

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

1.1. Product identifier

Product form : Mixture
Product name : 42450 - ENGINE OIL HDX 25W-60
Product code : 42450

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

Other hazards which do not result in classification : Flammable liquids. Prolonged or repeated skin contact with the material will remove natural oils which leads to a dermatitis. Spills of this product present a serious slipping hazard.

Contains no PBT and/or vPvB substances $\geq 0.1\%$ 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]
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	$\geq 55 - < 75$	Not classified
Residual oils (petroleum), solvent-dewaxed substance with national workplace exposure limit(s) (NL)	CAS-No.: 64742-62-7 EC-No.: 265-166-0 EC Index-No.: 649-471-00-X REACH-no: 01-2119480472-38	$\geq 15 - < 25$	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: 01-2119487077-29	$\geq 1 - < 5$	Not classified
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	$\geq 1 - < 3$	Not classified

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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	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: 01-2119521201-61	≥ 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: 01-2119480132-48	≥ 0.1 – < 1	Asp. Tox. 1, H304
reaction product of cocoalkyldiethanolamides and cocoalkylmonoglycerides and molybdenumtrioxide (1.75-2.2: 0.75-1.0:0.1-1.1) substance with national workplace exposure limit(s) (AT, BE, BG, CZ, DE, DK, ES, GB, GR, HR, HU, IE, PL, PT, RO, SE, SK, IS, NO, CH); substance with a Community workplace exposure limit	EC-No.: 430-380-7 EC Index-No.: 616-136-00-4 REACH-no: 01-0000017666-61	≥ 0.1 – < 0.3	Aquatic Chronic 2, H411
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)
Distillates (petroleum), hydrotreated heavy naphthenic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil of at least 100 SUS at 100°F (19cSt at 40 °C). It contains relatively few normal paraffins.] substance with national workplace exposure limit(s) (BE, BG, CZ, DK, ES, FI, GB, GR, HU, IE, LT, LV, NL, PL, PT, RO, SE, SK, IS, NO, CH); substance with a Community workplace exposure limit	CAS-No.: 64742-52-5 EC-No.: 265-155-0 EC Index-No.: 649-465-00-7 REACH-no: 01-2119467170-45	< 0.1	Not classified

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
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
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 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.

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.
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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.

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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".

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 : ≤ 40 °C

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

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 : ≤ 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

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/m ³
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United Kingdom - Occupational Exposure Limits

WEL TWA (OEL TWA) [1]	5 mg/m ³
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Distillates (petroleum), hydrotreated light paraffinic (64742-55-8)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA	5 mg/m ³
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA) [1]	5 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
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA) [1]	5 mg/m ³
WEL STEL (OEL STEL)	10 mg/m ³
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
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA) [1]	5 mg/m ³
WEL STEL (OEL STEL)	10 mg/m ³
reaction product of cocoalkyldiethanolamides and cocoalkylmonoglycerides and molybdenumtrioxide (1.75-2.2: 0.75-1.0:0.1-1.1)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA	10 mg/m ³
IOEL STEL	20 mg/m ³
United Kingdom - Occupational Exposure Limits	
Local name	Molybdenum compounds (as Mo) insoluble compounds
WEL TWA (OEL TWA) [1]	10 mg/m ³
WEL STEL (OEL STEL)	20 mg/m ³
Regulatory reference	UK Workplace Exposure Limits EH40/2005 (Fourth edition, published 2020)
Distillates (petroleum), solvent-dewaxed light paraffinic (64742-56-9)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA	5 mg/m ³ ACGIH TLV (inhalable fraction)
diphenylamine (122-39-4)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA	10 mg/m ³
IOEL STEL	20 mg/m ³
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA) [1]	10 mg/m ³
WEL STEL (OEL STEL)	20 mg/m ³

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Distillates (petroleum), hydrotreated heavy naphthenic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil of at least 100 SUS at 100°F (19cSt at 40 °C). It contains relatively few normal paraffins.] (64742-52-5)

EU - Indicative Occupational Exposure Limit (IOEL)

IOEL TWA	5 mg/m ³
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United Kingdom - Occupational Exposure Limits

WEL TWA (OEL TWA) [1]	5 mg/m ³
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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

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

Type	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

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

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Hand protection					
Type	Material	Permeation	Thickness (mm)	Penetration	Standard
	Polyvinylchloride (PVC)	2 (> 30 minutes)	0.4	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	: brown.
Odour	: characteristic.
Odour threshold	: Not available
Melting point	: Not applicable
Freezing point	: -21 °C (ASTM D7346)
Boiling point	: Not available
Flammability	: Non flammable.
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: > 201 °C (ASTM D92)
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
pH	: Not available
Viscosity, kinematic	: 243 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	: 890.5 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

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.

