



# SAFETY DATA SHEET

Gulf Gear LS, SAE 80W-90

03102/80W-90/2

Issuing Date 02-11-2022

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Version 3

## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

### 1.1. Product identifier

Product Name **Gulf Gear LS, SAE 80W-90**  
Product Code(s) 03102/80W-90/2

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

Recommended Use Transmission oil  
Uses advised against Any other purpose.

### 1.3. Details of the supplier of the safety data sheet

Supplier Gulf Oil Supply Company Limited  
B2 Industry Street, Qormi, QRM 3000, Malta  
Tel: +44 207 321 6219  
E-mail: products@gulfoilltd.com, sds@gulfoilltd.com

### 1.4. Emergency telephone number

Europe: (+) 44 808 189 0979 (Code 334276)  
(+) 1 760 476 3961 (Code 334276 )  
(+) 32 (0) 3241 33 55

Poison Information Center telephone number (IE) +353 (0)1 809 2166 (08:00 - 22:00), (IS) +354 543 2222

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Chronic aquatic toxicity	Category 3
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### 2.2. Label elements

Signal word  
None

#### Hazard statements

H412 - Harmful to aquatic life with long lasting effects  
EUH208 - Contains: Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentoxide, and salted by amines, C12-14- tert-alkyl; Reaction product of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and phenol, heptyl derivs. May produce an allergic reaction.

Precautionary Statements - EU (§28, 1272/2008)

P273 - Avoid release to the environment

P501 - Dispose of contents/ container to an approved waste disposal plant

**2.3. Other hazards**

Causes mild skin irritation

Contains a known or suspected endocrine disruptor: EC no. 939-460-0

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS****3.2 Mixtures**

This product is a mixture. Health hazard information is based on its ingredients

Chemical name	EC No	CAS No	Weight-%	Classification according to Regulation (EC) No. 1272/2008 [CLP]	REACH registration number
Highly refined base oil (Viscosity >20.5 cSt @40°C)	-	-	50% - 100%	**	-
Highly refined, low viscosity base oil (Viscosity <7 cSt @40°C)	-	-	1% - 2.5%	Asp. Tox. 1 (H304) (EUH066)	-
Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentoxide, and salted by amines, C12-14- tert-alkyl	931-384-6	NOT AVAILABLE	1% - 2.5%	Acute Tox. 4 (H302) Skin Sens. 1B (H317) Eye Irrit. 2 (H319) Aquatic Chronic 2 (H411)  SCL H319 C: > 50%	01-2119493620-38-xxxx
Reaction Products of alcohols, C14-18, C18 unsat., esterified with phosphorus pentoxide and salted with amines, C12-14,-tert-alkyl	939-591-3	NOT AVAILABLE	1% - 2.5%	Aquatic Chronic 3 (H412)	01-2119978530-33
(Z)-octadec-9-enylamine, C16-18-(even numbered, saturated and unsaturated)-alkylamines	627-034-4	1213789-63-9	0% - 1%	Acute Tox. 4 (H302) Asp. Tox. 1 (H304) Skin Corr. 1B (H314) Eye Dam. 1 (H318) STOT SE 3 (H335) STOT RE 2 (H373) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410) Aquatic Chronic 1 (H410)  M-Factor: Acute 10,Chronic 10	01-2119473797-19-xxxx
Reaction product of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and phenol, heptyl derivs.	939-460-0	NOT AVAILABLE	0% - 1%	Skin Irrit. 2 (H315) Skin Sens. 1B (H317) Eye Dam. 1 (H318) Aquatic Chronic 3 (H412)	01-2119971727-23-xxxx

Product containing mineral oil with less than 3% DMSO extract as measured by IP 346. See Section 15 for additional information on base oils. The highly refined base oil may be described by one or more of the following generic CAS identifiers: 64742-54-7, 64742-65-0, 64742-52-5, 64742-53-6, 64742-62-7, 64742-57-0, 64742-01-4, 64741-88-4, 64742-96-4, 64741-97-5, 64742-55-8, 64742-56-9, 64741-89-5, 8042-47-5.

