9) LOAEL (oral, rat, 90 days) 125 mg/kg bodyweight OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)	• •	
STOT-single exposure : Not classified Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7) LOAEL (oral, rat, 90 days)		
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 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) Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0) LOAEL (oral, rat, 90 days) 125 mg/kg bodyweight Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligomerization, carbonates, calcium salts, overbased, suffurized including distillates (petroleum), hydrotreated, solvent-refined, solvent-dewaxed, or catalytic dewaxed, light or heavy paraffinic C15-C50 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) Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts (84605-29-8) NOAEL (subacute, oral, animal/male, 28 days) 160 mg/kg bodyweight 407 Repeated Dose 28-day Oral Toxicity Study in Rodents Distillates (petroleum), solvent-dewaxed light paraffinic (64742-56-9) LOAEL (oral, rat, 90 days) 125 mg/kg bodyweight OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)	•	
Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7) LOAEL (oral, rat, 90 days) 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) Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0) LOAEL (oral, rat, 90 days) 125 mg/kg bodyweight Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligomerization, carbonates, calcium salts, overbased, sulfurized including distillates (petroleum), hydrotreated, solvent-refined, solvent-dewaxed, or catalytic dewaxed, light or heavy paraffinic C15-C50 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) Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts (84605-29-8) NOAEL (subacute, oral, animal/male, 28 days) 160 mg/kg bodyweight 407 Repeated Dose 28-day Oral Toxicity Study in Rodents Distillates (petroleum), solvent-dewaxed light paraffinic (64742-56-9) LOAEL (oral, rat, 90 days) 125 mg/kg bodyweight OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)	• •	
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) Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0) LOAEL (oral, rat, 90 days) 125 mg/kg bodyweight Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligomerization, carbonates, calcium salts, overbased, sulfurized including distillates (petroleum), hydrotreated, solvent-refined, solvent-dewaxed, or catalytic dewaxed, light or heavy paraffinic C15-C50 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) 220 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study) Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts (84605-29-8) NOAEL (subacute, oral, animal/male, 28 days) 160 mg/kg bodyweight 407 Repeated Dose 28-day Oral Toxicity Study in Rodents Distillates (petroleum), solvent-dewaxed light paraffinic (64742-56-9) LOAEL (oral, rat, 90 days) 125 mg/kg bodyweight OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents) diphenylamine (122-39-4)	STOT-repeated exposure :	Not classified
Distillates (petroleum), hydrotreated light paraffinic (64742-55-8) LOAEL (oral, rat, 90 days) Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0) LOAEL (oral, rat, 90 days) 125 mg/kg bodyweight Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligomerization, carbonates, calcium salts, overbased, sulfurized including distillates (petroleum), hydrotreated, solvent-refined, solvent-dewaxed, or catalytic dewaxed, light or heavy paraffinic C15-C50 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) Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts (84605-29-8) NOAEL (subacute, oral, animal/male, 28 days) 160 mg/kg bodyweight 407 Repeated Dose 28-day Oral Toxicity Study in Rodents Distillates (petroleum), solvent-dewaxed light paraffinic (64742-56-9) LOAEL (oral, rat, 90 days) 125 mg/kg bodyweight OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)	Distillates (petroleum), hydrotreated heavy pa	raffinic (64742-54-7)
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) Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0) LOAEL (oral, rat, 90 days) 125 mg/kg bodyweight Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligomerization, carbonates, calcium salts, overbased, sulfurized including distillates (petroleum), hydrotreated, solvent-refined, solvent-dewaxed, or catalytic dewaxed, light or heavy paraffinic C15-C50 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) Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts (84605-29-8) NOAEL (subacute, oral, animal/male, 28 days) 160 mg/kg bodyweight 407 Repeated Dose 28-day Oral Toxicity Study in Rodents Distillates (petroleum), solvent-dewaxed light paraffinic (64742-56-9) LOAEL (oral, rat, 90 days) 125 mg/kg bodyweight OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents) diphenylamine (122-39-4)	LOAEL (oral, rat, 90 days)	125 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408
CRepeated Dose 90-Day Oral Toxicity in Rodents	Distillates (petroleum), hydrotreated light para	affinic (64742-55-8)
DOAEL (oral, rat, 90 days) 125 mg/kg bodyweight Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligomerization, carbonates, calcium salts, overbased, sulfurized including distillates (petroleum), hydrotreated, solvent-refined, solvent-dewaxed, or catalytic dewaxed, light or heavy paraffinic C15-C50 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) Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts (84605-29-8) NOAEL (subacute, oral, animal/male, 28 days) 160 mg/kg bodyweight Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts (85940-28-9) NOAEL (subacute, oral, animal/female, 28 days) 125 mg/kg bodyweight 407 Repeated Dose 28-day Oral Toxicity Study in Rodents Distillates (petroleum), solvent-dewaxed light paraffinic (64742-56-9) LOAEL (oral, rat, 90 days) 125 mg/kg bodyweight OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)	LOAEL (oral, rat, 90 days)	
Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligomerization, carbonates, calcium salts, overbased, sulfurized including distillates (petroleum), hydrotreated, solvent-refined, solvent-dewaxed, or catalytic dewaxed, light or heavy paraffinic C15-C50 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) Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts (84605-29-8) NOAEL (subacute, oral, animal/male, 28 days) 160 mg/kg bodyweight Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts (85940-28-9) NOAEL (subacute, oral, animal/female, 28 days) 125 mg/kg bodyweight 407 Repeated Dose 28-day Oral Toxicity Study in Rodents Distillates (petroleum), solvent-dewaxed light paraffinic (64742-56-9) LOAEL (oral, rat, 90 days) 125 mg/kg bodyweight OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)	Distillates (petroleum), solvent-dewaxed heav	y paraffinic (64742-65-0)
carbonates, calcium salts, overbased, sulfurized including distillates (petroleum), hydrotreated, solvent-refined, solvent-dewaxed, or catalytic dewaxed, light or heavy paraffinic C15-C50 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) 2250 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study) Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts (84605-29-8) NOAEL (subacute, oral, animal/male, 28 days) 160 mg/kg bodyweight Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts (85940-28-9) NOAEL (subacute, oral, animal/female, 28 days) 125 mg/kg bodyweight 407 Repeated Dose 28-day Oral Toxicity Study in Rodents Distillates (petroleum), solvent-dewaxed light paraffinic (64742-56-9) LOAEL (oral, rat, 90 days) 125 mg/kg bodyweight OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents) diphenylamine (122-39-4)	LOAEL (oral, rat, 90 days)	125 mg/kg bodyweight
(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) Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts (84605-29-8) NOAEL (subacute, oral, animal/male, 28 days) 160 mg/kg bodyweight Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts (85940-28-9) NOAEL (subacute, oral, animal/female, 28 days) 125 mg/kg bodyweight 407 Repeated Dose 28-day Oral Toxicity Study in Rodents Distillates (petroleum), solvent-dewaxed light paraffinic (64742-56-9) LOAEL (oral, rat, 90 days) 125 mg/kg bodyweight OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents) diphenylamine (122-39-4)	carbonates, calcium salts, overbased, sulfuria	zed including distillates (petroleum), hydrotreated, solvent-refined, solvent-
Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts (84605-29-8) NOAEL (subacute, oral, animal/male, 28 days) Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts (85940-28-9) NOAEL (subacute, oral, animal/female, 28 days) 125 mg/kg bodyweight 407 Repeated Dose 28-day Oral Toxicity Study in Rodents Distillates (petroleum), solvent-dewaxed light paraffinic (64742-56-9) LOAEL (oral, rat, 90 days) 125 mg/kg bodyweight OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents) diphenylamine (122-39-4)	NOAEL (oral, rat, 90 days)	(Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity
NOAEL (subacute, oral, animal/male, 28 days) Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts (85940-28-9) NOAEL (subacute, oral, animal/female, 28 days) 125 mg/kg bodyweight 407 Repeated Dose 28-day Oral Toxicity Study in Rodents Distillates (petroleum), solvent-dewaxed light paraffinic (64742-56-9) LOAEL (oral, rat, 90 days) 125 mg/kg bodyweight OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents) diphenylamine (122-39-4)	NOAEL (dermal, rat/rabbit, 90 days)	
Phosphorodithioic acid, mixed O,O-bis(2-ethylhexyl and iso-Bu and iso-Pr) esters, zinc salts (85940-28-9) NOAEL (subacute, oral, animal/female, 28 days) 125 mg/kg bodyweight 407 Repeated Dose 28-day Oral Toxicity Study in Rodents Distillates (petroleum), solvent-dewaxed light paraffinic (64742-56-9) LOAEL (oral, rat, 90 days) 125 mg/kg bodyweight OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents) diphenylamine (122-39-4)	Phosphorodithioic acid, mixed O,O-bis(1,3-dia	methylbutyl and iso-Pr) esters, zinc salts (84605-29-8)
NOAEL (subacute, oral, animal/female, 28 days) 125 mg/kg bodyweight 407 Repeated Dose 28-day Oral Toxicity Study in Rodents Distillates (petroleum), solvent-dewaxed light paraffinic (64742-56-9) LOAEL (oral, rat, 90 days) 125 mg/kg bodyweight OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents) diphenylamine (122-39-4)	NOAEL (subacute, oral, animal/male, 28 days)	160 mg/kg bodyweight
Distillates (petroleum), solvent-dewaxed light paraffinic (64742-56-9) LOAEL (oral, rat, 90 days) 125 mg/kg bodyweight OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents) diphenylamine (122-39-4)	Phosphorodithioic acid, mixed O,O-bis(2-ethy	rlhexyl and iso-Bu and iso-Pr) esters, zinc salts (85940-28-9)
LOAEL (oral, rat, 90 days) 125 mg/kg bodyweight OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents) diphenylamine (122-39-4)	NOAEL (subacute, oral, animal/female, 28 days)	125 mg/kg bodyweight 407 Repeated Dose 28-day Oral Toxicity Study in Rodents
diphenylamine (122-39-4)	Distillates (petroleum), solvent-dewaxed light	paraffinic (64742-56-9)
	LOAEL (oral, rat, 90 days)	
STOT-repeated exposure May cause damage to organs through prolonged or repeated exposure.	diphenylamine (122-39-4)	
	STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.

