Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU) 2020/878 - Belgium

SAFETY DATA SHEET

Q8 Formula Arctic 5W-40



undertaking	
1.1 Product identifier	
Product name	: Q8 Formula Arctic 5W-40
Viscosity or Type	: SAE 5W-40
1.2 Relevant identified uses	of the substance or mixture and uses advised against
Material uses	: Lubricating oil for automotive engines
1.3 Details of the supplier of	the safety data sheet
Supplier	: Kuwait Petroleum Companies in the Benelux Company Office: Brusselstraat 59, 2018 Antwerp, Belgium Contactaddress: Petroleumkaai 7, 2020 Antwerp, Belgium Tel. +32 3 247 38 11, Fax +32 3 216 03 42
Manufacturer / Distributor	 Kuwait Petroleum Belgium N.V./S.A. Petroleumkaai 7 B-2020 Antwerp Belgium I Q8Oils Italia S.r.I. Via Volpedo 2 15050 Castellar Guidobono (AL) Italy
e-mail address of person responsible for this SDS	: SDSinfo@Q8.com, communication preferably in English only.
PCN Information contact	: PCNinfo@Q8.com, communication preferably in English only.
1.4 Emergency telephone nu	mber
Europe	: +44 (0) 1235 239 670 CARECHEM24
Global (English only)	: +44 (0) 1865 407 333

SECTION 2: Hazards identification

National advisory body/Poison Center

Belgium

2.1 Classification of the su	bstance or mixture
Product definition	: Mixture
Classification according t Not classified.	o Regulation (EC) No. 1272/2008 [CLP/GHS]
The product is not classified	as hazardous according to Regulation (EC) 1272/2008 as amended.
Ingredients of unknown toxicity	: None.
Ingredients of unknown ecotoxicity	: None.
See Section 11 for more de	tailed information on health effects and symptoms.
2.2 Label elements	
Signal word	: No signal word.
Hazard statements	: No known significant effects or critical hazards.
Precautionary statements	

: Poison Centre : +32 (0)70 245 245

Date of issue/Date of revision

: 18-11-2022 Date of previous issue

SECTION 2: Hazards identification

General	-	 P103 - Read carefully and follow all instructions. P102 - Keep out of reach of children. P101 - If medical advice is needed, have product container or label at hand.
Prevention	:	Not applicable.
Response	:	Not applicable.
Storage	:	Not applicable.
Disposal	:	Not applicable.
Supplemental label elements	1	Safety data sheet available on request.
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	:	Not applicable.
Detergents - Regulation (EC) No 648/2004	1	Not applicable.
Special packaging requirem	en	<u>its</u>
Containers to be fitted with child-resistant fastenings	-	Not applicable.
Tactile warning of danger	:	Not applicable.
2.3 Other hazards		
Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII	:	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
Other hazards which do not result in classification	1	Prolonged or repeated contact may dry skin and cause irritation.

SECTION 3: Composition/information on ingredients

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Туре
Severely refined mineral oil (C15 - C50) - Not classified.	CAS: *	≤10	Not classified.	-	[2]
Severely refined mineral oil (C15 - C50) - H304	CAS: *	≤5	Asp. Tox. 1, H304	-	[1] [2]
bis(nonylphenyl)amine	REACH #: 01-2119488911-28 EC: 701-385-4 CAS: 36878-20-3	≤3	Aquatic Chronic 4, H413	-	[1]
Phosphorodithioic acid, mixed O,O-bis (1,3-dimethylbutyl and iso- Pr) esters, zinc salts	REACH #: 01-2119493626-26 EC: 283-392-8 CAS: 84605-29-8	<2.5	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 2, H411	Skin Irrit. 2, H315: C ≥ 6.25% Eye Dam. 1, H318: C ≥ 12.5% Eye Irrit. 2, H319: 10% ≤ C < 12.5%	[1]
Date of issue/Date of revision	: 18-11-2022 Da	nte of previou	s issue : 20-09-2019	Version :1.0)1 2

SECTION 3: Composition/information on ingredients

•	5	
	See Section 16 for	
	the full text of the H	
	statements declared	
	above.	