\*\* Substances for which there are Community workplace exposure limits

**Full text of H- and EUH-phrases: see section 16**

This product contains one or more candidate substance(s) of very high concern (Regulation (EC) No. 1907/2006 (REACH), Article 59)

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of first aid measures

<b>General advice</b>	May produce an allergic reaction. If symptoms persist, call a physician.
<b>Inhalation</b>	Remove to fresh air.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water for at least 15 minutes. Take off contaminated clothing and wash before reuse. May cause an allergic skin reaction. If symptoms persist, call a physician.
<b>Eye contact</b>	Rinse thoroughly with plenty of water, also under the eyelids. Keep eye wide open while rinsing.
<b>Ingestion</b>	Clean mouth with water. Drink plenty of water. Do not induce vomiting without medical advice.
<b>Self-protection of the first aider</b>	Use personal protective equipment as required.

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

**Symptoms** Prolonged contact may cause redness and irritation. Rashes. Itching.

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

**Note to physicians** May cause sensitization by skin contact. Treat symptomatically.

## SECTION 5: FIRE FIGHTING MEASURES

### 5.1. Extinguishing media

#### **Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use: Carbon dioxide (CO<sub>2</sub>). Dry chemical. Foam. Water spray or fog. Cool containers with flooding quantities of water until well after fire is out.

#### **Unsuitable extinguishing media**

Do not use straight streams. Do not scatter spilled material with high pressure water streams.

### 5.2. Special hazards arising from the substance or mixture

#### **Specific hazards arising from the chemical**

Thermal decomposition can lead to release of irritating and toxic gases and vapors. In the event of fire and/or explosion do not breathe fumes. The product is insoluble and floats on water. Do not allow run-off from fire-fighting to enter drains or water courses. Do not flush into surface water or sanitary sewer system. Runoff may pollute waterways.

**Hazardous combustion products** Carbon monoxide. Carbon dioxide (CO<sub>2</sub>).

### 5.3. Advice for firefighters

**Special protective equipment for fire-fighters** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures

**Personal precautions** Remove all sources of ignition. Ensure adequate ventilation. Extremely slippery when spilled.

**For emergency responders** Use personal protection recommended in Section 8.

### 6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

### 6.3. Methods and material for containment and cleaning up

**Methods for containment** Dike to collect large liquid spills. Keep out of drains, sewers, ditches and waterways. Prevent further leakage or spillage if safe to do so.

**Methods for cleaning up** Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Take up mechanically, placing in appropriate containers for disposal.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

### 6.4. Reference to other sections

See Section 8 / 12 / 13 for more information.

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for safe handling

**Advice on safe handling** Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice.

**General hygiene considerations** When using do not eat, drink or smoke. Take off contaminated clothing and wash before reuse.

### 7.2. Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep container tightly closed in a dry and well-ventilated place. Keep cool. Protect from sunlight. Keep away from open flames, hot surfaces and sources of ignition.

**Materials to Avoid** Oxidizing agent

### 7.3. Specific end use(s)

Transmission oil

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters

## Exposure limits

## Legend

(s) - Skin; TWA - Time-Weighted Average; STEL - Short Term Exposure Limit; Ceiling - Ceiling Value; TLV® - Threshold Limit Value; PEL (Permissible Exposure Limit)

Chemical name	European Union	United Kingdom	France	Spain
Highly refined base oil (Viscosity >20.5 cSt @40°C)				VLA-EC: 10 mg/m <sup>3</sup> VLA-ED: 5 mg/m <sup>3</sup>
Highly refined, low viscosity base oil (Viscosity <7 cSt @40°C)				VLA-EC: 10 mg/m <sup>3</sup> VLA-ED: 5 mg/m <sup>3</sup>

Spain Límites de Exposición Profesional Para Agentes Químicos en España (Ley 31/1995).

Chemical name	Germany	Italy	Portugal	Netherlands
Highly refined base oil (Viscosity >20.5 cSt @40°C)		TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup> STEL: 10 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>
Highly refined, low viscosity base oil (Viscosity <7 cSt @40°C)		TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup> STEL: 10 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>

Italy Istituto Superiore per la Prevenzione e la Sicurezza del Lavoro (ISPESL), Allegato XXXVIII e Allegato XLIII - Valori Limite di Esposizione Professionale.

