SAFETY DATA SHEET

Q8 Formula Exclusive RN FE 0W-20



SECTION 1: Identific undertaking	ation of the substance/mixture and of the company/
1.1 Product identifier	
Product name	: Q8 Formula Exclusive RN FE 0W-20
Viscosity or Type	: SAE 0W-20
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	: Q8 Danmark A/S Arne Jacobsens Allé 17 2300 København S, Danmark Tel.: +45 7012 4545 Email: produktteknik@Q8.dk Web: www.Q8.dk
Manufacturer / Distributor	 Kuwait Petroleum Belgium N.V./S.A. Petroleumkaai 7 B-2020 Antwerp Belgium I Q8Oils Italia S.r.l. 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
Denmark	: +45 8988 2286 CARECHEM24
Europe	: +44 (0) 1235 239 670
Global (English only)	: +44 (0) 1865 407 333
National advisory body/Poi	son Center
Denmark	: Bispebjerg Hospital - poison line : +45 8212 1212
SECTION 2: Hazards	identification
2.1 Classification of the subs	stance or mixture
Product definition	: Mixture
Classification according to Not classified.	Regulation (EC) No. 1272/2008 [CLP/GHS]
The product is not classified a	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 deta	iled information on health effects and symptoms.
2.2 Label elements	
Signal word	: No signal word.
Hazard statements	No known significant effects or critical hazards.

Date of issue/Date of revision

Precautionary statements

: 13-03-2025 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	-	Contains C14-16-18 Alkyl Phenol, Benzoic acid, 2-hydroxy-, mono-C14-18-alkyl derivs., calcium salts (2:1) and Benzenesulfonic acid, methyl-, mono-C20-24-branched alkyl derivs., calcium salts. May produce an allergic reaction. 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.
Special packaging requirem	nen	<u>ts</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	:	Prolonged or repeated contact may dry skin and cause irritation.

SECTION 3: Composition/information on ingredients

3.2 Mixtures	: Mixture				
Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Туре
♥istillates (petroleum), hydrotreated heavy paraffinic	REACH #: 01-2119484627-25 EC: 265-157-1 CAS: 64742-54-7 Index: 649-467-00-8	≥50 - ≤75	Asp. Tox. 1, H304	-	[1] [2]
Severely refined mineral oil (C15 - C50) * - Not classified.	-	≤10	Not classified.	-	[2]
Distillates (petroleum), hydrotreated heavy paraffinic	REACH #: 01-2119484627-25 EC: 265-157-1 CAS: 64742-54-7 Index: 649-467-00-8	≤10	Not classified.	-	[2]
Severely refined mineral oil (C15 - C50) * - H304	-	≤3	Asp. Tox. 1, H304	-	[1] [2]
bis(nonylphenyl)amine	REACH #: 01-2119488911-28	≤3	Aquatic Chronic 3, H412	-	[1]
Date of issue/Date of revision	: 13-03-2025 Date	e of previous is	sue : 20-11-2024	Version : 1.0)2 2/21

SECTION 3: Composition/information on ingredients

			greatento		
	EC: 701-385-4 CAS: 36878-20-3				
C14-16-18 Alkyl Phenol	REACH #: 01-2119498288-19 EC: 931-468-2	≤3	Skin Sens. 1B, H317 STOT RE 2, H373 (liver)	Skin Sens. 1, H317: C ≥ 10%	[1]
Benzoic acid, 2-hydroxy-, mono-C14-18-alkyl derivs., calcium salts (2:1)	EC: 601-337-1 CAS: 114959-46-5	<1	Skin Sens. 1B, H317	-	[1]
Benzenesulfonic acid, methyl-, mono- C20-24-branched alkyl derivs., calcium salts	EC: 682-816-2 CAS: 722503-68-6	≤1	Skin Sens. 1B, H317	Skin Sens. 1, H317: C ≥ 2%	[1]
(tetrapropenyl)succinic acid	REACH #: 01-2120752504-57 EC: 248-698-8 CAS: 27859-58-1	≤0.3	Skin Irrit. 2, H315 Eye Dam. 1, H318 Repr. 2, H361 STOT RE 2, H373 (liver) See Section 16 for the full text of the H statements declared above.	-	[1]

