



# SAFETY DATA SHEET

Gulf Gear LS, SAE 80W-90

03102/80W-90/2

Issuing Date 08-09-2017

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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  
+44 207 321 6219  
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 - (H412)
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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.

### 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**

No information available

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS****3.1. Substances / 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) Aquatic Chronic 2 (H411) Eye Dam. 1 (H318) Flam. Liq. 3 (H226) Skin Sens. 1 (H317)	01-2119493620-38-xxx x
Reaction Products of alcohols, C14-18, C18 unsat., esterified with phosphorus pentoxide and salted with amines, C12-14,-tert-alkyl	-	NOT AVAILABLE	1% - 2.5%	Aquatic Chronic 3 (H412)	no data available
(Z)-octadec-9-enylamine	204-015-5	112-90-3	0% - 1%	Acute Tox. 4 (H302) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410) Eye Dam. 1 (H318) Skin Corr. 1B (H314) STOT RE 2 (H373) STOT SE 3 (H335)	no data available
Reaction product of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and phenol, heptyl derivs.	939-460-0	NOT AVAILABLE	0% - 1%	Aquatic Chronic 3 (H412) Eye Dam. 1 (H318) Flam. Liq. 3 (H226) Skin Irrit. 2 (H315) Skin Sens. 1 (H317)	01-2119971727-23-xxx x

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

## SECTION 4: FIRST AID MEASURES

### 4.1. Description of first-aid measures

<b>General advice</b>	May produce an allergic reaction. When symptoms persist or in all cases of doubt seek medical advice.
<b>Inhalation</b>	Move to fresh air.
<b>Skin contact</b>	Wash off immediately with plenty of water for at least 15 minutes. Remove and wash contaminated clothing before re-use. 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>Protection of First-aiders</b>	Use personal protective equipment. Avoid contact with skin, eyes and clothing.

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

**Main Symptoms**                      None

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

**Notes to physician**                      May cause sensitization of susceptible persons. 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 CO2, dry chemical, or foam, Water spray or fog, Cool containers / tanks with water spray

#### **Extinguishing media which shall not be used for safety reasons**

Do not use a solid water stream as it may scatter and spread fire

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

#### **Special Hazard**

In the event of fire and/or explosion do not breathe fumes. Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke). Thermal decomposition can lead to release of irritating gases and vapors. Water runoff can cause environmental damage. This material creates a fire hazard because it floats on water.

#### **Hazardous decomposition products**

Incomplete combustion and thermolysis produces potentially toxic gases such as carbon monoxide and carbon dioxide

### 5.3. Advice for firefighters

#### **Special protective equipment for fire-fighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

## SECTION 6: ACCIDENTAL RELEASE MEASURES

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

Remove all sources of ignition. Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing.

**Advice for non-emergency personnel**                      Material can create slippery conditions.

**Advice for emergency responders**    For personal protection see 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 materials for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Dike to collect large liquid spills.

### 6.4. Reference to other sections

See Section 8/12/13 for additional information

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for safe handling

Ensure adequate ventilation. Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practice. Keep away from open flames, hot surfaces and sources of ignition.

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

#### Technical measures/Storage conditions

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition.

#### Incompatible materials

Oxidizing agent

### 7.3. Specific end uses

**Recommended Use**                                      Engine oil    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				VLA-EC: 10 mg/m <sup>3</sup>

(Viscosity >20.5 cSt @40°C)				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>	
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>	

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).

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

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 tiltaksverdier 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> 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> 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 zdraví pri práci, ve znění narizeni vlady c.68/2010 Sb.

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
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>			
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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	8.56 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

Not determined

#### 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 pentoxide, and salted by amines, C12-14-tert-alkyl	0.25 mg/kg	6.25 mg/kg	2.2 mg/m <sup>3</sup>			
Reaction product of 1,3,4-thiadiazolidine-2,5-dithione	0.33 mg/kg	33.33 mg/kg	0.58 mg/m <sup>3</sup>			

e, formaldehyde and phenol, heptyl derivs.						
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**Consumers Local effects**

Not determined

**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 pentoxide, and salted by amines, C12-14- tert-alkyl	0.0012 mg/L	0.12 µg/L	3.13 mg/kg	0.313 mg/kg	2.54 mg/kg

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

Ensure adequate ventilation, especially in confined areas.

**Personal protective equipment**

Engineering controls should be considered as the first line of protection against adverse exposure to harmful substances. Administrative controls and PPE should be used in the absence of engineering controls or as supplemental controls where engineering controls are insufficient in reducing specific exposures to an acceptable level.