Contains one or more of the following:

CAS: 64742-54-7, EC: 265-157-1, EU REACH: 01-2119484627-25 CAS: 64742-55-8, EC: 265-158-7, EU REACH: 01-2119487077-29 CAS: 64742-56-9, EC: 265-159-2, EU REACH: 01-2119480132-48

CAS: 64742-65-0, EC: 265-169-7, EU REACH: 01-2119471299-27

The mineral base oils contained in this product are severely refined and contain less than 3% DMSO extract according to IP 346 method, and are therefore not classified as carcinogen according to Regulation (EC) No 1272/2008, note L.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Туре

Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
Inhalation	: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Skin contact	: ₩ash skin thoroughly with soap and water or use recognized skin cleanser. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	: Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Protection of first-aiders	■ No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
4.2 Most important symptor	ns and effects, both acute and delayed
Over-exposure signs/symp	<u>otoms</u>
Eye contact	: No specific data.
Inhalation	No specific data

Inhalation	: No specific data.
Skin contact	: Adverse symptoms may include the following: irritation dryness cracking
Ingestion	: No specific data.

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SECTION 4: First aid measures

4.3 Indication of any immed	iate medical attention and special treatment needed
Notes to physician	: In case of inhalation of decomposition products in a fire, symptoms may be delayed The exposed person may need to be kept under medical surveillance for 48 hours.
Specific treatments	: No specific treatment.
SECTION 5: Firefigh	ting measures
5.1 Extinguishing media	
Suitable extinguishing media	: Use dry chemical, CO ₂ , alcohol-resistant foam or water spray (fog).
Unsuitable extinguishing media	: Do not use water jet.
5.2 Special hazards arising	from the substance or mixture
Hazards from the substance or mixture	: In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous combustion products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides sulfur oxides phosphorus oxides metal oxide/oxides
5.3 Advice for firefighters	
Special protective actions for fire-fighters	: Promptly isolate the scene by removing all persons from the vicinity of the incident i there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

chemical incidents.

For non-emergency personnel	:	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	:	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
6.2 Environmental precautions	:	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
6.3 Methods and materials fo	r c	ontainment and cleaning up

Small spill	: Stop leak if without risk. Move containers from spill area. Dilute with water and mop
-	up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry
	material and place in an appropriate waste disposal container. Dispose of via a
	licensed waste disposal contractor.

SECTION 6: Accidental release measures

Large spill	: Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor.
6.4 Reference to other sections	: See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

Protective measures	: Put on appropriate personal protective equipment (see Section 8).
Advice on general occupational hygiene	: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s)

Recommendations Industrial sector specific solutions

- : Not available.
- cific : Not available.

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
Severely refined mineral oil (C15 - C50) - Not classified.	Limit values (Belgium, 5/2021). [] TWA: 5 mg/m ³ 8 hours. Form: mist STEL: 10 mg/m ³ 15 minutes. Form: mist EU OEL (Europe). TWA: 5 mg/m ³ 8 hours. Form: Mist STEL: 10 mg/m ³ 15 minutes. Form: Mist
Severely refined mineral oil (C15 - C50) - H304	Limit values (Belgium, 5/2021). [] TWA: 5 mg/m ³ 8 hours. Form: mist STEL: 10 mg/m ³ 15 minutes. Form: mist EU OEL (Europe). TWA: 5 mg/m ³ 8 hours. Form: Mist STEL: 10 mg/m ³ 15 minutes. Form: Mist

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SECTION 8: Exposure controls/personal protection

	Recommended monitoring procedures	: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
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DNELs/DMELs

Product/ingredient name	Туре	Exposure	Value	Population	Effects
ofs(nonylphenyl)amine	DNEL	Long term Oral	0.25 mg/ kg bw/day	General population	Systemic
	DNEL	Long term Dermal	2.5 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	5 mg/kg bw/day	Workers	Systemic
Phosphorodithioic acid, mixed O,O- bis(1,3-dimethylbutyl and iso-Pr) esters, zinc salts	DNEL	Long term Oral	0.24 mg/ kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	2.11 mg/m ³	General population	Systemic
	DNEL	Long term Dermal	6.1 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	8.31 mg/m ³	Workers	Systemic
	DNEL	Long term Dermal	12.1 mg/ kg bw/day	Workers	Systemic

PNECs

No PNECs available.