* Contains one or more of the following:

CAS: 64742-56-9, EC: 265-159-2, EU REACH: 01-2119480132-48 CAS: 64742-54-7, EC: 265-157-1, EU REACH: 01-2119484627-25 CAS: 64742-65-0, EC: 265-169-7, EU REACH: 01-2119471299-27 CAS: 64742-70-7, EC: 265-174-4, EU REACH: 01-2119487080-42

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

[1] 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	: Wash 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.

Q8 Formula Exclusive RN FE 0W-20

SECTION 4: First aid measures

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	1	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.

42	Most important	symptoms a	and effects	both acute and	delayed

Over-exposure signs/	symptoms
Eye contact	: No specific data.
Inhalation	: No specific data.
Skin contact	: Adverse symptoms may include the following: irritation dryness cracking
Ingestion	: No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician	: K 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: Firefighting measures

5.1 Extinguishing media		
Suitable extinguishing media	1	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 f	rom	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
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 if 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 chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, pro	tective equipment and emergency procedures
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 for	containment and cleaning up
Small spill	: Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
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. Dispose of via a licensed waste disposal contractor. 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.
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	: Not available.
Industrial sector specific	: Not available.
solutions	

Q8 Formula Exclusive RN FE 0W-20

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
₱istillates (petroleum), hydrotreated heavy paraffinic	Working Environment Authority (Denmark, 3/2024) [olietåge, mineraloliepartikler] TWA 8 hours: 1 mg/m ³ . Form: mist and particles.
	STEL 15 minutes: 2 mg/m ³ . Form: mist and particles.
	EU OEL (Europe)
	TWA: 5 mg/m³.
Severely refined mineral oil (C15 - C50) * - Not	EU OEL (Europe)
classified.	TWA 8 hours: 5 mg/m ³ . Form: Mist.
	STEL 15 minutes: 10 mg/m ³ . Form: Mist.
Distillates (petroleum), hydrotreated heavy paraffinic	Working Environment Authority (Denmark, 3/2024) [olietåge, mineraloliepartikler]
	TWA 8 hours: 1 mg/m ³ . Form: mist and particles.
	STEL 15 minutes: 2 mg/m ³ . Form: mist and particles.
	EU OEL (Europe)
	TWA: 5 mg/m³.
Severely refined mineral oil (C15 - C50) * -	EU OEL (Europe)
H304	TWA 8 hours: 5 mg/m ³ . Form: Mist.
	STEL 15 minutes: 10 mg/m ³ . Form: Mist.

Biological exposure indices

No exposure indices known.

Recommended monitoring procedures : 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.