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Lubricating oils (petroleum), C15-30, hydrotre	ated neutral oil-based (72623-86-0)	
LOAEL (oral, rat, 90 days)	125 mg/kg bodyweight	
Lubricating oils (petroleum), C20-50, hydrotre	eated neutral oil (72623-87-1)	
LOAEL (oral, rat, 90 days)	125 mg/kg bodyweight/day	
Aspiration hazard :	Not classified	
42550 - ENGINE OIL HDX 10W-40		
Viscosity, kinematic	91 mm²/s @ 40°C (ASTM D7042)	
Distillates (petroleum), hydrotreated heavy pa	raffinic (64742-54-7)	
Viscosity, kinematic	98 (98 – 108) mm²/s @40°C	
Distillates (petroleum), hydrotreated light para	affinic (64742-55-8)	
Viscosity, kinematic	< 20.5 mm²/s @40°C	
Distillates (petroleum), solvent-dewaxed heav	y paraffinic (64742-65-0)	
Viscosity, kinematic	150 (1.99 – 847) mm²/s @40°C	
Distillates (petroleum), solvent-refined heavy paraffinic (64741-88-4)		
Viscosity, kinematic	28.51 mm²/s @40°C	
Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligomerization, carbonates, calcium salts, overbased, sulfurized including distillates (petroleum), hydrotreated, solvent-refined, solvent-dewaxed, or catalytic dewaxed, light or heavy paraffinic C15-C50		
Viscosity, kinematic	206820 mm²/s Temp.: '20°C' Parameter: 'cSt'	
Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts (84605-29-8)		
Viscosity, kinematic	407.6 mm²/s	
Distillates (petroleum), solvent-dewaxed light	paraffinic (64742-56-9)	
Viscosity, kinematic	1.99 – 847 mm²/s Temp.: '40°C	
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (72623-86-0)		
Viscosity, kinematic	1.99 – 847 mm²/s 40°C	
Lubricating oils (petroleum), C20-50, hydrotre	ated neutral oil (72623-87-1)	
Viscosity, kinematic	47 mm²/s	