Portugal Valores-limite e índices biológicos de exposição profissional a agentes químicos. Quadro 1 - Valores Limite de Exposição (Norma Portuguesa NP 1796:2014).

Netherlands Grenswaarden gezondheidsschadelijke stoffen; Arbeidsomstandighedenregeling.

Chemical name	Austria	Switzerland	Poland	Ireland
Highly refined base oil (Viscosity >20.5 cSt @40°C)			TWA: 5 mg/m <sup>3</sup> frakcja wdychalna	STEL: 10 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup> (Mist)
Highly refined, low viscosity base oil (Viscosity <7 cSt @40°C)			TWA: 5 mg/m <sup>3</sup> frakcja wdychalna	STEL: 10 mg/m <sup>3</sup> TWA: 5 mg/m <sup>3</sup> (Mist)

Poland Rozporządzenie Ministra Pracy i Polityki Społecznej z dnia 6 czerwca 2014 w sprawie najwyższych dopuszczalnych stężeń i natężeń czynników szkodliwych dla zdrowia w środowisku pracy (Dz.U. 2016 Nr. 944).

Ireland 2016 Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents) Regulations 2001.

Chemical name	Finland	Denmark	Norway	Sweden
Highly refined base oil (Viscosity >20.5 cSt @40°C)	TWA: 5mg/m <sup>3</sup> (Öljysumu)	TWA: 1 mg/m <sup>3</sup> (Olietåge)	TWA: 1 mg/m <sup>3</sup> (Oljetåke)	TWA: 1 mg/m <sup>3</sup> STEL: 3 mg/m <sup>3</sup> (Oljedimma)
Highly refined, low viscosity base oil (Viscosity <7 cSt @40°C)	TWA: 5mg/m <sup>3</sup> (Öljysumu)	TWA: 1 mg/m <sup>3</sup> (Olietåge)	TWA: 1 mg/m <sup>3</sup> (Oljetåke)	TWA: 1 mg/m <sup>3</sup> STEL: 3 mg/m <sup>3</sup> (Oljedimma)

Finland Förordningen om koncentrationer som befunnits skadliga, 268/2014 - HTP-arvot 2014.

Denmark Bekendtgørelse om grænseværdier for stoffer og materialer. Arbejdstilsynets bekendtgørelse nr. 507 Bilag 2 Afsnit A.

Norway Forskrift om tiltaks- og grenseverdier for fysiske og kjemiske faktorer i arbeidsmiljøet samt smitterisikogrupper for biologiske faktorer (Forskrift om tiltaks- og grenseverdier), FOR-2011-12-06-1358, FOR-2016-06-21-760, FOR-2016-12-22-1860.

Sweden Arbetsmiljöverkets föreskrifter om hygieniska gränsvärden och allmänna råd om tillämpningen av föreskrifterna.

Chemical name	Czech Republic	Hungary	Bulgaria	Romania
Highly refined base oil (Viscosity >20.5 cSt @40°C)	TWA: 5 mg/m <sup>3</sup> Ceiling: 10 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup> STEL: 10 mg/m <sup>3</sup>
Highly refined, low viscosity base oil (Viscosity <7 cSt @40°C)	TWA: 5 mg/m <sup>3</sup> Ceiling: 10 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup>	TWA: 5 mg/m <sup>3</sup> STEL: 10 mg/m <sup>3</sup>

Czech Republic Narizeni vlady 93/2012, kterym se meni narizeni vlady c.361/2007 Sb., kterym se stanoví podmínky ochrany zdravi pri praci, ve zneni narizeni vlady c.68/2010 Sb.

Hungary 25/2000. (IX. 30.) EüM-SzCsM együttes rendelet a munkahelyek kémiai biztonságáról (62/2016. (XII.29.)).

Bulgaria НАРЕДБА #13 от 30.12.2003 г. за защита на работещите от рискове, свързани с експозиция на химични агенти при работа.

Romania Valori Limit Obligatorii Nationale de expunere profesională ale agenților chimic - Anex Nr.1 Publicat în Monitorul Oficial, Partea I nr. 845.