DNELs/DMELs

Product/ingredient name

Distillates (petroleum), hydrotreated heavy paraffinic

Result

DNEL - General population - Long term - Oral 0.74 mg/kg bw/day Effects: Systemic

DNEL - Workers - Long term - Dermal 0.97 mg/kg bw/day <u>Effects</u>: Systemic

DNEL - General population - Long term - Inhalation 1.19 mg/m³ Effects: Local

DNEL - Workers - Long term - Inhalation 2.73 mg/m³ Effects: Systemic

DNEL - Workers - Long term - Inhalation 5.58 mg/m³ <u>Effects</u>: Local

Q8 Formula Exclusive RN FE 0W-20

Distillates (petroleum), hydrotreated heavy baraffinic	DNEL - General population - Long term - Oral 0.74 mg/kg bw/day <u>Effects</u> : Systemic
	DNEL - Workers - Long term - Dermal 0.97 mg/kg bw/day <u>Effects</u> : Systemic
	DNEL - General population - Long term - Inhalation 1.19 mg/m ³ <u>Effects</u> : Local
	DNEL - Workers - Long term - Inhalation 2.73 mg/m ³ <u>Effects</u> : Systemic
	DNEL - Workers - Long term - Inhalation 5.58 mg/m ³ <u>Effects</u> : Local
C14-16-18 Alkyl Phenol	DNEL - Workers - Long term - Dermal 0.3 mg/kg bw/day <u>Effects</u> : Systemic
	DNEL - Workers - Long term - Inhalation 1.17 mg/m ³ <u>Effects</u> : Systemic
enzoic acid, 2-hydroxy-, mono-C14-18-alkyl erivs., calcium salts (2:1)	DNEL - General population - Long term - Oral 0.5 mg/kg bw/day <u>Effects</u> : Systemic
	DNEL - General population - Long term - Dermal 0.5 mg/kg bw/day <u>Effects</u> : Systemic
	DNEL - Workers - Long term - Dermal 1 mg/kg bw/day <u>Effects</u> : Systemic
tetrapropenyl)succinic acid	DNEL - General population - Long term - Oral 0.2 mg/kg bw/day <u>Effects</u> : Systemic
	DNEL - General population - Long term - Dermal 0.3 mg/kg bw/day <u>Effects</u> : Systemic
	DNEL - General population - Long term - Inhalation 0.3 mg/m ³ <u>Effects</u> : Systemic
	DNEL - Workers - Long term - Dermal 0.7 mg/kg bw/day <u>Effects</u> : Systemic
	DNEL - Workers - Long term - Inhalation 1.2 mg/m ³ <u>Effects</u> : Systemic

Q8 Formula Exclusive RN FE 0W-20

SECTION 8: Exposure controls/personal protection

8.2 Exposure controls		
Appropriate engineering controls	: Good general ventilation should be sufficient to control worker exposure to airborn contaminants.	ie
Individual protection meas	r <mark>es</mark>	
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 clothin 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 wit side-shields.	5,
Skin protection		
Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard shou be worn at all times when handling chemical products if a risk assessment indicate 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.	
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. Gas and combination filter cartridges should comply with the European standard EN14387.	nt
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.	3

SECTION 9: Physical and chemical properties

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

<u>Appearance</u>	
Physical state	: Liquid. [Oily liquid.]
Appearance	: Clear
Color	: Yellow
Odor	: Slight
Odor threshold	: Not available.
Melting point/freezing point	: Not applicable.
Pour point	: <-30°C (<-22°F) [ASTM D 97]
Boiling point or initial boiling point and boiling range	: >300°C (>572°F)
Flammability	: Not applicable.

Q8 Formula Exclusive RN FE 0W-20

SECTION 9: Physical and chemical properties

Lower and upper explosion limit	: Not available.
Flash point	: Open cup: >200°C (>392°F) [ASTM D 92]
Auto-ignition temperature	: >300°C (>572°F)
Decomposition temperature	: >300°C
рН	: Not applicable.
Viscosity	 Kinematic (40°C (104°F)): 42.38 mm²/s (42.38 cSt) [ASTM D 445] Kinematic (100°C (212°F)): 8.37 mm²/s (8.37 cSt) [ASTM D 445]

Solubility

	Media		Result		
cold water hot water			Not soluble Not soluble		
Partition coefficient n-octanol/ : Not applicable. water (log Pow)		Not applicable.			
V	apor pressure	:	<0.01 kPa (<0.075006 mm Hg)		
D	ensity	:	0.84 g/cm³ [15°C (59°F)] [ASTM D 4052]		
R	elative vapor density	÷	Not available.		
<u>P</u>	article characteristics				
	ledian particle size	:	Not applicable.		

9.2 Other information

9.2.1 Information with regard to physical hazard classes				
Explosive properties	: Not applicable.			
Oxidizing properties	: Not applicable.			
9.2.2 Other safety characteristics				

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9.2.2 Other safety characteristics

Not applicable.

SECTION 10: Stability and reactivity

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.

Q8 Formula Exclusive RN FE 0W-20

SECTION 11: Toxicological information

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

Product/ingredient name Severely refined mineral oil (C15 - C50) * -Not classified.

