



# Armado Synth 5W-30

## Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878  
Issue date: 18.04.2023 Revision date: 27.09.2023 Supersedes version of: 22.06.2023 Version: 2.1

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

#### 1.1. Product identifier

Product form : Mixture  
Trade name : Armado Synth 5W-30  
Product code : 01.40.50  
Product group : Trade product

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

##### 1.2.1. Relevant identified uses

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

Kroon-Oil B.V.  
Dollegoorweg 15  
NL- 7602 EC Almelo  
Netherlands  
T 0031 (0)546 81 81 65  
[vib@kroon-oil.nl](mailto:vib@kroon-oil.nl)

#### 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	+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	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]

Not classified

##### 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]

EUH-statements : EUH208 - Contains C14-16-18 Alkyl phenol. May produce an allergic reaction.  
EUH210 - Safety data sheet available on request.

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### 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
zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate) (93819-94-4)	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
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based (72623-87-1)	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
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (72623-86-0)	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 %

## 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
Dec-1-ene, trimers, hydrogenated	CAS-No.: 157707-86-3 EC-No.: 500-393-3 REACH-no: 01-2119493949-12	10 – 20	Asp. Tox. 1, H304
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based (Note L)	CAS-No.: 72623-87-1 EC-No.: 276-738-4 EC Index-No.: 649-483-00-5 REACH-no: 01-2119474889-13	2,5 – 10	Asp. Tox. 1, H304
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (Note L)	CAS-No.: 72623-86-0 EC-No.: 276-737-9 EC Index-No.: 649-482-00-X REACH-no: 01-2119474878-16	2,5 – 10	Asp. Tox. 1, H304
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	0,1 – 2,5	Asp. Tox. 1, H304

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Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Distillates (petroleum), solvent-dewaxed heavy paraffinic (Note L)	CAS-No.: 64742-65-0 EC-No.: 265-169-7 EC Index-No.: 649-474-00-6 REACH-no: 01-2119471299-27	0,1 – 2,5	Asp. Tox. 1, H304
Paraffin oils (petroleum), catalytic dewaxed heavy	CAS-No.: 64742-70-7 EC-No.: 265-174-4 REACH-no: 01-2119487080-42	0,1 – 2,5	Asp. Tox. 1, H304
C14-16-18 Alkyl phenol	EC-No.: 931-468-2 REACH-no: 01-2119498288-19	0,1 – 2,5	Skin Sens. 1B, H317 STOT RE 2, H373
zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate)	CAS-No.: 93819-94-4 EC-No.: 298-577-9 REACH-no: 01-2119543726-33	1 – 2,5	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 2, H411

### Specific concentration limits:

Name	Product identifier	Specific concentration limits (%)
C14-16-18 Alkyl phenol	EC-No.: 931-468-2 REACH-no: 01-2119498288-19	(10 ≤ C < 100) Skin Sens. 1B, H317
zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate)	CAS-No.: 93819-94-4 EC-No.: 298-577-9 REACH-no: 01-2119543726-33	(6,25 ≤ C ≤ 100) Skin Irrit. 2, H315 (10 ≤ C < 12,5) Eye Irrit. 2, H319 (12,5 ≤ C ≤ 100) Eye Dam. 1, H318

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

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

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

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures 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 : No additional information available.

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

Treat symptomatically.