**Eye Protection**

Safety glasses with side-shields.

**Hand Protection**

The following glove type may be suitable for handling this product: Protective gloves complying with EN 374.

*Nitrile rubber*

*Glove thickness => 0.38 mm Break through time => 480 min*

*Butyl rubber*

*Glove thickness => 0.64 mm Break through time => 480 min*

Glove material suitability will vary depending on specific use conditions. Consideration should be given to variables such as operational characteristics, anticipated contact time, task requirements and other factors relevant to the selection of PPE. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion. Any specific glove information provided is based on published literature and glove manufacturer data. Gloves should be replaced regularly and if there is any sign of damage to the glove material.

**Skin and body protection**

Long sleeved clothing. Apron. Impervious gloves.

**Respiratory protection**

No special protective equipment required. In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit.

*This information is based on the state in which the specific product is delivered and on the intended use specified within this SDS. This information is provided based on literature reference, manufacturer specifications and recommendations and/or derived by analogy with similar substances. The level of protection and types of exposure controls will vary depending on potential exposure conditions.*

**Hygiene measures**

Regular cleaning of equipment, work area and clothing is recommended. Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use. Handle in accordance with good industrial hygiene and safety practice.

**Environmental Exposure Controls**

Do not allow material to contaminate ground water system.

**Thermal hazards**

None under normal use conditions

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

<b>Physical state</b>	liquid	<b>Appearance</b>	clear amber
<b>Odor</b>	Hydrocarbon-like	<b>Odor threshold</b>	Not Determined
<u>Property</u>	<u>Values</u>	<u>Remarks</u>	
<b>pH</b>	Not Determined		
<b>Melting point / freezing point</b>	Not Determined		
<b>Boiling point / boiling range</b>	Not Determined		
<b>Flash point</b>	234 °C / 453 °F	ASTM D 92	
<b>Evaporation rate</b>	Not Determined		
<b>Flammability (solid, gas)</b>	Not Determined		
<b>Flammability Limit in Air</b>			
<b>Upper flammability limit:</b>	Not Determined		
<b>Lower flammability limit:</b>	Not Determined		
<b>Vapor pressure</b>	Not Determined		
<b>Vapor density</b>	Not Determined		
<b>Relative density</b>	0.8488	@15°C	
<b>Solubility(ies)</b>	Insoluble in water		
<b>Partition coefficient</b>	Not Determined		
<b>Autoignition temperature</b>	Not Determined		
<b>Decomposition temperature</b>	Not Determined		
<b>Kinematic viscosity</b>	53.4 cSt @ 40 °C	ASTM D 445	
<b>Explosive properties</b>	Not applicable		
<b>Oxidizing Properties</b>	Not applicable		

### 9.2. Other information

<b>Viscosity, kinematic (100°C)</b>	9.8 cSt @ 100°C	ASTM D 445
<b>Pour Point</b>	-39 °C / -38 °F	ASTM D 97
<b>VOC Content (ASTM E-1868-10)</b>	Not Determined	
<b>VOC content</b>	Not Determined	

## 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



Incomplete combustion and thermolysis produces potentially toxic gases such as carbon monoxide and carbon dioxide.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1. Information on toxicological effects

#### Product Information - Principle Routes of Exposure

<b>Inhalation</b>	None known
<b>Eye contact</b>	None known
<b>Skin contact</b>	Repeated or prolonged skin contact may cause allergic reactions with susceptible persons
<b>Ingestion</b>	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	
Highly refined, low viscosity base oil (Viscosity <7 cSt @40°C)	>2000 mg/kg	>2000 mg/kg	

<b>Skin corrosion/irritation</b>	Based on available data, the classification criteria are not met.
<b>Serious eye damage/eye irritation</b>	Based on available data, the classification criteria are not met.
<b>Sensitization</b>	
<b>Respiratory Sensitization</b>	Based on available data, the classification criteria are not met.
<b>Skin sensitization</b>	Repeated contact may cause allergic reactions in very susceptible persons.
<b>Germ cell mutagenicity</b>	Based on available data, the classification criteria are not met.
<b>Carcinogenicity</b>	Based on available data, the classification criteria are not met.
<b>Reproductive toxicity</b>	Based on available data, the classification criteria are not met.
<b>Specific target organ systemic toxicity (single exposure)</b>	Based on available data, the classification criteria are not met.
<b>Specific target organ systemic toxicity (repeated exposure)</b>	Based on available data, the classification criteria are not met.
<b>Aspiration hazard</b>	Based on available data, the classification criteria are not met.

