

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

Product form : Mixture
Trade name : VatOil AgriSyn 10W-40
Product code : VM.30.02
Product group : Trade product

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
Use of the substance/mixture : Engine oil
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

VatOil
Dollegoorweg, 15
NL- 7602 EC Almelo
Netherlands
T 0031 (0)546 81 81 65
vib@vatoil.com

1.4. Emergency telephone number

Country	Organisation/Company	Address	Emergency number	Comment
Ireland	National Poisons Information Centre Beaumont Hospital	PO Box 1297 Beaumont Road 9 Dublin	+353 1 809 2566 (Healthcare professionals- 24/7) +353 1 809 2166 (public, 8am - 10pm, 7/7)	
United Kingdom	National Poisons Information Service (Cardiff Centre) University Hospital Llandough	Penlan Road CF64 2XX Llandough	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, Category 3 H412
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. Harmful to aquatic life with long lasting effects.

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

Signal word (CLP) : -
Hazard statements (CLP) : H412 - Harmful to aquatic life with long lasting effects.

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Precautionary statements (CLP)	: P102 - Keep out of reach of children. P273 - Avoid release to the environment. P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
EUH-statements	: EUH208 - Contains 2-tetradecyloxirane, reaction products with boric acid. May produce an allergic reaction.

2.3. Other hazards

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

Component	
Distillates (petroleum), solvent-dewaxed light paraffinic (64742-56-9)	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
Phenol, dodecyl-, branched (121158-58-5)	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 is 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, dodecyl-, branched(121158-58-5)	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

Comments : Highly refined mineral oils and additives.

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Distillates (petroleum), hydrotreated heavy paraffinic (Note L)	CAS-No.: 64742-54-7 EC-No.: 265-157-1 EC Index-No.: 649-467-00-8 REACH-no: 01-2119484627-25	25 – 50	Asp. Tox. 1, H304
Blend of mineral oils * (*)(Note L)	-	10 – 20	Asp. Tox. 1, H304
zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate)	CAS-No.: 4259-15-8 EC-No.: 224-235-5 REACH-no: 01-2119493635-27	1 – 2,5	Eye Dam. 1, H318 Aquatic Chronic 2, H411
Calcium branched alkyl phenate sulphide (overbased)	-	0,3 – 2,5	Aquatic Chronic 4, H413
2-tetradecyloxirane, reaction products with boric acid	EC-No.: 701-392-2 REACH-no: 01-2119976364-28	0,1 – 1	Skin Sens. 1B, H317

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Distillates (petroleum), solvent-dewaxed light paraffinic substance with a Community workplace exposure limit (Note L)	CAS-No.: 64742-56-9 EC-No.: 265-159-2 EC Index-No.: 649-469-00-9 REACH-no: 01-2119480132-48	< 1	Asp. Tox. 1, H304
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics substance with national workplace exposure limit(s) (GB)	CAS-No.: 1174522-09-8 EC-No.: 918-481-9 REACH-no: 01-2119457273-39	< 0,3	Asp. Tox. 1, H304 EUH066
Phenol, dodecyl-, branched 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.: 121158-58-5 EC-No.: 310-154-3 EC Index-No.: 604-092-00-9 REACH-no: 01-2119513207-49	< 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)
butan-1-ol; n-butanol substance with national workplace exposure limit(s) (GB, IE)	CAS-No.: 71-36-3 EC-No.: 200-751-6 EC Index-No.: 603-004-00-6 REACH-no: 01-2119484630-38	< 0,1	Flam. Liq. 3, H226 Acute Tox. 4 (Oral), H302 STOT SE 3, H335 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H336

Specific concentration limits:

Name	Product identifier	Specific concentration limits
zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate)	CAS-No.: 4259-15-8 EC-No.: 224-235-5 REACH-no: 01-2119493635-27	(50 ≤C < 100) Eye Irrit. 2, H319 (80 ≤C ≤ 100) Eye Dam. 1, H318
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics	CAS-No.: 1174522-09-8 EC-No.: 918-481-9 REACH-no: 01-2119457273-39	(25 ≤C < 100) EUH066

Comments : The highly refined mineral oil contains <3% (w/w) DMSOextract, according to IP346.

