SAFETY DATA SHEET

Gulf Supreme Duty ULE 15W-40 **02160/15W-40/2**

Issuing Date 12-21-2017 **Revision Date** 12-21-2017 **Version** 2

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

1.1. Product identifier

Product Name **Gulf Supreme Duty ULE 15W-40**
Product Code(s) 02160/15W-40/2

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

Recommended Use Engine oil

Uses advised against Any other purpose.

1.3. Details of the supplier of the safety data sheet

Supplier

PROLUB COMBUSTIBLES & LUBRICANTES S.A.
Parque Logístico Nacional del Tolima Kilómetro 10 Vía Ibagué – Gualanday.
infoclientes@gulfcolombia.com
(57+8) 2770323
018000-180176

1.4. Emergency telephone number

Telefono Fijo, Ibague, Tolima (57+8) 2770323 ; Linea unica nacional: 018000-180176
Lunes a Viernes 07:00 AM - 05:00 PM (Dias Habiles).

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

Contains 2,5-Furandione, polymer with 1-hexadecene, 2-methyloxirane polymer with oxirane bis(2 aminopropyl) ether and 2-methyl-1- propene, 4-(phenylamino)phenylimide, Coconut oil, reaction products with boric acid (H3BO3), diethanolamine and glycerol , Benzenesulfonic acid, methyl-mono-C20-26-branched alkyl derivs.,calcium salts, Calcium di(alkyl(C20-C24, even numbered) branched)-methyl benzenesulfonate May produce an allergic reaction.

2.2. Label Elements

Signal word
None

Hazard statements

EUH208 - Contains 2,5-Furandione, polymer with 1-hexadecene, 2-methyloxirane polymer with oxirane bis(2 aminopropyl) ether and 2-methyl-1- propene, 4-(phenylamino)phenylimide, Coconut oil, reaction products with boric acid (H3BO3), diethanolamine and glycerol , Benzenesulfonic acid, methyl-mono-C20-26-branched alkyl derivs.,calcium salts, Calcium di(alkyl(C20-C24, even numbered) branched)-methyl benzenesulfonate May produce an allergic reaction.

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 mineral oils/hydrocarbons (Viscosity >7 - <20.5 cSt @40°C)	-	-	2.5% - 10%	Asp. Tox. 1 (H304) (EUH066)	-
Derivative of amines, polyethylene poly-compounds with (polybutenyl) succinic anhydride, borates	-	NOT AVAILABLE	2.5% - 10%	Aquatic Chronic 4 (H413)	no data available
2,5-Furandione, polymer with 1-hexadecene, 2-methyloxirane polymer with oxirane bis(2 aminopropyl) ether and 2-methyl-1- propene, 4-(phenylamino)phenylimide	-	873694-48-5	1% - 2.5%	Aquatic Chronic 4 (H413) Skin Sens. 1 (H317)	no data available
reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-tertbutyl-4-hydroxy phenyl)propionate	406-040-9	125643-61-0	1% - 2.5%	Aquatic Chronic 4 (H413)	no data available
Amines, polyethylenepoly-, reaction products with 1,3-dioxolan-2-one and succinic anhydride monopolyisobutenyl derivs.	604-611-9	147880-09-9	1% - 2.5%	Aquatic Chronic 4 (H413)	no data available
Bis(nonylphenyl)amine	253-249-4	36878-20-3	0% - 1%	Aquatic Chronic 4 (H413)	01-2119488911-28-xxxx
Phenol, dodecyl-, sulfurized, carbonates, calcium salts, overbased	272-234-3	68784-26-9	0% - 1%	Aquatic Chronic 4 (H413)	01-2119524004-56-xxxx
Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts	272-238-5	68784-31-6	0% - 1%	Eye Dam. 1 (H318) Aquatic Chronic 2 (H411)	01-2119657973-23-xxxx
Calcium di(alkyl(C20-C24,	-	722503-68-6	0% - 1%	Skin Sens. 1 (H317)	no data available

even numbered) branched)-methyl benzenesulfonate				Aquatic Chronic 4 (H413)	
Benzenesulfonic acid, C10-60-alkyl derivs., magnesium salts	296-721-5	93028-29-6	0% - 1%	Aquatic Chronic 4 (H413)	no data available
Phenol, dodecyl-, branched	310-154-3	121158-58-5	0% - 1%	Eye Dam. (H318) Skin Corr. 1C (H314) Repr. 1B (H360F) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410)	01-2119513207-49-xxxx
Coconut oil, reaction products with boric acid (H3BO3), diethanolamine and glycerol	806-731-9	1428353-74-5	0% - 1%	Eye Irrit. 2 (H319) Skin Sens. 1 (H317) Aquatic Chronic 2 (H411)	01-2120067755-46-xxxx
Benzenesulfonic acid, methyl-mono-C20-26-branched alkyl derivs.,calcium salts	-	722503-69-7	0% - 1%	Skin Sens. 1 (H317) Aquatic Chronic 4 (H413)	no data available

Product containing mineral oil with less than 3% DMSO extract as measured by IP 346. 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. See Section 15 for additional information on base oils.