Result

Rabbit - Dermal - LD50 >5000 mg/kg

Rat - Oral - LD50 >5000 mg/kg

Rat - Male, Female - Inhalation - LC50 Dusts and mists 5.53 mg/l [4 hours] Acute Inhalation Toxicity

Severely refined mineral oil (C15 - C50) * - H304

Rabbit - Dermal - LD50 >5000 mg/kg

Rat - Oral - LD50 >5000 mg/kg

Rat - Male, Female - Inhalation - LC50 Dusts and mists 5.53 mg/l [4 hours] Acute Inhalation Toxicity

Benzoic acid, 2-hydroxy-, mono-C14-18-alkyl derivs., calcium salts (2:1)

Rat - Oral - LD50 >5000 mg/kg

Conclusion/Summary [Product] : 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

Skin corrosion/irritation

Product/ingredient name

Severely refined mineral oil (C15 - C50) * -Not classified.

Severely refined mineral oil (C15 - C50) * -

Result

Rabbit - Skin - Erythema/EscharDuration of treatment/exposure: 72 hoursObservation period: 7 daysIrritation score: 0.17Fully reversible in 7 days or less

Rabbit - Skin - Edema

<u>Duration of treatment/exposure</u>: 72 hours <u>Observation period</u>: 7 days <u>Irritation score</u>: 0 Fully reversible in 7 days or less

Rabbit - Skin - Erythema/Eschar

<u>Duration of treatment/exposure</u>: 72 hours <u>Observation period</u>: 7 days <u>Irritation score</u>: 0.17 Fully reversible in 7 days or less

Rabbit - Skin - Edema

Duration of treatment/exposure: 72 hours

H304

Q8 Formula Exclusive RN FE 0W-20

SECTION 11: Toxicological information

<u>Observation period</u>: 7 days <u>Irritation score</u>: 0 Fully reversible in 7 days or less

Conclusion/Summary [Product] : Not available.

Serious eye damage/eye irritation

Product/ingredient name

Severely refined mineral oil (C15 - C50) * -Not classified.

Result

Rabbit - Eyes - Iris lesion Acute Eye Irritation/Corrosion <u>Duration of treatment/exposure</u>: 48 hours <u>Observation period</u>: 72 hours <u>Irritation score</u>: 0 Fully reversible in 7 days or less

Rabbit - Eyes - Redness of the conjunctivae

Acute Eye Irritation/Corrosion <u>Duration of treatment/exposure</u>: 48 hours <u>Observation period</u>: 72 hours <u>Irritation score</u>: 0.33 Fully reversible in 7 days or less

Severely refined mineral oil (C15 - C50) * - H304

Rabbit - Eyes - Iris lesion

Acute Eye Irritation/Corrosion <u>Duration of treatment/exposure</u>: 48 hours <u>Observation period</u>: 72 hours <u>Irritation score</u>: 0 Fully reversible in 7 days or less

Rabbit - Eyes - Redness of the conjunctivae

Acute Eye Irritation/Corrosion <u>Duration of treatment/exposure</u>: 48 hours <u>Observation period</u>: 72 hours <u>Irritation score</u>: 0.33 Fully reversible in 7 days or less

Conclusion/Summary [Product] : Not available.

Respiratory corrosion/irritation

Not available.

Conclusion/Summary [Product] : Not available.

Respiratory or skin sensitization

Product/ingredient name

Severely refined mineral oil (C15 - C50) * - Not classified.

Severely refined mineral oil (C15 - C50) * - H304

Result

Guinea pig - skin Skin Sensitization Result: Not sensitizing

Guinea pig - skin Skin Sensitization <u>Result</u>: Not sensitizing

Skin

Conclusion/Summary [Product] : Not available.

Respiratory

Date of issue/Date of revision

SECTION 11: Toxicological information

Conclusion/Summary [Product] : Not available.

Germ cell mutagenicity

Product/ingredient name

Severely refined mineral oil (C15 - C50) * -Not classified.