*: contains one or more of the following CAS-numbers (REACH registration numbers):

64741-88-4 (01-2119488706-23), 64741-89-5 (01-2119487067-30), 64741-95-3 (01-2119487081-40), 64741-96-4 (01-2119483621-38), 64741-97-5 (01-2119480374-36), 64742-01-4 (01-2119488707-21), 64742-52-5 (01-2119467170-45), 64742-53-6 (01-2119480375-34), 64742-54-7 (01-2119484627-25), 64742-55-8 (01-2119487077-29), 64742-56-9 (01-2119480132-48), 64742-57-0 (01-2119489287-22), 64742-62-7 (01-2119480472-38), 64742-65-0 (01-2119471299-27), 64742-71-8 (01-2119485040-48), 72623-85-9 (01-2119555262-43), 72623-86-0 (01-2119474878-16), 72623-87-1 (01-2119474889-13), 74869-22-0 (01-2119495601-36)

Note L : The classification as a carcinogen need not apply if it can be shown that the substance contains less than 3 % DMSO extract as measured by IP 346 'Determination of polycyclic aromatics in unused lubricating base oils and asphaltene free petroleum fractions — Dimethyl sulphoxide extraction refractive index method', Institute of Petroleum, London. This note applies only to certain complex oil-derived substances in Part 3.

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.

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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 : No additional information available.

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 heavy water stream.

5.2. Special hazards arising from the substance or mixture

Fire hazard : Combustible liquid.
Hazardous decomposition products in case of fire : Toxic fumes may be released. Incomplete combustion releases dangerous carbon monoxide, carbon dioxide and other toxic gases.

5.3. Advice for firefighters

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

6.1.1. For non-emergency personnel

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

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 : Provide good ventilation in process area to prevent formation of vapour.
Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container closed when not in use. Keep in a cool, well-ventilated place away from heat.

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Storage temperature : 0 – 40 °C

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

VatOil AgriSyn 10W-40	
EU - Indicative Occupational Exposure Limit (IOEL)	
Exposure limits/standards for materials that can be formed when handling this product. When mists/aerosols can occur the following is recommended	5 mg/m ³ - ACGIH TLV (inhalable fraction).
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics (1174522-09-8)	
United Kingdom - Occupational Exposure Limits	
WEL TWA (OEL TWA) [1]	1200 mg/m ³
WEL TWA (OEL TWA) [2]	184 ppm
butan-1-ol; n-butanol (71-36-3)	
Ireland - Occupational Exposure Limits	
Local name	Butan-1-ol [n-Butyl alcohol]
OEL TWA [2]	20 ppm
Regulatory reference	Chemical Agents Code of Practice 2021
United Kingdom - Occupational Exposure Limits	
Local name	Butan-1-ol
WEL STEL (OEL STEL)	154 mg/m ³
WEL STEL (OEL STEL) [ppm]	50 ppm
Remark	Sk (Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity)
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE
Distillates (petroleum), solvent-dewaxed light paraffinic (64742-56-9)	
EU - Indicative Occupational Exposure Limit (IOEL)	
IOEL TWA	5 mg/m ³

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 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)	6 (> 480 minutes)	≥0.35		EN ISO 374

Other skin protection

Materials for protective clothing:

Wear suitable protective clothing

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

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Freezing point	: -39 °C - ASTM D5950 (pour point)
Boiling point	: Not available
Flammability	: Not applicable
Explosive properties	: Presents no particular fire or explosion hazard.
Explosive limits	: Not available
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: 220 °C - ASTM D92 (COC)
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
pH	: Not available
Viscosity, kinematic	: 85 mm ² /s (40 °C) - ASTM D7279
Solubility	: Water: Insoluble / Slightly miscible
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: Not available
Vapour pressure at 50 °C	: Not available
Density	: 0,868 kg/l (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

VOC content : 0 %

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. Reacts violently with (strong) oxidizers.

10.4. Conditions to avoid

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

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

No decomposition if stored normally.

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

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Phenol, dodecyl-, branched (121158-58-5)	
LD50 oral rat	2100 mg/kg (OECD 401 method)
LD50 dermal rabbit	15000 mg/kg (OECD 402 method)
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics (1174522-09-8)	
LD50 oral rat	> 5000 mg/kg (OESO 401)
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LD50 dermal rabbit	≥ 3160 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LC50 Inhalation - Rat	> 4,951 g/m ³ (4h, OESO 403)
Blend of mineral oils *	
LD50 oral rat	> 5000 mg/kg Data from similar product
LD50 dermal rabbit	> 5000 mg/kg Data from similar product
LC50 Inhalation - Rat (Dust/Mist)	> 5 mg/l/4h Data from similar product
Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 Inhalation - Rat	> 5,53 mg/l/4h
zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) (4259-15-8)	
LD50 oral rat	3100 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 1800 - 5100
LD50 dermal rabbit	> 5000 mg/kg bodyweight Animal: rabbit, Animal sex: male, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
Distillates (petroleum), solvent-dewaxed light paraffinic (64742-56-9)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	> 5000 mg/kg
LC50 Inhalation - Rat (Dust/Mist)	5,53 mg/l/4h
Skin corrosion/irritation	: Not classified
Distillates (petroleum), solvent-dewaxed light paraffinic (64742-56-9)	
pH	7
Serious eye damage/irritation	: Not classified
Distillates (petroleum), solvent-dewaxed light paraffinic (64742-56-9)	
pH	7
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
butan-1-ol; n-butanol (71-36-3)	
STOT-single exposure	May cause respiratory irritation. May cause drowsiness or dizziness.
STOT-repeated exposure	: Not classified