** 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

General advice May produce an allergic reaction. When symptoms persist or in all cases of doubt seek medical advice.

Inhalation Move to fresh air.

Skin contact 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.

Eye contact Rinse thoroughly with plenty of water, also under the eyelids. Keep eye wide open while rinsing.

Ingestion Clean mouth with water. Drink plenty of water. Do not induce vomiting without medical advice.

Protection of First-aiders Use personal protective equipment. Avoid contact with skin, eyes and clothing.

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

Main Symptoms May cause allergic skin reaction

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. 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.

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. Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Remove and wash contaminated clothing before re-use.

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

Engine 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/m³ VLA-ED: 5 mg/m³
Highly refined, low viscosity mineral oils/hydrocarbons (Viscosity >7 - <20.5 cSt @40°C)				VLA-EC: 10 mg/m³ VLA-ED: 5 mg/m³

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/m³	TWA: 5 mg/m³ STEL: 10 mg/m³	
Highly refined, low viscosity mineral oils/hydrocarbons (Viscosity >7 - <20.5 cSt @40°C)		TWA: 5 mg/m³	TWA: 5 mg/m³ STEL: 10 mg/m³	

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/m³ TWA: 5 mg/m³ (Mist)
Highly refined, low viscosity mineral oils/hydrocarbons (Viscosity >7 - <20.5 cSt @40°C)				STEL: 10 mg/m³ TWA: 5 mg/m³ (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/m³ (Öljysumu)	TWA: 1 mg/m³ (Olietåge)	TWA: 1 mg/m³ (Oljetåke)	TWA: 1 mg/m³ STEL: 3 mg/m³ (Oljedimma)
Highly refined, low viscosity mineral oils/hydrocarbons (Viscosity >7 - <20.5 cSt @40°C)	TWA: 5mg/m³ (Öljysumu)	TWA: 1 mg/m³ (Olietåge)	TWA: 1 mg/m³ (Oljetåke)	TWA: 1 mg/m³ STEL: 3 mg/m³ (Oljedimma)

Finland Förordningen om koncetrationer som befunnits skadliga, 268/2014 - HTP-arvot 2014.
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. Denmark Bekendtgørelse om grænseværdier for stoffer og materialer. Arbejdstilsynets bekendtgørelse nr. 507 Bilag 2 Afsnit A.

Chemical name	Czech Republic	Hungary	Bulgaria	Romania
Highly refined base oil (Viscosity >20.5 cSt @40°C)	TWA: 5 mg/m³ Ceiling: 10 mg/m³		TWA: 5 mg/m³	TWA: 5 mg/m³ STEL: 10 mg/m³
Highly refined, low viscosity mineral oils/hydrocarbons (Viscosity >7 - <20.5 cSt @40°C)	TWA: 5 mg/m³ Ceiling: 10 mg/m³		TWA: 5 mg/m³	TWA: 5 mg/m³ STEL: 10 mg/m³

Czech Republic Narizeni vlady 93/2012, kterym se meni narizeni vlady c.361/2007 Sb., kterym se stanovi podminky ochrany zdravi pri praci, ve zneni 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 agenţilor chimic - Anex Nr.1 Pubilicat 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/m³			
Highly refined, low viscosity mineral oils/hydrocarbons (Viscosity >7 - <20.5 cSt @40°C)	TWA: 5 mg/m³			

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/m³ STEL: 10 mg/m³			
Highly refined, low viscosity mineral oils/hydrocarbons (Viscosity >7 - <20.5 cSt @40°C)	TWA: 5 mg/m³ STEL: 10 mg/m³			

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/m³	TWA: 1 mg/m³ STEL: 3 mg/m³
Highly refined, low viscosity mineral oils/hydrocarbons (Viscosity >7 - <20.5 cSt @40°C)			TWA: 5 mg/m³	TWA: 1 mg/m³ STEL: 3 mg/m³

Latvia Ministru Kabineta noteikumi Nr. 325 - Darba aizsardzības prasības, saskaroties ar ķīmiskajām vielām darba vietās.