Severely refined mineral oil (C15 - C50) * - H304

Result

In vivo - Mammalian-Animal - Somatic - Intraperitoneal Mammalian Erythrocyte Micronucleus Test <u>Result</u>: Negative

In vivo - Mammalian-Animal - Somatic - Intraperitoneal Mammalian Erythrocyte Micronucleus Test <u>Result</u>: Negative

Conclusion/Summary [Product] : Not available.

Carcinogenicity

Product/ingredient name

Severely refined mineral oil (C15 - C50) * -Not classified.

Severely refined mineral oil (C15 - C50) * - H304

Result

Mouse - Female - Dermal - TC Carcinogenicity Studies 78 weeks <u>Result</u>: Negative

Mouse - Female - Dermal - TC Carcinogenicity Studies 78 weeks <u>Result</u>: Negative

Conclusion/Summary [Product] : Not available.

Reproductive toxicity

Product/ingredient name

Severely refined mineral oil (C15 - C50) * -Not classified.

Severely refined mineral oil (C15 - C50) * - H304

Result

Rat - Male, Female - Oral Reproduction/Developmental Toxicity Screening Test 1000 mg/kg <u>Effects</u>: No effect level. <u>Maternal toxicity</u>: Negative <u>Fertility effects</u>: Negative <u>Developmental</u>: Negative

Rat - Male, Female - Oral

Reproduction/Developmental Toxicity Screening Test 1000 mg/kg <u>Effects</u>: No effect level. <u>Maternal toxicity</u>: Negative <u>Fertility effects</u>: Negative <u>Developmental</u>: Negative

Conclusion/Summary [Product] : Not available.

Specific target organ toxicity (single exposure) Not available.

Specific target organ toxicity (repeated exposure)

Product/ingredient name

14-16-18 Alkyl Phenol (tetrapropenyl)succinic acid Result

STOT RE 2, H373 (liver) STOT RE 2, H373 (liver)

SECTION 11: Toxicological information

Aspiration hazard		
Product/ingredient name		Result
Ďístillates (petroleum), hydrotro	eated heavy	ASPIRATION HAZARD - Category 1
paraffinic Severely refined mineral oil (C	15 - C50) * -	ASPIRATION HAZARD - Category 1
H304		
Information on the likely rout	<u>es of exposure</u>	
Not available.		
Potential acute health effects		
Eye contact	: No known significa	ant effects or critical hazards.
Inhalation	: No known significa	ant effects or critical hazards.
Skin contact	•	in. May cause skin dryness and irritation.
Ingestion	-	ant effects or critical hazards.
Symptoms related to the phy		toxicological characteristics
Eye contact	: No specific data.	
Inhalation	: No specific data.	
Skin contact	: Adverse symptoms irritation	s may include the following:
	dryness	
	cracking	
Ingestion	: No specific data.	
Delayed and immediate effec	ts and also chronic	effects from short and long term exposure
<u>Short term exposure</u>		
Potential immediate effects	: Not available.	
Potential delayed effects	: Not available.	
Long term exposure		
Potential immediate effects	: Not available.	
Potential delayed effects	: Not available.	
Potential chronic health effect	<u>xts</u>	
Product/ingredient name		Result
Severely refined mineral oil (C Not classified.	15 - C50) * -	Sub-chronic - Rat - Male, Female - Oral - NOAEL Subchronic Dermal Toxicity: 90-day Study ≥2000 mg/kg [5 days per week] [13 weeks]
		Sub-acute - Rat - Male - Oral - LOAEL Repeated Dose 90-Day Oral Toxicity Study in Rodents 125 mg/kg [5 hours per day] [13 weeks]
		Sub-acute - Rat - Male - Inhalation - NOAEL >980 mg/m³ [5 days per week] [4 weeks]
Severely refined mineral oil (C H304	15 - C50) * -	Sub-chronic - Rat - Male, Female - Oral - NOAEL Subchronic Dermal Toxicity: 90-day Study ≥2000 mg/kg [5 days per week] [13 weeks]
		Sub-acute - Rat - Male - Oral - LOAEL Repeated Dose 90-Day Oral Toxicity Study in Rodents 125 mg/kg [5 hours per day] [13 weeks]
		Sub-acute - Rat - Male - Inhalation - NOAEL >980 mg/m³ [5 days per week] [4 weeks]
Conclusion/Summary [Proc		
General	: Prolonged or repeator or dermatitis.	ated contact can defat the skin and lead to irritation, cracking and
Date of issue/Date of revision	: 13-03-2025 Date o	f previous issue : 20-11-2024 Version : 1.02 13/2