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zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) (4259-15-8)	
NOAEL (oral, rat, 90 days)	125 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 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/day
NOAEL (subchronic, oral, animal/male, 90 days)	≥ 2000 mg/kg bodyweight
NOAEL (subchronic, oral, animal/female, 90 days)	≥ 2000 mg/kg bodyweight

Aspiration hazard : Not classified

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Viscosity, kinematic	85 mm ² /s (40 °C) - ASTM D7279

Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics (1174522-09-8)	
Viscosity, kinematic	1,8 mm ² /s Temp.: '20°C' Parameter: 'kinematic viscosity (in mm ² /s)'

Blend of mineral oils *	
Viscosity, kinematic	< 20,5 mm ² /s
Aliphatic, alicyclic or aromatic hydrocarbon	Yes

Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)	
Viscosity, kinematic	< 20,5 mm ² /s
Aliphatic, alicyclic or aromatic hydrocarbon	Yes

Distillates (petroleum), solvent-dewaxed light paraffinic (64742-56-9)	
Viscosity, kinematic	< 20,5 mm ² /s
Aliphatic, alicyclic or aromatic hydrocarbon	Yes

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Component	
Phenol, dodecyl-, branched(121158-58-5)	The substance is identified for having endocrine disrupting properties but there is no additional data available

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. Harmful to aquatic life with long lasting effects.
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.
Not rapidly degradable	

Phenol, dodecyl-, branched (121158-58-5)	
LC50 - Fish [1]	40 mg/l (Pimephales promelas, 96h) (OECD 203 method)
EC50 - Crustacea [1]	0,037 mg/l (Daphnia magna, 48h) (OECD 202 method)

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Phenol, dodecyl-, branched (121158-58-5)	
EC50 72h - Algae [1]	0,36 mg/l (Desmodesmus subspicatus, 72h) (OECD 201 method)
NOEC (chronic)	0,0037 mg/l (Daphnia magna, 21d) (OECD 211 method)
2-tetradecyloxirane, reaction products with boric acid	
LC50 - Fish [1]	> 100 mg/l
EC50 - Crustacea [1]	> 100 mg/l
EC50 72h - Algae [1]	> 100 mg/l
NOEC chronic crustacea	10 mg/l (21d)
Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics (1174522-09-8)	
LC50 - Fish [1]	> 1001 mg/l (OECD 203 method)
EC50 - Crustacea [1]	> 1000 mg/l (OECD 202 method)
EC50 72h - Algae [1]	W 1000 mg/l (OECD 201 method)
ErC50 algae	1000 mg/l (Pseudokirchneriella subcapitata, EL0, 72h)
Blend of mineral oils *	
LC50 - Fish [1]	> 100 mg/l Data from similar product
EC50 - Crustacea [1]	> 10000 mg/l Data from similar product
EC50 72h - Algae [1]	> 100 mg/l Data from similar product
NOEC chronic crustacea	> 10 mg/l
NOEC chronic algae	> 10 mg/l (Water flea (Daphnia magna), 21 d)
Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)	
LC50 - Fish [1]	> 100 mg/l (Pimephales promelas, 96h) (OECD 203 method)
EC50 - Crustacea [1]	> 10000 mg/l (Gammarus pulex, 48h) (OECD 202 method)
EC50 72h - Algae [1]	> 100 mg/l
NOEC (acute)	≥ 100 mg/l (Pseudokirchnerella subcapitata, 72h) (OECD 201 method)
NOEC chronic crustacea	10 mg/l (Daphnia magna, 21d) (OECD 211 method)
zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) (4259-15-8)	
LC50 - Fish [1]	46 mg/l Test organisms (species): Cyprinodon variegatus
LC50 - Fish [2]	46 mg/l Test organisms (species):
EC50 - Crustacea [1]	1,2 mg/l
Calcium branched alkyl phenate sulphide (overbased)	
LC50 - Fish [1]	> 1000 mg/l
EC50 - Crustacea [1]	> 1000 mg/l
EC50 96h - Algae [1]	> 1000 mg/l
12.2. Persistence and degradability	
Phenol, dodecyl-, branched (121158-58-5)	
Biodegradation	25 % Sturm (28 d)

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2-tetradecyloxirane, reaction products with boric acid

Biodegradation	17,3 %
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Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics (1174522-09-8)