Lithuania Del Lietuvos higienos normos HN 23:2011 "Cheminiu medžiagu 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/m³	
Highly refined, low viscosity mineral oils/hydrocarbons (Viscosity >7 - <20.5 cSt @40°C)			TWA: 5mg/m³	

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
Bis(nonylphenyl)amine		5 mg/kg				
Phenol, dodecyl-, sulfurized, carbonates, calcium salts, overbased		2.08 mg/kg	7.05 mg/m³		80 mg/kg	167 mg/m³
Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts		10.42 mg/kg bw/day	2.93 mg/m³		100 mg/kg bw/day	496.4 mg/m³
Phenol, dodecyl-, branched		0.25 mg/kg	1.7621 mg/m³		166 mg/kg	44.18 mg/m³

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
Bis(nonylphenyl)amine		2.5 mg/kg				
Phenol, dodecyl-, sulfurized, carbonates, calcium salts, overbased	0.5 mg/kg	1.04 mg/kg	1.74 mg/m³	50 mg/kg	40 mg/kg	0.167 mg/m³
Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts	210 µg/kg bw/day	2.1 mg/kg bw/day	11.75 mg/m³		50 mg/kg bw/day	198.6 mg/m³
Phenol, dodecyl-, branched	0.075 mg/kg	0.075 mg/kg	0.79 mg/m³	1.26 mg/kg	50 mg/kg	13.26 mg/m³

Consumers Local effects

Not determined

Predicted No Effect Concentration (PNEC)

Chemical name	Fresh water	Sea water	Fresh water sediment	Sea sediment	Soil
Bis(nonylphenyl)amine	0.1 mg/L	0.01 mg/L	132000 mg/kg	13200 mg/kg	
Phenol, dodecyl-, sulfurized, carbonates, calcium salts, overbased	0.5 mg/L	0.04 mg/L	43500 mg/kg	3480 mg/kg	8850 mg/kg
Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts	4 µg/L	4.6 µg/L	70.1 µg/kg	7.01 µg/kg	54.8 µg/kg
Phenol, dodecyl-, branched	0.074 µg/L	0.0074 µg/L	0.226 mg/kg	0.0266 mg/kg	0.118 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.

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
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
No special environmental precautions required.

Thermal hazards
None under normal use conditions

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state	liquid	**Appearance**	clear amber
Odor	Hydrocarbon-like	**Odor threshold**	Not Determined

Property	Values	Remarks
pH	Not Determined	
Melting point / freezing point	Not Determined	
Boiling point / boiling range	Not Determined	
Flash point	240 °C / 464 °F	ASTM D 92
Evaporation rate	Not Determined	
Flammability (solid, gas)	Not Determined	
Flammability Limit in Air		
Upper flammability limit:	Not Determined	
Lower flammability limit:	Not Determined	
Vapor pressure	Not Determined	
Vapor density	Not Determined	
Relative density	0.887	@15°C
Solubility(ies)	Insoluble in water	
Partition coefficient	Not Determined	
Autoignition temperature	Not Determined	
Decomposition temperature	Not Determined	
Kinematic viscosity	109.9 cSt @ 40 °C	ASTM D 445
Explosive properties	Not applicable	
Oxidizing Properties	Not applicable	

9.2. Other information

Viscosity, kinematic (100°C)	14.3 cSt @ 100°C	ASTM D 445
Pour Point	-30 °C / -22 °F	ASTM D 97
VOC Content (ASTM E-1868-10)	Not Determined	
VOC content	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

Inhalation	None known
Eye contact	None known
Skin contact	Repeated or prolonged skin contact may cause allergic reactions with susceptible persons
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	
Highly refined, low viscosity mineral oils/hydrocarbons (Viscosity >7 - <20.5 cSt @40°C)	>2000 mg/kg	>2000 mg/kg	
reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-tertbutyl-4-hydroxyphenyl)	>2000 mg/kg (Rat)	>2000 mg/kg (Rat)	

propionate			
Bis(nonylphenyl)amine	> 5000 mg/kg (Rat)	> 2000 mg/kg (Rat)	
Phenol, dodecyl-, sulfurized, carbonates, calcium salts, overbased	>15380 mg/kg (Rat)	>15000 mg/kg (Rat)	
Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts	2900 - 3400 mg/kg (Rat)	>5000 mg/kg (Rabbit)	
Phenol, dodecyl-, branched	~2100 mg/kg (Rat)	>5000 mg/kg (Rabbit)	

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

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.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