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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
LC50 inhalation (rat) (Dust/Mist - mg/l/4h)	> 5.53 mg/l/4h 403 Acute Inhalation Toxicity Test

Residual oils (petroleum), solvent-dewaxed (64742-62-7)

LD50 oral (rat)	> 5000 mg/kg
LD50 dermal (rat)	> 2000 mg/kg

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
LC50 inhalation (rat) (Dust/Mist - mg/l/4h)	> 5.53 mg/l/4h 403 Acute Inhalation Toxicity Test

Distillates (petroleum), solvent-dewaxed heavy 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/m ³
LC50 inhalation (rat) (Vapours - mg/l/4h)	5.53 mg/l/4h

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)
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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 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)

reaction product of cocoalkyldiethanolamides and cocoalkylmonoglycerides and molybdenumtrioxide (1.75-2.2: 0.75-1.0:0.1-1.1)

LD50 oral (rat)	> 5000 mg/kg Source: ECHA
LD50 dermal (rabbit)	> 2000 mg/kg Source: ECHA

Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl 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-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

diphenylamine (122-39-4)

LD50 oral (rat)	> 800 mg/kg
LD50 dermal (rabbit)	> 5000 mg/kg

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

Distillates (petroleum), hydrotreated heavy naphthenic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil of at least 100 SUS at 100°F (19cSt at 40 °C). It contains relatively few normal paraffins.] (64742-52-5)

LD50 oral (rat)	> 5000 mg/kg bodyweight OECD 401
LD50 dermal (rabbit)	> 5000 mg/kg bodyweight OECD 402
LC50 inhalation (rat) (Dust/Mist - mg/l/4h)	5.53 mg/l/4h OECD 403

Skin corrosion/irritation : Not classified

reaction product of cocoalkyldiethanolamides and cocoalkylmonoglycerides and molybdenumtrioxide (1.75-2.2: 0.75-1.0:0.1-1.1)

pH	3.5 Source: ECHA
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Serious eye damage/irritation : Not classified

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reaction product of cocoalkyldiethanolamides and cocoalkylmonoglycerides and molybdenumtrioxide (1.75-2.2: 0.75-1.0:0.1-1.1)	
pH	3.5 Source: ECHA
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
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)
reaction product of cocoalkyldiethanolamides and cocoalkylmonoglycerides and molybdenumtrioxide (1.75-2.2: 0.75-1.0:0.1-1.1)	
NOAEL (oral, rat, 90 days)	150 mg/kg bodyweight Animal: rat, Guideline: EU Method B.7 (Repeated Dose (28 Days) Toxicity (Oral)), Guideline: OECD Guideline 407 (Repeated Dose 28-Day Oral Toxicity Study in Rodents)
NOAEL (subacute, oral, animal/male, 28 days)	150 mg/kg bodyweight
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)	
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	: Not classified
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Viscosity, kinematic	243 mm ² /s @ 40°C (ASTM D7042)
Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)	
Viscosity, kinematic	98 (98 – 108) mm ² /s @40°C

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Residual oils (petroleum), solvent-dewaxed (64742-62-7)	
Viscosity, kinematic	490 mm ² /s @40°C
Distillates (petroleum), hydrotreated light paraffinic (64742-55-8)	
Viscosity, kinematic	< 20.5 mm ² /s @40°C
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, 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 mm ² /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 mm ² /s
Distillates (petroleum), solvent-dewaxed light paraffinic (64742-56-9)	
Viscosity, kinematic	1.99 – 847 mm ² /s Temp.: '40°C'

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

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 subcapitata
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)

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Distillates (petroleum), hydrotreated light paraffinic (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 subcapitata
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]	> 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
reaction product of cocoalkyldiethanolamides and cocoalkylmonoglycerides and molybdenumtrioxide (1.75-2.2: 0.75-1.0:0.1-1.1)	
LC50 - Fish [1]	> 10 mg/l Test organisms (species): Oncorhynchus mykiss (previous name: Salmo gairdneri)
EC50 - Crustacea [1]	1.5 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	1.5 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
EC50 72h - Algae [2]	4 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
LOEC (chronic)	1.5 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC (chronic)	0.47 mg/l Test organisms (species): Daphnia magna Duration: '21 d'
NOEC chronic crustacea	0.47 mg/l Daphnia magna (21d)
NOEC chronic algae	0.625 mg/l Desmodesmus subspicatus (72h)
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