Chemical name	Greece	Cyprus	Turkey	Malta
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Highly refined base oil (Viscosity >20.5 cSt @40°C)	TWA: 5 mg/m <sup>3</sup>			
Highly refined, low viscosity base oil (Viscosity <7 cSt @40°C)	TWA: 5 mg/m <sup>3</sup>			

Greece Οριακές Τιμές Επαγγελματικής Έκθεσης - Προστασία της υγείας και της ασφάλειας των εργαζομένων που εκτίθενται σε ορισμένους καρκινογόνους και μεταλλαξιογόνους παράγοντες 127/2000.

Chemical name	Belgium	Luxembourg	Iceland	Croatia
Highly refined base oil (Viscosity >20.5 cSt @40°C)	TWA: 5 mg/m <sup>3</sup> STEL: 10 mg/m <sup>3</sup>			
Highly refined, low viscosity base oil (Viscosity <7 cSt @40°C)	TWA: 5 mg/m <sup>3</sup> STEL: 10 mg/m <sup>3</sup>			

Belgium Arrêté royal relatif à la protection de la santé et de la sécurité des travailleurs contre les risques liés à des agents chimiques sur le lieu de travail.

Chemical name	Russia	Estonia	Latvia	Lithuania
Highly refined base oil (Viscosity >20.5 cSt @40°C)			TWA: 5 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup> STEL: 3 mg/m <sup>3</sup>
Highly refined, low viscosity base oil (Viscosity <7 cSt @40°C)			TWA: 5 mg/m <sup>3</sup>	TWA: 1 mg/m <sup>3</sup> STEL: 3 mg/m <sup>3</sup>

Latvia Ministru Kabineta noteikumi Nr. 325 - Darba aizsardzības prasības, saskaroties ar ķīmiskajām vielām darba vietās.  
Lithuania Del Lietuvos higienos normos HN 23:2011 "Cheminių medžiagų profesinio poveikio ribiniai dydžiai. Matavimo ir poveikio vertinimo bendrieji reikalavimai".

Chemical name	Belarus	Ukraine	Slovakia	Slovenia
Highly refined base oil (Viscosity >20.5 cSt @40°C)			TWA: 5mg/m <sup>3</sup>	
Highly refined, low viscosity base oil (Viscosity <7 cSt @40°C)			TWA: 5mg/m <sup>3</sup>	

Slovakia Nariadenie Vlády Slovenskej republiky z 16. januára 2002 o ochrane zdravia pri práci s karcinogénnymi a mutagénnymi faktormi.

## Derived No Effect Level (DNEL)

### Workers Systemic toxicity

Chemical name	Long term - Oral exposure	Long term - Dermal exposure	Long term - Inhalation exposure	Short term - Oral Exposure	Short term - Dermal exposure	Short term - Inhalation exposure
Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentoxide, and salted by amines, C12-14-tert-alkyl		12.5 mg/kg	4.28 mg/m <sup>3</sup>			
(Z)-octadec-9-enylamine, C16-18-(even numbered, saturated and unsaturated)-alkylamines		0.09 mg/kg	0.38 mg/m <sup>3</sup>			
Reaction product of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and phenol, heptyl derivs.		66.7 mg/kg	2.35 mg/m <sup>3</sup>			

### Workers Local effects

Chemical name	Long term - Oral exposure	Long term - Dermal exposure	Long term - Inhalation exposure	Short term - Oral Exposure	Short term - Dermal exposure	Short term - Inhalation exposure
Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentaoxide, and salted by amines, C12-14-tert-alkyl		160 µg/cm <sup>2</sup>			160 µg/cm <sup>2</sup>	
(Z)-octadec-9-enylamine, C16-18-(even numbered, saturated and unsaturated)-alkylamines			1 mg/m <sup>3</sup>			1 mg/m <sup>3</sup>

**Consumers Systemic toxicity**

Chemical name	Long term - Oral exposure	Long term - Dermal exposure	Long term - Inhalation exposure	Short term - Oral Exposure	Short term - Dermal exposure	Short term - Inhalation exposure
Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentaoxide, and salted by amines, C12-14-tert-alkyl	250 µg/kg	6.25 mg/kg	1.09 mg/m <sup>3</sup>			
(Z)-octadec-9-enylamine, C16-18-(even numbered, saturated and unsaturated)-alkylamines	0.04 mg/kg		35 µg/m <sup>3</sup>			
Reaction product of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and phenol, heptyl derivs.	0.33 mg/kg	33.33 mg/kg	0.58 mg/m <sup>3</sup>			