8.2 Exposure controls	
Appropriate engineering controls	: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
Individual protection meas	<u>sures</u>
Hygiene measures	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
Skin protection	
Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Wear suitable gloves tested to EN374. Recommended: < 1 hour (breakthrough time): nitrile rubber 0.17 mm. Provide employee with skin care programmes.
Body protection	 Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
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SECTION 8: Exposure controls/personal protection

Other skin protection	:	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	:	Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Recommended: Boiling point > 65 °C: A1; Boiling point < 65 °C: AX1; Hot material: A1P2.
Environmental exposure controls	:	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

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The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

9.1 Information on basic physical and chemical properties

	and a substances by a base of a substance of a subs
<u>Appearance</u>	
Physical state	: Liquid. [Oily liquid.]
Appearance	: Clear.
Color	: Brown.
Odor	: Slight
Odor threshold	: Not available.
Melting point/freezing point	: Not applicable.
Pour point	: 🗾 🖉 55°C (<-67°F) [ASTM D 97]
Initial boiling point and boiling range	: >250°C (>482°F)
Flammability	: Not applicable.
Lower and upper explosion limit	: Not available.
Flash point	: 🗭osed cup: >200°C (>392°F) [ASTM D 93]
Auto-ignition temperature	: >250°C (>482°F)
Decomposition temperature	: >250°C
рН	: 📈 ot applicable.
Viscosity	: Kinematic (40°C (104°F)): 89.9 mm²/s (89.9 cSt) [ASTM D 445] Kinematic (100°C (212°F)): 14.2 mm²/s (14.2 cSt) [ASTM D 445]

Solubility(ies)

Media	Result
<mark>⊭o</mark> ld water	Not soluble
hot water	Not soluble
Partition coefficient: n-octanol/ water	: Not applicable.
Vapor pressure	: 📈 0.01 kPa (<0.075006 mm Hg)
Density	: 🛿 85 g/cm³ [15°C (59°F)] [ASTM D 4052]
Vapor density	: Not available.
Explosive properties	: Not applicable.
Oxidizing properties	: Not applicable.
Particle characteristics	
Median particle size	: Not applicable.

SECTION 10): Stability and	reactivity
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10.1 Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability	: The product is stable.
10.3 Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
10.4 Conditions to avoid	: No specific data.
10.5 Incompatible materials	: Reactive or incompatible with the following materials: Strong oxidizing materials
10.6 Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Severely refined mineral oil	LC50 Inhalation Dusts and	Rat - Male,	5.53 mg/l	4 hours
(C15 - C50) - Not classified.	mists	Female		
. ,	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
Severely refined mineral oil	LC50 Inhalation Dusts and	Rat - Male,	5.53 mg/l	4 hours
(C15 - C50) - H304	mists	Female		
. ,	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-
Phosphorodithioic acid, mixed O,O-bis (1,3-dimethylbutyl and iso- Pr) esters, zinc salts	LD50 Oral	Rat	3.2 g/kg	-

Conclusion/Summary : Not available.

Acute toxicity estimates

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
Severely refined mineral oil (C15 - C50) - Not classified.	N/A	N/A	N/A	N/A	5.53
Severely refined mineral oil (C15 - C50) - H304	N/A	N/A	N/A	N/A	5.53
Phosphorodithioic acid, mixed O,O-bis (1,3-dimethylbutyl and iso-Pr) esters, zinc salts	3200	N/A	N/A	N/A	N/A

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
everely refined mineral oil (C15 - C50) - Not classified.	Eyes - Iris lesion	Rabbit	0	48 hours	72 hours
,	Eyes - Redness of the conjunctivae	Rabbit	0.33	48 hours	72 hours
	Skin - Edema	Rabbit	0	72 hours	7 days
	Skin - Erythema/Eschar	Rabbit	0.17	72 hours	7 days
Severely refined mineral oil (C15 - C50) - H304	Eyes - Iris lesion	Rabbit	0	48 hours	72 hours
	Eyes - Redness of the conjunctivae	Rabbit	0.33	48 hours	72 hours

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SECTION 11. Toxicological information

SECTION II. TOXIC	ological information					
	Skin - Edema Skin - Erythema/Eschar	Rabbit Rabbit	0 0.17	72 hours 72 hours	7 days 7 days	
Conclusion/Summary	: Not available.					