Persistence and degradability	Readily biodegradable.
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Biodegradation	80 % (28d)
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Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)

Biodegradation	31 % (28d) (OECD 301F method)
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zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) (4259-15-8)

Biodegradation	5 % (closed bottle 28d.)
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Distillates (petroleum), solvent-dewaxed light paraffinic (64742-56-9)

Persistence and degradability	Potentially biodegradable.
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12.3. Bioaccumulative potential

Phenol, dodecyl-, branched (121158-58-5)

BCF - Fish [1]	794,33
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Bioconcentration factor (BCF REACH)	2,9 (27 d)
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Partition coefficient n-octanol/water (Log Pow)	7,1
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Partition coefficient n-octanol/water (Log Kow)	7,1 Octanol-water coefficient (0.1 d)
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2-tetradecyloxirane, reaction products with boric acid

Partition coefficient n-octanol/water (Log Pow)	9,4 at 40 °C
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Hydrocarbons, C10-C13, n-alkanes, isoalkanes, cyclics, < 2% aromatics (1174522-09-8)

Partition coefficient n-octanol/water (Log Pow)	5,57 – 6,62
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zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate) (4259-15-8)

Partition coefficient n-octanol/water (Log Pow)	3,59
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Partition coefficient n-octanol/water (Log Kow)	3,6 (octanol/water 0.1d)
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Calcium branched alkyl phenate sulphide (overbased)

BCF - Fish [1]	2,2
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Partition coefficient n-octanol/water (Log Kow)	11,08
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Distillates (petroleum), solvent-dewaxed light paraffinic (64742-56-9)

Partition coefficient n-octanol/water (Log Pow)	> 3
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12.4. Mobility in soil

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

Ecology - soil	Insoluble in water.
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12.5. Results of PBT and vPvB assessment

No additional information available

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12.6. Endocrine disrupting properties

Component

Phenol, dodecyl-, branched(121158-58-5)	The substance is identified for having endocrine disrupting properties but there is no additional data available
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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 in a safe manner in accordance with local/national regulations.
European List of Waste (LoW) code	: 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	Not regulated	Not regulated	Not regulated	Not regulated
14.2. UN proper shipping name				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.3. Transport hazard class(es)				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.4. Packing group				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
14.5. Environmental hazards				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
No supplementary information available				

14.6. Special precautions for user

Overland transport

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

Inland waterway transport

Not regulated

Rail transport

Not regulated

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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)

EU restriction list (REACH Annex XVII)

Reference code	Applicable on
3.	zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate)
3(b)	Distillates (petroleum), hydrotreated heavy paraffinic ; zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate)
3(c)	VatOil AgriSyn 10W-40 ; zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate)

REACH Annex XIV (Authorisation List)

Contains no REACH Annex XIV substances

REACH Candidate List (SVHC)

Contains a substance on the REACH candidate list: Phenol, alkylation products (mainly in para position) with C12-rich branched alkyl chains from oligomerisation, covering any individual isomers and/ or combinations thereof (PDDP) (EC 310-154-3, CAS 121158-58-5)

PIC Regulation (Prior Informed Consent)

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

POP Regulation (Persistent Organic Pollutants)

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

Ozone Regulation (1005/2009)

Contains no substance subject to REGULATION (EU) No 1005/2009 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 September 2009 on substances that deplete the ozone layer.

VOC Directive (2004/42)

VOC content : 0 %

Biocide Regulation (528/2012)

Child-resistant fastening : Not applicable
Tactile warning : Not applicable

Explosives Precursors Regulation (2019/1148)

Contains no substance subject to Regulation (EU) 2019/1148 of the European Parliament and of the Council of 20 June 2019 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 drug precursors)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

For the following substances of this mixture a chemical safety assessment has been carried out:

Distillates (petroleum), solvent-dewaxed light paraffinic

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SECTION 16: Other information

Indication of changes			
Section	Changed item	Change	Comments
	Revision date	Modified	
	Supersedes	Modified	
1.2	Use of the substance/mixture	Added	
1.2	Function or use category	Added	
5.2	Hazardous decomposition products in case of fire	Modified	
10.3	Possibility of hazardous reactions	Modified	
15.1	REACH Annex XVII	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
PBT	Persistent Bioaccumulative Toxic
PNEC	Predicted No-Effect Concentration
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet

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Abbreviations and acronyms:

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 EUH-statements:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
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
EUH066	Repeated exposure may cause skin dryness or cracking.
EUH208	Contains 2-tetradecyloxirane, reaction products with boric acid. May produce an allergic reaction.
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Flam. Liq. 3	Flammable liquids, Category 3
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H360F	May damage fertility.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
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

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Full text of H- and EUH-statements:

Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1B	Skin sensitisation, category 1B
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation

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.