No special environmental measures are necessary

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 mineral oils/hydrocarbons (Viscosity >7 - <20.5 cSt @40°C)	>100: 72 h mg/L	>100: 96 h mg/L	>100: 48 h mg/L
reaction mass of isomers of: C7-9-alkyl 3-(3,5-di-tertbutyl-4-hydroxyphenyl) propionate	>3: 72 h Desmodesmus subspicatus mg/L EC50	>74: 96 h Danio rerio mg/L LC50	>100: 24 h Daphnia magna mg/L EC50
Bis(nonylphenyl)amine		1000: 96 h Pimephales promelas mg/L LC50 semi-static	
Phenol, dodecyl-, sulfurized, carbonates, calcium salts, overbased	>500: 96 h Pseudokirchneriella subcapitata mg/L EC50	72.3: 96 h Pimephales promelas mg/L LC50 static	4.9: 48 h Daphnia magna mg/L EC50
Phosphorodithioic acid, mixed O,O-bis(sec-Bu and 1,3-dimethylbutyl) esters, zinc salts	240 - 410: 72 h Scenedesmus subspicatus mg/L EC50	46: 96 h Cyprinodon variegatus mg/L LC50	75: 48 h Daphnia magna mg/L EC50
Benzenesulfonic acid, C10-60-alkyl derivs., magnesium salts		1000: 96 h Pimephales promelas mg/L LC50 semi-static 1000: 96 h Pimephales promelas mg/L LC50 static	1000: 96 h Daphnia magna mg/L EC50
Phenol, dodecyl-, branched	0.36: 72 h Desmodesmus	40: 96 h Pimephales promelas mg/L	0.037: 48 h Daphnia magna mg/L

	subspicatus mg/L EC50	LC50	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

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 in accordance with local 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 >=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 Low hazard to water/Class 1

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
Contact supplier for inventory compliance status

IECSC - China Inventory of Existing Chemical Substances
Contact supplier for inventory compliance status

ENCS - Japan Existing and New Chemical Substances
Contact supplier for inventory compliance status

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 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 mineral oils/hydrocarbons (Viscosity >7 - <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), hydrotreated heavy paraffinic	63742-54-7	265-157-1	01-2119484627-25-xxxx
Distillates (petroleum), heavy hydrocracked	64741-76-0	265-077-7	01-2119486951-26-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	01-2119487067-30-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 light	64742-71-8	265-176-5	01-2119485040-48-xxxx
Dec-1-ene, homopolymer, hydrogenated	68037-01-4	500-183-1	01-2119486452-34-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

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

• H224 - Extremely flammable liquid and vapor	• H341 - Suspected of causing genetic defects
• H225 - Highly flammable liquid and vapor	• H350 - May cause cancer
• H226 - Flammable liquid and vapor	• H351 - Suspected of causing cancer
• H270 - May cause or intensify fire; oxidizer	• H360 - May damage fertility or the unborn child
• H271 - May cause fire or explosion; strong oxidizer	• H361 - Suspected of damaging fertility or the unborn child
• H272 - May intensify fire; oxidizer	• H362 - May cause harm to breast-fed children
• H290 - May be corrosive to metals	• H370 - Causes damage to organs
• H300 - Fatal if swallowed	• H371 - May cause damage to organs
• H301 - Toxic if swallowed	• H372 - Causes damage to organs through prolonged or repeated exposure
• H302 - Harmful if swallowed	• H373 - May cause damage to organs through prolonged or repeated exposure
• H304 - May be fatal if swallowed and enters airways	• H400 - Very toxic to aquatic life
• H310 - Fatal in contact with skin	• H410 - Very toxic to aquatic life with long lasting effects
• H311 - Toxic in contact with skin	• H411 - Toxic to aquatic life with long lasting effects
• H312 - Harmful in contact with skin	• H412 - Harmful to aquatic life with long lasting effects
• H314 - Causes severe skin burns and eye damage	• H413 - May cause long lasting harmful effects to aquatic life
• H315 - Causes skin irritation	• H360Df - May damage the unborn child. Suspected of damaging fertility
• H317 - May cause an allergic skin reaction	• H360D - May damage the unborn child
• H318 - Causes serious eye damage	• H360FD - May damage fertility. May damage the unborn child
• H319 - Causes serious eye irritation	• H360F - May damage fertility
• H330 - Fatal if inhaled	• H361d - Suspected of damaging the unborn child
• H331 - Toxic if inhaled	• H361fd - Suspected of damaging fertility. Suspected of damaging the unborn child
• H332 - Harmful if inhaled	• H361f - Suspected of damaging fertility
• H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled	• EUH066 - Repeated exposure may cause skin dryness or cracking
• H335 - May cause respiratory irritation	• EUH210 - Safety data sheet available on request
• H336 - May cause drowsiness or dizziness	• EUH208 - May produce an allergic reaction
• H340 - May cause genetic defects	

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

Physical hazards	On basis of test data
Health Hazards	Calculation Method
Environmental Hazards	Calculation Method

Revision Date 12-21-2017

Revision Note This SDS has been revised in the following section(s), 3, 8, 10, 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.