Conclusion/Summary

Sensitization	

Product/ingredient name	Route of exposure	Species	Result
Severely refined mineral oil (C15 - C50) - Not classified.	skin	Guinea pig	Not sensitizing
Severely refined mineral oil (C15 - C50) - H304	skin	Guinea pig	Not sensitizing

Conclusion/Summary : Not available.

Mutagenicity

Product/ingredient name	Test	Experiment	Result
	474 Mammalian Erythrocyte Micronucleus Test	Experiment: In vivo Subject: Mammalian-Animal Cell: Somatic	Negative
Severely refined mineral oil (C15 - C50) - H304	474 Mammalian Erythrocyte Micronucleus Test	Experiment: In vivo Subject: Mammalian-Animal Cell: Somatic	Negative

Conclusion/Summary

: Not available.

Carcinogenicity

Product/ingredient name	Result	Species	Dose	Exposure
Severely refined mineral oil (C15 - C50) - Not classified.	Negative - Dermal - TC	Mouse - Female	-	78 weeks
Severely refined mineral oil (C15 - C50) - H304	Negative - Dermal - TC	Mouse - Female	-	78 weeks

: Not available. **Conclusion/Summary**

Reproductive toxicity

Product/ingredient name	Maternal toxicity	Fertility	Development toxin	Species	Dose	Exposure
Severely refined mineral oil (C15 - C50) - Not classified.	Negative	Negative	Negative	Rat - Male, Female	Oral: 1000 mg/ kg	-
Severely refined mineral oil (C15 - C50) - H304	Negative	Negative	Negative	Rat - Male, Female	Oral: 1000 mg/ kg	-

Conclusion/Summary : Not available.

Teratogenicity

Product/ingredient name	Result	Species	Dose	Exposure
Severely refined mineral oil (C15 - C50) - Not classified.	Negative - Dermal	Rat	2000 mg/kg	7 days per week
Severely refined mineral oil (C15 - C50) - H304	Negative - Dermal	Rat	2000 mg/kg	7 days per week

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure) Not available.

Aspiration hazard

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SECTION 11: Toxicological information

Product/ingredient name			Result		
Severely refined mineral oil (C15 - C50) - H304		ASPIRATI	ASPIRATION HAZARD - Category 1		
L		I			
Information on the likely routes of exposure	: Not available.				
Potential acute health effect	<u>s</u>				
Eye contact	: No known significant effects	or critical hazaro	ds.		
Inhalation	: No known significant effects	s or critical hazaro	ds.		
Skin contact	: Defatting to the skin. May c	ause skin drynes	s and irritation.		
Ingestion	: No known significant effects	s or critical hazaro	ds.		
Symptoms related to the phy	vsical, chemical and toxicolog	ical characterist	tics		
Eye contact	: No specific data.				
Inhalation	: No specific data.				
Skin contact	: Adverse symptoms may inc irritation dryness cracking	lude the following	j:		
Ingestion	: No specific data.				
	cts and also chronic effects fro	om short and loi	ng term exposure		
Short term exposure Potential immediate	: Not available.				
effects					
Potential delayed effects	: Not available.				
<u>Long term exposure</u>					
Potential immediate effects	: Not available.				
Potential delayed effects	: Not available.				
Potential chronic health eff	ects				
Product/ingredient name	Result	Species	Dose	Exposure	
Severely refined mineral oil (C15 - C50) - Not classified.	Sub-acute LOAEL Oral	Rat - Male	125 mg/kg	13 weeks; 5 hours per day	
· · · ·	Sub-chronic NOAEL Oral	Rat - Male, Female	≥2000 mg/kg	13 weeks; 5 days per week	
	Sub-acute NOAEL Inhalation Vapor	Rat - Male	>980 mg/m³	4 weeks; 5 days per week	
Severely refined mineral oil (C15 - C50) - H304	Sub-acute LOAEL Oral	Rat - Male	125 mg/kg	13 weeks; 5 hours per day	
	Sub-chronic NOAEL Oral	Rat - Male, Female	≥2000 mg/kg	13 weeks; 5 days per week	
	Sub-acute NOAEL Inhalation Vapor	Rat - Male	>980 mg/m ³	4 weeks; 5 days per week	
Conclusion/Summary	: Not available.				
General	: Prolonged or repeated conta or dermatitis.	act can defat the	skin and lead to irri	tation, cracking and/	
Carcinogenicity	: No known significant effects	s or critical hazard	ds.		
Mutagenicity	: No known significant effects or critical hazards.				
			ds.		