**Consumers Local effects**

Chemical name	Long term - Oral exposure	Long term - Dermal exposure	Long term - Inhalation exposure	Short term - Oral Exposure	Short term - Dermal exposure	Short term - Inhalation exposure
Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentaoxide, and salted by amines, C12-14-tert-alkyl		160 µg/cm <sup>2</sup>			160 µg/cm <sup>2</sup>	

**Predicted No Effect Concentration (PNEC)**

Chemical name	Fresh water	Sea water	Fresh water sediment	Sea sediment	Soil
Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentaoxide, and salted by amines, C12-14-tert-alkyl	2.4 µg/L	240 ng/L	12.9 µg/kg	1.29 µg/kg	1.17 µg/kg
(Z)-octadec-9-enylamine, C16-18-(even numbered, saturated and unsaturated)-alkylamines	0.26 µg/L	0.026 µg/L	3.76 mg/kg	376 µg/kg	10 mg/kg

**8.2. Exposure controls****Engineering Measures**



Flash point	234 °C / 453 °F	ASTM D 92
Autoignition temperature	No data available	
Decomposition temperature	No data available	
pH	No data available	
Kinematic viscosity	53.4 cSt @ 40 °C	ASTM D 445
Solubility	Insoluble in water	Soluble in hydrocarbons
Partition coefficient	Not applicable	
Vapor pressure	No data available	
Relative density	0.8488 @ 15 °C	
Vapor density	No data available	
Particle characteristics	Not applicable	

**9.2. Other information**

Viscosity, kinematic (100°C)	9.8 cSt @ 100°C	ASTM D 445
Pour Point	-39 °C / -38 °F	ASTM D 97

## SECTION 10: STABILITY AND REACTIVITY

**10.1. Reactivity**

None under normal use conditions.

**10.2. Chemical stability**

Stable under normal conditions.

**10.3. Possibility of hazardous reactions**

None under normal use conditions

**10.4. Conditions to avoid**

Keep away from open flames, hot surfaces and sources of ignition. Extremes of temperature and direct sunlight.

**10.5. Incompatible materials**

Oxidizing agent.

**10.6. Hazardous decomposition products**

Thermal decomposition can lead to release of irritating and toxic gases and vapors; Carbon monoxide; Carbon dioxide (CO<sub>2</sub>)

## SECTION 11: TOXICOLOGICAL INFORMATION

**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008****Product Information - Principle Routes of Exposure**

Inhalation	None known
Eye contact	None known
Skin contact	Repeated or prolonged skin contact may cause allergic reactions with susceptible persons; Mild skin irritation
Ingestion	None known

**Acute toxicity - Product Information**

Product does not present an acute toxicity hazard based on known or supplied information.

**Acute toxicity - Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Highly refined base oil (Viscosity >20.5 cSt @40°C)	>2000 mg/kg	>2000 mg/kg	>5 mg/L
Highly refined, low viscosity base oil (Viscosity <7 cSt @40°C)	>2000 mg/kg	>2000 mg/kg	>5 mg/L
(Z)-octadec-9-enylamine, C16-18-(even numbered, saturated and unsaturated)-alkylamines	1689 mg/kg (Rat)		

**Skin corrosion/irritation** Based on available data, the classification criteria are not met. Mild skin irritant.

**Serious eye damage/eye irritation** Based on available data, the classification criteria are not met.

**Sensitization****Respiratory Sensitization**

Based on available data, the classification criteria are not met.

**Skin sensitization**

Repeated contact may cause allergic reactions in very susceptible persons.

**Germ cell mutagenicity**

Based on available data, the classification criteria are not met.

**Carcinogenicity**

Based on available data, the classification criteria are not met.

**Reproductive toxicity**

Based on available data, the classification criteria are not met.

**Specific target organ systemic toxicity (single exposure)**

Based on available data, the classification criteria are not met

**Specific target organ systemic toxicity (repeated exposure)**

Based on available data, the classification criteria are not met

**Aspiration hazard**

Based on available data, the classification criteria are not met.