11.2. Information on other hazards

11.2.1. 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)

11.2.2. Other information

No additional information available

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.

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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 heavy paraffinic (64742-54-7)		
LC50 - Fish [1]	> 100 mg/l Pimephales promelas	
EC50 - Crustacea [1]	> 10000 mg/l Daphnia magna	
EC50 72h - Algae [1]	> 100 mg/l Pseudokirchneriella subcapitat	
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), hydrotreated light par	affinic (64742-55-8)	
LC50 - Fish [1]	> 100 mg/l Pimephales promelas	
EC50 - Crustacea [1]	> 10000 mg/l Daphnia magna	
EC50 72h - Algae [1]	> 100 mg/l Pseudokirchneriella subcapitat	
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 heav	yy paraffinic (64742-65-0)	
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)	
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, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligomerization, carbonates, calcium salts, overbased, sulfurized including distillates (petroleum), hydrotreated, solvent-refined, solvent-dewaxed, or catalytic dewaxed, light or heavy paraffinic C15-C50		
LC50 - Fish [1]	> 1000 mg/l Pimephales promelas	
EC50 - Crustacea [1]	> 1000 mg/l Daphnia magna	
EC50 96h - Algae [1]	> 500 mg/l Pseudokirchneriella subcapitata	
Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts (84605-29-8)		
LC50 - Fish [1]	4.5 mg/l Oncorhynchus mykiss	
LC50 - Fish [2]	46 mg/l Cyprinodon variegatus	
EC50 - Crustacea [1]	23 mg/l Water flea (Daphnia magna) (OECD 202)	
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Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts (84605-29-8)			
NOEC chronic crustacea	0.4 mg/l Daphnia magna (21d) (OECD 211)		
NOEC chronic algae	10 mg/l Scenedesmus quadricauda (72h)		
Phosphorodithioic acid, mixed O,O-bis(2-ethy	rlhexyl 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)		
Distillates (petroleum), solvent-dewaxed light	paraffinic (64742-56-9)		
LC50 - Fish [1]	> 100 mg/l Pimephales promelas		
EC50 - Crustacea [1]	> 10000 mg/l Daphnia magna		
NOEC chronic fish	≥ 1000 mg/l Oncorhynchus mykiss		
NOEC chronic crustacea	10 mg/l Daphnia magna		
NOEC chronic algae	≥ 100 mg/l Pseudokirchneriella subcapitata		
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)		
diphenylamine (122-39-4)			
LC50 - Fish [1]	3.79 mg/l Pimephales promelas		
EC50 - Crustacea [1]	2 mg/l Daphnia magna (OECD 202)		
EC50 72h - Algae [1]	2.17 mg/l Desmodesmus subspicatus (OECD 201)		
NOEC chronic fish	0.625 mg/l Oryzias latipes (21d)		
NOEC chronic crustacea	0.125 mg/l Daphnia magna (OECD Test Guideline 202) (21d)		
NOEC chronic algae	0.027 mg/l Pseudokirchnerella subcapitata (72h)		
Lubricating oils (petroleum), C15-30, hydrotre	Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (72623-86-0)		
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)		
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)		
	10 mg/l Daphnia magna (21d)		

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Lubricating oils (petroleum), C20-50, hydrotreated neutral oil (72623-87-1)			
NOEC chronic algae	100 mg/l Pseudokirchneriella subcapitata (72h)		
12.2. Persistence and degradability			
Distillates (petroleum), hydrotreated heavy pa	araffinic (64742-54-7)		
Persistence and degradability	Not readily biodegradable.		
Biodegradation	31 % OECD TG 301 F (28d)		
Distillates (petroleum), hydrotreated light para	affinic (64742-55-8)		
Biodegradation	31 % OECD TG 301 F (28d)		
Distillates (petroleum), solvent-dewaxed heav	y paraffinic (64742-65-0)		
Biodegradation	31 % OECD 301F (28d)		
Distillates (petroleum), solvent-refined heavy	paraffinic (64741-88-4)		
Persistence and degradability	Not readily biodegradable.		
Biodegradation	31 % OECD 301F (28d)		
	oranched olefins (C12 rich) derived from propene oligomerization, zed including distillates (petroleum), hydrotreated, solvent-refined, solvent-paraffinic C15-C50		
Persistence and degradability	Not readily biodegradable.		
Biodegradation	13.4 % OECD 301B (28d)		
Phosphorodithioic acid, mixed O,O-bis(1,3-dia	methylbutyl and iso-Pr) esters, zinc salts (84605-29-8)		
Persistence and degradability	Not readily biodegradable.		
Biodegradation	1.5 % OECD TG 301 B (28d)		
Phosphorodithioic acid, mixed O,O-bis(2-ethy	/lhexyl and iso-Bu and iso-Pr) esters, zinc salts (85940-28-9)		
Persistence and degradability	Not readily biodegradable.		
Biodegradation	1.5 % OECD 301B (28d)		
Distillates (petroleum), solvent-dewaxed light	paraffinic (64742-56-9)		
Persistence and degradability	Not readily biodegradable.		
Biodegradation	31 % OECD 301F		
phenol, (tetrapropenyl) derivatives (74499-35-	phenol, (tetrapropenyl) derivatives (74499-35-7)		
Persistence and degradability	Not readily biodegradable.		
Biodegradation	6 – 25 % OECD 301B (28d)		
diphenylamine (122-39-4)			
Biodegradation	26 % OECD TG 301 D (28d)		
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (72623-86-0)			
Persistence and degradability	Not readily biodegradable.		
Biodegradation	31 % 28 d OECD 301F		
Lubricating oils (petroleum), C20-50, hydrotre	eated neutral oil (72623-87-1)		
Biodegradation	31 %		