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### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media : Water spray. Dry powder. Foam. Carbon dioxide.  
Unsuitable extinguishing media : Do not use a 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.  
Storage temperature : 0 – 40 °C

#### 7.3. Specific end use(s)

No additional information available

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### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### 8.1.1 National occupational exposure and biological limit values

Armado Synth 5W-30	
<b>EU - Indicative Occupational Exposure Limit (IOEL)</b>	
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 <sup>3</sup> - ACGIH TLV (inhalable fraction).
<b>Distillates (petroleum), solvent-dewaxed light paraffinic (64742-56-9)</b>	
<b>EU - Indicative Occupational Exposure Limit (IOEL)</b>	
IOEL TWA	5 mg/m <sup>3</sup>

##### 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 symbol(s):



###### 8.2.2.1. Eye and face protection

###### Eye protection:

Safety glasses

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

###### 8.2.2.2. Skin protection

###### Skin and body protection:

Wear suitable protective clothing

###### Hand protection:

Protective gloves

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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
Freezing point	: -48 °C - ASTM D5950 (pour point)
Boiling point	: Not available
Flammability	: Not applicable
Explosive properties	: Presents no particular fire or explosion hazard.
Lower explosion limit	: Not available
Upper explosion limit	: Not available
Flash point	: 226 °C - ASTM D92 (COC)
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available
pH	: Not available
Viscosity, kinematic	: 70,8 mm <sup>2</sup> /s (40 °C) - ASTM D7042
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	: 0,858 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 %

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### 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

Dec-1-ene, trimers, hydrogenated (157707-86-3)	
LD50 oral rat	> 2000 mg/kg bodyweight
LD50 dermal	> 2000 mg/kg bodyweight
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
Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)	
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), Guideline: OECD Guideline 420 (Acute Oral Toxicity - Fixed Dose Method)
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-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate) (93819-94-4)	
LD50 oral rat	2600 mg/kg bodyweight Animal: rat, Animal sex: male, Remarks on results: other:
LD50 dermal rabbit	> 3160 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Remarks on results: other:
LC50 Inhalation - Rat	> 2 mg/l (1h) - OECD403

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<b>C14-16-18 Alkyl phenol</b>	
LD50 oral rat	> 2000 mg/kg bodyweight Animal: rat, Animal sex: female, Guideline: OECD Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method), Guideline: EU Method B.1 tris (Acute Oral Toxicity - Acute Toxic Class Method), Guideline: EPA OPPTS 870.1100 (Acute Oral Toxicity), Guideline: other:
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity), Guideline: EU Method B.3 (Acute Toxicity (Dermal)), Guideline: EPA OPPTS 870.1200 (Acute Dermal Toxicity), Guideline: other:
<b>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based (72623-87-1)</b>	
LD50 oral rat	> 5000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity), Guideline: OECD Guideline 420 (Acute Oral Toxicity - Fixed Dose Method)
LD50 dermal rabbit	> 2000 mg/kg (OECD 402 method)
LC50 Inhalation - Rat	5,53 mg/l/4h (OECD 403 method)
<b>Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (72623-86-0)</b>	
LD50 oral rat	> 5000 mg/kg (OECD 401 method)
LD50 dermal rabbit	> 2000 mg/kg (OECD 402 method)
LC50 Inhalation - Rat	> 5,53 mg/l (OECD 403 method)
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
<b>Distillates (petroleum), solvent-dewaxed light paraffinic (64742-56-9)</b>	
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
<b>Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)</b>	
LOAEL (oral, rat, 90 days)	125 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity Study in Rodents)
NOAEL (dermal, rat/rabbit, 90 days)	≈ 1000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 410 (Repeated Dose Dermal Toxicity: 21/28-Day Study)
<b>C14-16-18 Alkyl phenol</b>	
STOT-repeated exposure	May cause damage to organs (liver) through prolonged or repeated exposure.
<b>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based (72623-87-1)</b>	
LOAEL (oral, rat, 90 days)	125 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
Aspiration hazard	: Not classified
<b>Armado Synth 5W-30</b>	
Viscosity, kinematic	70,8 mm <sup>2</sup> /s (40 °C) - ASTM D7042
<b>Distillates (petroleum), solvent-dewaxed light paraffinic (64742-56-9)</b>	
Viscosity, kinematic	< 20,5 mm <sup>2</sup> /s