**11.2. Information on other hazards**

**Endocrine Disruptor Information** None known

**Other information** No information available

**SECTION 12: ECOLOGICAL INFORMATION****12.1. Toxicity**

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Chemical name	Algae/aquatic plants	Fish	Crustacea
Highly refined base oil (Viscosity >20.5 cSt @40°C)	>100: 72 h mg/L	>100: 96 h mg/L	>100: 48 h mg/L
Highly refined, low viscosity base oil (Viscosity <7 cSt @40°C)	>100: 72 h mg/L	>100: 96 h mg/L	>100: 48 h mg/L
Reaction products of 4-methyl-2-pentanol and diphosphorus pentasulfide, propoxylated, esterified with diphosphorus pentoxide, and	6.4: 96 h Selenastrum capricornutum mg/L EC50	8.5: 96 h Pimephales promelas mg/L LC50 24: 96 h Oncorhynchus mykiss mg/L LC50	91.4: 48 h Daphnia magna mg/L EC50

salted by amines, C12-14- tert-alkyl (Z)-octadec-9-enylamine, C16-18-(even numbered, saturated and unsaturated)-alkylamines	>0.13: 72 h Alga mg/L EC50	0.11: 96 h Pimephales promelas mg/L LC50 0.9: 96 h Cyprinodon variegatus mg/L LC50 1.3: 96 h Oncorhynchus mykiss mg/L LC50	0.011: 48 h Daphnia magna mg/L EC50
Reaction product of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and phenol, heptyl derivs.	25: 96 h Selenastrum capricornutum mg/L EC50	40: 96 h Pimephales promelas mg/L LC50	75: 48 h Daphnia magna mg/L EC50

**12.2. Persistence and degradability**

The product is not readily biodegradable, but it can be degraded by micro-organisms, it is regarded as being inherently biodegradable.

**12.3. Bioaccumulative potential**

Chemical name	Partition coefficient
(Z)-octadec-9-enylamine, C16-18-(even numbered, saturated and unsaturated)-alkylamines	4.33
Reaction product of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and phenol, heptyl derivs.	>9.4

**12.4. Mobility in soil**

The product is insoluble and floats on water. Is not likely mobile in the environment due its low water solubility.

**12.5. Results of PBT and vPvB assessment**

This preparation contains no substance considered to be persistent, bioaccumulating nor toxic (PBT) This preparation contains no substance considered to be very persistent nor very bioaccumulating (vPvB)

**12.6. Endocrine Disruptor Information**

Contains a known or suspected endocrine disruptor: EC no. 939-460-0

**12.7. Other adverse effects**

None known

## SECTION 13: DISPOSAL CONSIDERATIONS

**13.1. Waste treatment methods****Waste from residues/unused products**

Should not be released into the environment. This material and its container must be disposed of as hazardous waste. Dispose of in accordance with local regulations.

**Contaminated packaging**

Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not reuse empty containers. Observe all label precautions until container is cleaned, reconditioned or destroyed

**Waste codes / waste designations according to EWC / AVV**

Waste codes should be assigned by the user based on the application for which the product was used.

## SECTION 14: TRANSPORT INFORMATION

**14.1. UN-Number**

Not regulated

**14.2. UN proper shipping name**

Not regulated

**14.3. Transport hazard class**

Not regulated

**14.4. Packing Group**

Not regulated

**14.5. Environmental Hazards**

None

**14.6. Special precautions for users**

None

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

Not applicable

**IMDG** Not regulated**ADR** Not regulated**IATA** Not regulated**ADN** Not regulated**SECTION 15: REGULATORY INFORMATION****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU legislation**

The Classification, Labeling and Packaging of Substances and Mixtures (CLP) Regulation (EC 1272/2008)  
Registration, Evaluation, Authorization, and Restriction of Chemicals (REACH) Regulation (EC 1907/2006)  
European Agreement concerning the International Carriage of Dangerous Goods by Road  
Safety Data Sheet according to Regulation EC 1907/2006 (REACH) with its amendment regulation EU 2020/878  
European Agreement concerning the International Carriage of Dangerous Goods by Road/ Regulations concerning the  
International Carriage of Dangerous Goods by Rail  
International Civil Aviation Organization / International Air Transport Association Dangerous Goods Regulation

**Substance(s) of Very High Concern**

This product contains one or more candidate substance(s) of very high concern (Regulation (EC) No. 1907/2006 (REACH), Article 59): EC no. 939-460-0.