11.2 Information on other hazards

Date of issue/Date of revision

: 18-11-2022 Date of previous issue

SECTION 11: Toxicological information

11.2.1 Endocrine disrupting properties

Not available.

11.2.2 Other information

Not available.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
Severely refined mineral oil (C15 - C50) - Not classified.	Acute NEL >100 mg/l Fresh water	Algae	72 hours
	Acute NEL >10000 mg/l Fresh water	Daphnia - Daphnia Magma	48 hours
	Acute NEL ≥100 mg/l Fresh water	Fish - Pimephales promelas	96 hours
	Chronic NEL 10 mg/l Fresh water	Daphnia - Daphnia magna	21 days
Severely refined mineral oil (C15 - C50) - H304	Acute NEL >100 mg/l Fresh water	Algae	72 hours
	Acute NEL >10000 mg/l Fresh water	Daphnia - Daphnia Magma	48 hours
	Acute NEL ≥100 mg/l Fresh water	Fish - Pimephales promelas	96 hours
	Chronic NEL 10 mg/l Fresh water	Daphnia - Daphnia magna	21 days

Conclusion/Summary

: Not available.

12.2 Persistence and degradability

Conclusion/Summary	: Not available.		
Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Severely refined mineral oil (C15 - C50) - Not classified. Severely refined mineral oil (C15 - C50) - H304			Inherent Inherent

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Pis(nonylphenyl)amine Phosphorodithioic acid, mixed O,O-bis (1,3-dimethylbutyl and iso- Pr) esters, zinc salts	3.64 to 7.02 0.56	1730 -	high Iow

12.4 Mobility in soil

Soil/water partition coefficient (Koc)	: Not available.
Mobility	: Not available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Endocrine disrupting properties

Not available.

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product	
Methods of disposal	: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.
Hazardous waste	: Yes.

European waste catalogue (EWC)

Waste code	Waste designation mineral-based non-chlorinated engine, gear and lubricating oils			
13 02 05*				
Packaging				
Methods of disposal	: The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.			
Special precautions	: This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.			

SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number or ID number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-	-
14.3 Transport hazard class(es)	-	-	-	-
14.4 Packing group	-	-	-	-
14.5 Environmental hazards	No.	No.	No.	No.

user

14.6 Special precautions for : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

: Not available. 14.7 Maritime transport in bulk according to IMO instruments

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Commission Regulation (EU) 2020/878 - Belgium

Q8 Formula Arctic 5W-40

SECTION 15: Regulatory information

I5.1 Safety, health and environmental regulations/legislation specific for the substance or mixture <u>EU Regulation (EC) No. 1907/2006 (REACH)</u>
Annex XIV - List of substances subject to authorization
Annex XIV
None of the components are listed.
Substances of very high concern None of the components are listed.
Annex XVII - Restrictions : Not applicable. on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles
Other EU regulations
Industrial emissions : Not listed (integrated pollution prevention and control) - Air
Industrial emissions : Not listed (integrated pollution prevention and control) - Water
Ozone depleting substances (1005/2009/EU) Not listed.
Prior Informed Consent (PIC) (649/2012/EU) Not listed.
Persistent Organic Pollutants Not listed.
Seveso Directive
This product is not controlled under the Seveso Directive.
National regulations
Germany
Hazard class for water : 1 (WGK)
<u>Switzerland</u>
VOC content : Exempt.
International regulations Chemical Weapon Convention List Schedules I, II & III Chemicals Not listed.
Montreal Protocol Not listed.
Stockholm Convention on Persistent Organic Pollutants Not listed.
Rotterdam Convention on Prior Informed Consent (PIC) Not listed.
UNECE Aarhus Protocol on POPs and Heavy Metals Not listed.