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12.3. Bloaccumulative potential	12.3. Bloaccumulative potential	
Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)		
Partition coefficient n-octanol/water (Log Pow)	3.9 – 6	
Distillates (petroleum), hydrotreated light para	affinic (64742-55-8)	
Partition coefficient n-octanol/water (Log Pow)	> 6	
Distillates (petroleum), solvent-dewaxed heav	y paraffinic (64742-65-0)	
Bioconcentration factor (BCF REACH)	260	
Distillates (petroleum), solvent-refined heavy	paraffinic (64741-88-4)	
Partition coefficient n-octanol/water (Log Pow)	3.9 – 6	
Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligomerization, carbonates, calcium salts, overbased, sulfurized including distillates (petroleum), hydrotreated, solvent-dewaxed, or catalytic dewaxed, light or heavy paraffinic C15-C50		
Bioconcentration factor (BCF REACH)	2.2	
Partition coefficient n-octanol/water (Log Pow)	9.5	
Phosphorodithioic acid, mixed O,O-bis(1,3-dia	methylbutyl and iso-Pr) esters, zinc salts (84605-29-8)	
Partition coefficient n-octanol/water (Log Kow)	0.56	
Phosphorodithioic acid, mixed O,O-bis(2-ethy	rlhexyl 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.	
diphenylamine (122-39-4)		
Bioconcentration factor (BCF REACH)	151.36	
Partition coefficient n-octanol/water (Log Kow)	3.4	

12.4. Mobility in soil

Phenol, paraalkylation products with C10-15 branched olefins (C12 rich) derived from propene oligomerization, carbonates, calcium salts, overbased, sulfurized including distillates (petroleum), hydrotreated, solvent-refined, solvent-dewaxed, or catalytic dewaxed, light or heavy paraffinic C15-C50

Mobility in soil	3615000000000 Source: EPISUITE

Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts (84605-29-8)

Ecology - soil Adsorbs into the soil.

Distillates (petroleum), solvent-dewaxed light paraffinic (64742-56-9)

Ecology - soil Adsorbs into the soil.

Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (72623-86-0)

Ecology - soil Adsorbs into the soil.

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12.5. Results of PBT and vPvB assessment

Component	
phenol, (tetrapropenyl) derivatives (74499-35-7)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

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

Waste treatment methods

Product/Packaging disposal recommendations

European List of Waste (LoW, EC 2000/532) HP Code

- : Dispose of contents/container in accordance with licensed collector's sorting instructions.
- : Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
- : 13 02 00 waste engine, gear and lubricating oils
- : HP5 "Specific Target Organ Toxicity (STOT)/Aspiration Toxicity:" waste which can cause specific target organ toxicity either from a single or repeated exposure, or which cause acute toxic effects following aspiration.

SECTION 14: Transport information

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

ADR	IMDG	IATA	ADN	RID
14.1. UN number or ID n	umber			
Not regulated for transport				
14.2. UN proper shipping	g name			
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
14.3. Transport hazard c	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 haz	ards			
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 informatio	n available	1		ı

14.6. Special precautions for user

Overland transport

No data available

Transport by sea

No data available

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Air transport

No data available

Inland waterway transport

No data available

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

15.1.1. 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 ≥ 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 substance(s) listed on the PIC list (Regulation EU 649/2012 concerning the export and import of hazardous chemicals): Diphenylamine (122-39-4)

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)

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)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Indication of changes			
Section	Changed item	Change	Comments
	Revision date	Modified	
	Supersedes	Modified	

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Indication of changes			
Section	Changed item	Change	Comments
1.2	Main use category	Modified	
5.1	Unsuitable extinguishing media	Added	
5.3	Firefighting instructions	Added	
5.3	Precautionary measures fire	Added	
6.1	Protective equipment	Modified	
6.3	For containment	Added	
7.1	Handling temperature	Added	
7.1	Precautions for safe handling	Modified	
7.2	Technical measures	Added	
7.2	Storage temperature	Modified	
7.2	Special rules on packaging	Modified	
8.2	Personal protective equipment	Added	
13.1	Waste disposal recommendations	Modified	

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	
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	

Safety Data Sheet

Abbreviations and acronyms:	
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 disrupting properties

Full text of H- and EUF	H-statements:
Acute Tox. 3 (Dermal)	Acute toxicity (dermal), Category 3
Acute Tox. 3 (Inhalation)	Acute toxicity (inhal.), Category 3
Acute Tox. 3 (Oral)	Acute toxicity (oral), Category 3
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
H301	Toxic if swallowed.
H304	May be fatal if swallowed and enters airways.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic 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.

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Full text of H- and EUH-statements:	
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
STOT RE 2	Specific target organ toxicity – Repeated exposure, 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.