**Authorizations and/or restrictions on use:**

This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII). This

product does not contain substances subject to authorization (Regulation (EC) No. 1907/2006 (REACH), Annex XIV).

### National regulations

<b>Germany Water hazard class (WGK)</b>	Hazard to water/Class 2
<b>Product Registration number</b> Denmark Registration (DK)	No information available

### International Regulations

#### **Ozone-depleting substances (ODS)**

Not applicable

#### **The Stockholm Convention on Persistent Organic Pollutants**

Not applicable

#### **The Rotterdam Convention**

Not applicable

### International Inventories

#### **TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

All ingredients are on the inventory or exempt from listing

#### **DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

All ingredients are on the inventory or exempt from listing

#### **AICS** - Australian Inventory of Chemical Substances

All ingredients are on the inventory or exempt from listing

#### **PICCS** - Philippines Inventory of Chemicals and Chemical Substances

All ingredients are on the inventory or exempt from listing

#### **KECL** - Korean Existing and Evaluated Chemical Substances

All ingredients are on the inventory or exempt from listing

#### **IECSC** - China Inventory of Existing Chemical Substances

All ingredients are on the inventory or exempt from listing

#### **ENCS** - Japan Existing and New Chemical Substances

All ingredients are on the inventory or exempt from listing

#### **TCSI** - Taiwan National Existing Chemical Inventory

Contact supplier for inventory compliance status

#### **NZIoC** - New Zealand Inventory of Chemicals

All ingredients are on the inventory or exempt from listing

### Other Information

The highly refined base oil (Viscosity >20.5 cSt @40°C) contains one or more substance with the following CAS/EC numbers/REACH registration numbers:

Chemical name	CAS No	EC No	REACH registration number

Lubricating oils (petroleum), C24-50, solvent-extd., dewaxed, hydrogenated	101316-72-7	309-877-7	01-2119489969-06-xxxx
Distillates (petroleum), solvent-refined heavy paraffinic	64741-88-4	265-090-8	01-2119488706-23-xxxx
Distillates (petroleum), solvent-refined light paraffinic	64741-89-5	265-091-3	01-2119487081-40-xxxx
Residual oils (petroleum), solvent deasphalted	64741-95-3	265-096-0	01-2119487081-40-xxxx
Distillates (petroleum), solvent-refined heavy naphthenic	64741-96-4	265-097-6	01-2119483621-38-xxxx
Distillates (petroleum), solvent-refined light naphthenic	64741-97-5	265-098-1	01-2119480374-36-xxxx
Residual oils (petroleum), solvent-refined	64742-01-4	265-101-6	01-2119488707-21-xxxx
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	265-155-0	01-2119467170-45-xxxx
Distillates (petroleum), hydrotreated light naphthenic	64742-53-6	265-156-6	01-2119480375-34-xxxx
Distillates (petroleum), hydrotreated heavy paraffinic	64742-54-7	265-157-1	01-2119484627-25-xxxx
Distillates (petroleum), hydrotreated light paraffinic	64742-55-8	265-158-7	01-2119487077-29-xxxx
Distillates (petroleum), solvent-dewaxed light paraffinic	64742-56-9	265-159-2	01-2119480132-48-xxxx
Residual oils (petroleum), hydrotreated	64742-57-0	265-160-8	01-2119489287-22-xxxx
Lubricating oils (petroleum), hydrotreated spent	64742-58-1	265-161-3	
Residual oils (petroleum), solvent-dewaxed	64742-62-7	265-166-0	01-2119480472-38-xxxx
Distillates (petroleum), solvent-dewaxed heavy paraffinic	64742-65-0	265-169-7	01-2119471299-27-xxxx
Paraffin oils (petroleum), catalytic dewaxed heavy	64742-70-7	265-174-4	01-2119487080-42-xxxx
Paraffin oils (petroleum), catalytic dewaxed light	64742-71-8	265-176-5	01-2119485040-48-xxxx
Lubricating oils (petroleum), C>25, hydrotreated bright stock-based	72623-83-7	276-735-8	
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based, high-viscosity	72623-85-9	276-736-3	01-2119555262-43-xxxx
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based	72623-86-0	276-737-9	01-2119474878-16-xxxx
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based	72623-87-1	276-738-4	01-2119474889-13-xxxx
Lubricating oils	74869-22-0	278-012-2	01-2119495601-36-xxxx
White mineral oil (petroleum)	8042-47-5	232-455-8	