SECTION 15: Regulatory information

		-
Inventory list		
Australia	:	All components are listed or exempted.
Canada	:	All components are listed or exempted.
China	:	🕅 components are listed, exempted, or notified.
Eurasian Economic Union	:	Russian Federation inventory: Not determined.
Japan	:	Japan inventory (CSCL): Not determined. Japan inventory (ISHL): Not determined.
New Zealand	:	All components are listed or exempted.
Philippines	:	All components are listed or exempted.
Republic of Korea	:	All components are listed or exempted.
Taiwan	:	Not determined.
Thailand	:	Not determined.
Turkey	:	Not determined.
United States of America	:	🕅 components are active or exempted.
Viet Nam	:	Not determined.
15.2 Chemical Safety	:	Chemical Safety Assessments for all substances in this product are either Complete

Assessment

or Not applicable.

SECTION 16: Other information

Indicates information that has changed from previously issued version.		
Abbreviations and	: 🗚 N = European Provisions concerning the International Carriage of Dangerous	
acronyms	Goods by Inland Waterway	
	ADR = The European Agreement concerning the International Carriage of	
	Dangerous Goods by Road	
	ASTM = American Society for Testing and Materials	
	ATE = Acute Toxicity Estimate	
	BCF = Bioconcentration Factor	
	CAS = Chemical Abstracts Service	
	CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]	
	DIN = German Institute for Standardization	
	DMEL = Derived Minimal Effect Level	
	DNEL = Derived No Effect Level	
	EC = European Commission	
	EC50 = Half maximal effective concentration	
	EN = European Standard (Norm)	
	EUH statement = CLP-specific Hazard statement	
	GHS - Globally Harmonized System of Classification and Labeling of Chemicals	
	IATA = International Air Transport Association IBC = Intermediate Bulk Container	
	IC50 = Half maximal inhibitory concentration	
	IMDG = International Maritime Dangerous Goods	
	IMO = International Maritime Organisation	
	ISO = International Organization for Standardization	
	LC50 = Median lethal concentration	
	LD50 = Median lethal dose	
	LOAEL / LOAEC = Lowest Observed Adverse Effect Level / Concentration	
	MARPOL = International Convention for the Prevention of Pollution From Ships,	
	1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)	
	N/A = Not available	
	NOAEL / NOAEC = No Observed Adverse Effect Level / Concentration	
	NOEL / NOEC = No Observed Effect Level / Concentration	
	OECD = Organisation for Economic Co-operation and Development	
	OEL = Occupational Exposure Limit	
	PBT = Persistent, Bioaccumulative and Toxic	
	PNEC = Predicted No Effect Concentration	

SECTION 16: Other information

REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006] RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail SDS = Safety Data Sheet SVHC = Substances of Very High Concern STEL = Short Term Exposure Limit TLV = Threshold Limit Value TWA = Time Weighted Average UFI = Unique Formula Identifier UN = United Nations VOC = Volatile Organic Compound vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Not classified.

The mineral base oils contained in this product are severely refined and contain less than 3% DMSO extract according to IP 346 method, and are therefore not classified as carcinogen according to Regulation (EC) No 1272/2008, note L.

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

Full text of abbreviated H statements

H304	May be fatal if swallowed and enters airways.	
H315	Causes skin irritation.	
H318	Causes serious eye damage.	
H411	Toxic to aquatic life with long lasting effects.	
H413	May cause long lasting harmful effects to aquatic life.	

Full text of classifications [CLP/GHS]

Aquatic Chronic 2 Aquatic Chronic 4 Asp. Tox. 1 Eye Dam. 1 Skin Irrit. 2	AQUATIC HAZARD (LONG-TERM) - Category 2 AQUATIC HAZARD (LONG-TERM) - Category 4 ASPIRATION HAZARD - Category 1 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1 SKIN CORROSION/IRRITATION - Category 2
Training advice	: Ensure operatives are trained to minimise exposures.
Date of printing	: 18-11-2022
Date of issue/ Date of revision	: 18-11-2022
Date of previous issue	e : 20-09-2019
Version	: 1.01
Prepared by	: Kuwait Petroleum Research & Technology B.V., The Netherlands
Notice to reader	

Notice to reader

The information in this SDS is based on the present state of our knowledge and on current laws. The product is not to be used for purposes other than those specified under section 1 without first obtaining written handling instructions. It is always the responsibility of the user to take all necessary steps to fulfill the demands set out in the local rules and legislation. The information in this SDS is meant to be a description of the safety requirements for our product. It is not to be considered a guarantee of the product's properties.