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<b>Distillates (petroleum), solvent-dewaxed light paraffinic (64742-56-9)</b>	
Aliphatic, alicyclic or aromatic hydrocarbon	Yes
<b>Distillates (petroleum), solvent-dewaxed heavy paraffinic (64742-65-0)</b>	
Viscosity, kinematic	< 20,5 mm <sup>2</sup> /s @40°C
Aliphatic, alicyclic or aromatic hydrocarbon	Yes
<b>Paraffin oils (petroleum), catalytic dewaxed heavy (64742-70-7)</b>	
Viscosity, kinematic	< 20,5 mm <sup>2</sup> /s
Hydrocarbon	Yes
Aliphatic, alicyclic or aromatic hydrocarbon	Yes
<b>Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)</b>	
Viscosity, kinematic	< 20,5 mm <sup>2</sup> /s
Aliphatic, alicyclic or aromatic hydrocarbon	Yes
<b>C14-16-18 Alkyl phenol</b>	
Viscosity, kinematic	52 mm <sup>2</sup> /s (40°C)   5,4 mm <sup>2</sup> /s (100°C) [ASTM D445]
<b>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based (72623-87-1)</b>	
Viscosity, kinematic	< 20,5 mm <sup>2</sup> /s (40 °C) - ASTM D7042
Aliphatic, alicyclic or aromatic hydrocarbon	Yes
<b>Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (72623-86-0)</b>	
Viscosity, kinematic	< 20,5 mm <sup>2</sup> /s (40 °C) - ASTM D7042
Aliphatic, alicyclic or aromatic hydrocarbon	Yes

### 11.2. Information on other hazards

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)	: Not classified
Not rapidly degradable	

<b>Dec-1-ene, trimers, hydrogenated (157707-86-3)</b>	
LC50 - Fish [1]	> 1000 mg/l
EC50 - Crustacea [1]	> 1000 mg/l
<b>Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)</b>	
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)

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<b>Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)</b>	
NOEC chronic crustacea	10 mg/l (Daphnia magna, 21d) (OECD 211 method)
<b>zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate) (93819-94-4)</b>	
LC50 - Fish [1]	4,5 mg/l 96 h (Oncorhynchus mykiss) [OECD 203]
EC50 - Crustacea [1]	5,4 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	2,1 mg/l Test organisms (species): other:
EC50 72h - Algae [2]	2 mg/l Test organisms (species): other:
EC50 96h - Algae [1]	2,1 mg/l Test organisms (species): other:
EC50 96h - Algae [2]	2 mg/l Test organisms (species): other:
ErC50 algae	2,1 mg/l 96 h (Selenastrum capricornutum) [OECD 201]
<b>C14-16-18 Alkyl phenol</b>	
EC50 - Crustacea [1]	> 100 mg/l Test organisms (species): Daphnia magna
<b>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based (72623-87-1)</b>	
LC50 - Fish [1]	> 100 mg/l (Pimephales promelas, 96h) (OECD 203 method)
LC50 - Other aquatic organisms [1]	> 10000 mg/l (Gammarus pulex, 48h) (OECD 202 method)
NOEC (acute)	≥ 100 mg/l (Pseudokirchnerella subcapitata, 72h) (OECD 201 method)
<b>Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (72623-86-0)</b>	
LC50 - Fish [1]	> 100 mg/l
EC50 - Crustacea [1]	> 10000 mg/l
NOEC (acute)	≥ 100 mg/l (Pseudokirchnerella subcapitata, 72h) (OECD 211 method)
NOEC chronic fish	> 1000 mg/l
NOEC chronic crustacea	> 10 mg/l (Daphnia magna, 21d) (OECD 211 method)
NOEC chronic algae	≥ 100 mg/l
<b>12.2. Persistence and degradability</b>	
<b>Distillates (petroleum), solvent-dewaxed light paraffinic (64742-56-9)</b>	
Persistence and degradability	Potentially biodegradable.
<b>Distillates (petroleum), hydrotreated heavy paraffinic (64742-54-7)</b>	
Biodegradation	31 % (28d) (OECD 301F method)
<b>zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate) (93819-94-4)</b>	
Persistence and degradability	Not readily biodegradable.
Biodegradation	1,5 % 28 d - 10mg/l [OECD 301 B]
<b>Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based (72623-87-1)</b>	
Biodegradation	31 % (28d) (OECD 301F method)
<b>Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (72623-86-0)</b>	
Persistence and degradability	Not readily biodegradable.
Biodegradation	31 % (28d) (OECD 301F method)