The highly refined, low viscosity base oil (Viscosity <7 cSt @40°C) contains one or more substance with the following CAS/EC numbers/REACH registration numbers:

Chemical name	CAS No	EC No	REACH registration number
Distillates (petroleum), hydrotreated heavy paraffinic	63742-54-7	265-157-1	01-2119484627-25-xxxx
Distillates (petroleum), hydrotreated light	64742-47-8	265-149-8	01-2119484819-18-xxxx
Distillates (petroleum), hydrotreated light naphthenic	64742-53-6	265-156-6	01-2119480375-34-xxxx
Distillates (petroleum), hydrotreated light paraffinic	64742-55-8	265-158-7	01-2119487077-29-xxxx
Distillates (petroleum), solvent-dewaxed light paraffinic	64742-56-9	265-159-2	01-2119480132-48-xxxx
Distillates (petroleum), solvent-dewaxed heavy paraffinic	64742-65-0	265-169-7	01-2119471299-27-xxxx
Distillates (petroleum), hydrodesulfurized middle	64742-80-9	265-183-3	01-2119448343-41-xxxx
Dec-1-ene, dimers, hydrogenated	68649-11-6	500-228-5	
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics	NOT AVAILABLE	926-141-6	01-2119456620-43-xxxx

## 15.2. Chemical Safety Assessment

A chemical safety assessment according to regulation (EC) No. 1907/2006 is not required

## SECTION 16: OTHER INFORMATION

### Key or legend to abbreviations and acronyms used in the safety data sheet

Repr.-Reproduction toxicity  
 Asp. Tox. - Aspiration Toxicity  
 Acute Tox. - Acute Toxicity  
 Aquatic Acute - Acute Aquatic Toxicity  
 Aquatic Chronic - Chronic Aquatic Toxicity  
 Eye Dam. - Eye Damage

Eye Irrit. - Eye Irritation  
 Skin Corr. - Skin Corrosion  
 Skin Irrit. - Skin Irritation  
 Skin Sens. - Skin Sensitizer  
 Resp. Sens. - Respiratory Sensitizer  
 STOT SE - Specific target organ systemic toxicity (Single exposure)  
 STOT RE - Specific target organ systemic toxicity (repeated exposure)  
 VOC - Volatile organic compounds

#### Full text of H-Statements referred to under section 3

EUH066 - Repeated exposure may cause skin dryness or cracking  
 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  
 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

#### Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)  
 U.S. Environmental Protection Agency ChemView Database  
 European Food Safety Authority (EFSA)  
 EPA (Environmental Protection Agency)  
 Acute Exposure Guideline Level(s) (AEGL(s))  
 U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
 U.S. Environmental Protection Agency High Production Volume Chemicals  
 Food Research Journal  
 Hazardous Substance Database  
 International Uniform Chemical Information Database (IUCLID)  
 Japan GHS Classification  
 Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
 NIOSH (National Institute for Occupational Safety and Health)  
 National Library of Medicine's ChemID Plus (NLM CIP)  
 National Library of Medicine's PubMed database (NLM PUBMED)  
 National Toxicology Program (NTP)  
 New Zealand's Chemical Classification and Information Database (CCID)  
 Organization for Economic Co-operation and Development Environment, Health, and Safety Publications  
 Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
 Organization for Economic Co-operation and Development Screening Information Data Set  
 RTECS (Registry of Toxic Effects of Chemical Substances)  
 World Health Organization

#### Classification for mixtures and used evaluation method according to regulation (EC) 1207/2008 [CLP]

<b>Physical hazards</b>	On basis of test data
<b>Health Hazards</b>	Bridging principle "Batching", Calculation Method
<b>Environmental Hazards</b>	Bridging principle "Batching"

**Revision Date** 02-11-2022

**Revision Note** This SDS has been revised in the following section(s), 2, 3, 8, 11, 12, 15.

#### Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other

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materials or in any process, unless specified in the text.