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Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts (84605-29-8)	
EC50 - Crustacea [1]	23 mg/l Water flea (Daphnia magna) (OECD 202)
EC50 72h - Algae [1]	21 mg/l Scenedesmus quadricauda
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-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)
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
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)
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), hydrotreated heavy naphthenic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil of at least 100 SUS at 100°F (19cSt at 40 °C). It contains relatively few normal paraffins.] (64742-52-5)	
LC50 - Fish [1]	> 100 mg/l Pimephales promelas
EC50 - Crustacea [1]	> 10000 mg/l
NOEC chronic fish	> 1000 mg/l
NOEC chronic crustacea	10 mg/l Daphnia magna OECD 211 (21d)
NOEC chronic algae	> 100 mg/l

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12.2. Persistence and degradability

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

Persistence and degradability	Not readily biodegradable.
Biodegradation	31 % OECD TG 301 F (28d)

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

Biodegradation	31 % OECD TG 301 F (28d)
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Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)

Biodegradation	31 % OECD 301F (28d)
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Distillates (petroleum), solvent-refined heavy paraffinic (64741-88-4)

Persistence and degradability	Not readily biodegradable.
Biodegradation	31 % OECD 301F (28d)

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

Persistence and degradability	Not readily biodegradable.
Biodegradation	13.4 % OECD 301B (28d)

reaction product of cocoalkyldiethanolamides and cocoalkylmonoglycerides and molybdenumtrioxide (1.75-2.2: 0.75-1.0:0.1-1.1)

Biodegradation	57 – 98 % 28d
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Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl 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-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)

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

Persistence and degradability	Not readily biodegradable.
Biodegradation	31 % OECD 301F

diphenylamine (122-39-4)

Biodegradation	26 % OECD TG 301 D (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), hydrotreated heavy naphthenic; Baseoil— unspecified; [A complex combination of hydrocarbons obtained by treating a petroleum fraction with hydrogen in the presence of a catalyst. It consists of hydrocarbons having carbon numbers predominantly in the range of C20 through C50 and produces a finished oil of at least 100 SUS at 100°F (19cSt at 40 °C). It contains relatively few normal paraffins.] (64742-52-5)

Biodegradation	31 % 28d
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12.3. Bioaccumulative potential

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

Partition coefficient n-octanol/water (Log Pow)	3.9 – 6
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Residual oils (petroleum), solvent-dewaxed (64742-62-7)

Partition coefficient n-octanol/water (Log Pow)	> 3.5
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Distillates (petroleum), hydrotreated light paraffinic (64742-55-8)

Partition coefficient n-octanol/water (Log Pow)	> 6
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Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)

Bioconcentration factor (BCF REACH)	260
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Distillates (petroleum), solvent-refined heavy paraffinic (64741-88-4)

Partition coefficient n-octanol/water (Log Pow)	3.9 – 6
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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

Bioconcentration factor (BCF REACH)	2.2
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Partition coefficient n-octanol/water (Log Pow)	9.5
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reaction product of cocoalkyldiethanolamides and cocoalkylmonoglycerides and molybdenumtrioxide (1.75-2.2: 0.75-1.0:0.1-1.1)

Bioconcentration factor (BCF REACH)	< 84
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Partition coefficient n-octanol/water (Log Pow)	0.3 – 6.5 Source: ECHA
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Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts (84605-29-8)

Partition coefficient n-octanol/water (Log Kow)	0.56
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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
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diphenylamine (122-39-4)

Bioconcentration factor (BCF REACH)	151.36
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Partition coefficient n-octanol/water (Log Kow)	3.4
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phenol, (tetrapropenyl) derivatives (74499-35-7)

Bioconcentration factor (BCF REACH)	289
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Partition coefficient n-octanol/water (Log Pow)	7.14 @ 25°C
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Bioaccumulative potential	Bioaccumulative potential.
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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	361500000000 Source: EPISUITE
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Phosphorodithioic acid, mixed O,O-bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts (84605-29-8)

Ecology - soil	Adsorbs into the soil.
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Distillates (petroleum), solvent-dewaxed light paraffinic (64742-56-9)

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
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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)
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12.7. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations : Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
European List of Waste (LoW, EC 2000/532) : 13 02 05* - mineral-based non-chlorinated 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

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Transport by sea

No data available

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 $\geq 0.1\%$ 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 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	

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Indication of changes			
Section	Changed item	Change	Comments
	Supersedes	Modified	
2.1	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Modified	
2.2	Precautionary statements (CLP)	Modified	
9.1	Colour	Modified	
10.5	Incompatible materials	Added	
13.1	European List of Waste (LoW, EC 2000/532)	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
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)

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Abbreviations and acronyms:

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 EUH-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.
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.