## 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

**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**

No information available

**12.4. Mobility**

The product is insoluble and floats on water

**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. Other adverse effects**

None known

## SECTION 13: DISPOSAL CONSIDERATIONS

**13.1. Waste treatment methods****Waste from Residues / Unused Products**

Dispose of as hazardous waste in compliance with local and national regulations

**Contaminated packaging**

Empty containers should be taken to an approved waste handling site for recycling or disposal. Observe all label precautions until container is cleaned, reconditioned or destroyed.

**Other Data**

According to the European Waste Catalog, Waste Codes are not product specific, but application specific. 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. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

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 EC 2015/830  
 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 does not contain candidate substances of very high concern at a concentration  $\geq 0.1\%$  (Regulation (EC) No. 1907/2006 (REACH), Article 59).

**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**

**Germany WGK Classification** Hazard to water/Class 2

**Product Registration number**  
 Denmark Registration (DK) No information available

**International Regulations**

**Ozone-depleting substances (ODS)**  
 Not applicable

**Persistent Organic Pollutants**

Not applicable

**Chemicals Subject to Prior Informed Consent (PIC)**

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
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	72623-83-7	276-735-8	

stock-based			
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 which may be referred to under Sections 2 and 3

<ul style="list-style-type: none"> <li>• H224 - Extremely flammable liquid and vapor</li> <li>• H225 - Highly flammable liquid and vapor</li> <li>• H226 - Flammable liquid and vapor</li> <li>• H270 - May cause or intensify fire; oxidizer</li> <li>• H271 - May cause fire or explosion; strong oxidizer</li> <li>• H272 - May intensify fire; oxidizer</li> <li>• H290 - May be corrosive to metals</li> <li>• H300 - Fatal if swallowed</li> <li>• H301 - Toxic if swallowed</li> <li>• H302 - Harmful if swallowed</li> <li>• H304 - May be fatal if swallowed and enters airways</li> <li>• H310 - Fatal in contact with skin</li> <li>• H311 - Toxic in contact with skin</li> <li>• H312 - Harmful in contact with skin</li> <li>• H314 - Causes severe skin burns and eye damage</li> <li>• H315 - Causes skin irritation</li> <li>• H317 - May cause an allergic skin reaction</li> <li>• H318 - Causes serious eye damage</li> <li>• H319 - Causes serious eye irritation</li> <li>• H330 - Fatal if inhaled</li> <li>• H331 - Toxic if inhaled</li> <li>• H332 - Harmful if inhaled</li> <li>• H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled</li> <li>• H335 - May cause respiratory irritation</li> <li>• H336 - May cause drowsiness or dizziness</li> <li>• H340 - May cause genetic defects</li> </ul>	<ul style="list-style-type: none"> <li>• H341 - Suspected of causing genetic defects</li> <li>• H350 - May cause cancer</li> <li>• H351 - Suspected of causing cancer</li> <li>• H360 - May damage fertility or the unborn child</li> <li>• H361 - Suspected of damaging fertility or the unborn child</li> <li>• H362 - May cause harm to breast-fed children</li> <li>• H370 - Causes damage to organs</li> <li>• H371 - May cause damage to organs</li> <li>• H372 - Causes damage to organs through prolonged or repeated exposure</li> <li>• H373 - May cause damage to organs through prolonged or repeated exposure</li> <li>• H400 - Very toxic to aquatic life</li> <li>• H410 - Very toxic to aquatic life with long lasting effects</li> <li>• H411 - Toxic to aquatic life with long lasting effects</li> <li>• H412 - Harmful to aquatic life with long lasting effects</li> <li>• H413 - May cause long lasting harmful effects to aquatic life</li> <li>• H360Df - May damage the unborn child. Suspected of damaging fertility</li> <li>• H360D - May damage the unborn child</li> <li>• H360FD - May damage fertility. May damage the unborn child</li> <li>• H360F - May damage fertility</li> <li>• H361d - Suspected of damaging the unborn child</li> <li>• H361fd - Suspected of damaging fertility. Suspected of damaging the unborn child</li> <li>• H361f - Suspected of damaging fertility</li> <li>• EUH066 - Repeated exposure may cause skin dryness or cracking</li> <li>• EUH210 - Safety data sheet available on request</li> <li>• EUH208 - May produce an allergic reaction</li> </ul>
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#### 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>	Calculation Method
<b>Environmental Hazards</b>	Calculation Method

**Revision Date** 08-09-2017

**Revision Note** This SDS has been revised in the following section(s), 3, 8, 15, 16.

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