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### 12.3. Bioaccumulative potential

#### Dec-1-ene, trimers, hydrogenated (157707-86-3)

Partition coefficient n-octanol/water (Log Pow)	5 @20°C
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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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#### zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate) (93819-94-4)

Partition coefficient n-octanol/water (Log Pow)	0,9 (23 °C)
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#### C14-16-18 Alkyl phenol

Partition coefficient n-octanol/water (Log Pow)	> 7,2
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#### Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (72623-86-0)

Partition coefficient n-octanol/water (Log Kow)	> 6
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Bioaccumulative potential	Bioaccumulative potential.
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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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#### Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based (72623-87-1)

Mobility in soil	Product adsorbs onto the soil
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#### Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (72623-86-0)

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

#### 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
zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate) (93819-94-4)	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
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based (72623-87-1)	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
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based (72623-86-0)	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

No additional information available

### 12.7. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste treatment methods : Do not allow into drains or water courses. Dispose of contents/container in accordance with licensed collector's sorting instructions.

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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
<b>14.1. UN number or ID number</b>				
No dangerous good in sense of transport regulations.(ADR, RID, IMDG, IATA )				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
<b>14.2. UN proper shipping name</b>				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
<b>14.3. Transport hazard class(es)</b>				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
<b>14.4. Packing group</b>				
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated
<b>14.5. Environmental hazards</b>				
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

### 14.7. Maritime transport in bulk according to IMO instruments

Not applicable

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### 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	Entry title or description
3(b)	Dec-1-ene, trimers, hydrogenated ; Distillates (petroleum), solvent-dewaxed light paraffinic ; Distillates (petroleum), solvent-dewaxed heavy paraffinic ; Paraffin oils (petroleum), catalytic dewaxed heavy ; Distillates (petroleum), hydrotreated heavy paraffinic ; zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate) ; C14-16-18 Alkyl phenol ; Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based ; Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10
3(c)	zinc bis[O-(6-methylheptyl)] bis[O-(sec-butyl)] bis(dithiophosphate)	Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1

###### REACH Annex XIV (Authorisation List)

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

###### REACH Candidate List (SVHC)

Contains no substance(s) listed on the REACH Candidate List

###### PIC Regulation (Prior Informed Consent)

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

###### POP Regulation (Persistent Organic Pollutants)

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

###### Ozone Regulation (1005/2009)

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

###### VOC Directive (2004/42)

VOC content : 0 %

###### 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)

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### 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

## SECTION 16: Other information

Indication of changes			
Section	Changed item	Change	Comments
2.2	EUH-statements	Modified	
3	Composition/information on ingredients	Modified	
9.1	Pour point	Modified	
9.1	Viscosity, kinematic	Modified	
9.1	Freezing point	Modified	
9.1	Flash point	Modified	
9.1	Colour	Modified	
9.1	Density	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

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### Abbreviations and acronyms:

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

### Full text of H- and EUH-statements:

Aquatic Chronic 2	Hazardous to the aquatic environment – Chronic Hazard, Category 2
Asp. Tox. 1	Aspiration hazard, Category 1
EUH208	Contains C14-16-18 Alkyl phenol. May produce an allergic reaction.
EUH210	Safety data sheet available on request.
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.
Skin Irrit. 2	Skin corrosion/irritation, Category 2
Skin Sens. 1B	Skin sensitisation, category 1B
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.