Q8 Formula Exclusive RN FE 0W-20

SECTION 11: Toxicological information

Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Reproductive toxicity	: No known significant effects or critical hazards.

11.2 Information on other hazards

Not available.

- **Conclusion/Summary [Product]** : The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.

11.2.2 Other information

Not available.

SECTION 12: Ecological information

12.1 Toxicity

H304

Product/ingredient name Severely refined mineral oil (C15 - C50) * -Not classified.

Severely refined mineral oil (C15 - C50) * -

Result

Acute - NEL - Fresh water Fish, Acute Toxicity Test Fish - Pimephales promelas ≥100 mg/l [96 hours]

Acute - NEL - Fresh water

Daphnia sp. Acute Immobilization Test and Reproduction Test Daphnia - Daphnia Magma >10000 mg/l [48 hours]

Chronic - NEL - Fresh water

Daphnia Magna Reproduction Test Daphnia - Daphnia magna 10 mg/l [21 days] Effect: Reproduction

Acute - NEL - Fresh water

Alga, Growth Inhibition Test Algae >100 mg/l [72 hours] Effect: (growth rate)

Acute - NEL - Fresh water

Fish, Acute Toxicity Test Fish - Pimephales promelas ≥100 mg/l [96 hours]

Acute - NEL - Fresh water

Daphnia sp. Acute Immobilization Test and Reproduction Test Daphnia - Daphnia Magma >10000 mg/l [48 hours]

Chronic - NEL - Fresh water

Daphnia Magna Reproduction Test Daphnia - Daphnia magna 10 mg/l [21 days] Effect: Reproduction

Acute - NEL - Fresh water

Alga, Growth Inhibition Test Algae >100 mg/l [72 hours] Effect: (growth rate)

Q8 Formula Exclusive RN FE 0W-20

SECTION 12: Ecological information

Conclusion/Summary [Product] : Not available.

12.2 Persistence and degradability

Not available.

Conclusion/Summary [Product] : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Severely refined mineral oil (C15 - C50) * - Not classified.	-	-	Inherent
Distillates (petroleum), hydrotreated heavy paraffinic	-	-	Inherent
Severely refined mineral oil (C15 - C50) * - H304	-	-	Inherent

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
♥istillates (petroleum), hydrotreated heavy paraffinic bis(nonylphenyl)amine Benzoic acid, 2-hydroxy-, mono-C14-18-alkyl derivs., calcium salts (2:1)	>1 3.64 to 7.02 5.32	- 1730 23442	Low High High

12.4 Mobility in soil

Soil/Water partition coefficient

Not available.

Results of PMT and vPvM assessment

Product/ingredient name	РМТ	Р	Μ	т	vPvM	vP	vM
₱ Øistillates (petroleum), hydrotreated heavy paraffinic	No	No	No	No	No	No	No
Severely refined mineral oil (C15 - C50) * - Not classified.	No	No	No	No	No	No	No
Distillates (petroleum), hydrotreated heavy paraffinic	No	No	No	No	No	No	No
Severely refined mineral oil (C15 - C50) * - H304	No	No	No	No	No	No	No
bis(nonylphenyl)amine	No	No	No	No	No	No	No
C14-16-18 Alkyl Phenol	No	No	No	No	No	No	No
Benzoic acid, 2-hydroxy-, mono-C14-18-alkyl derivs., calcium salts (2:1)	No	No	No	No	No	No	No
Benzenesulfonic acid, methyl-, mono- C20-24-branched alkyl derivs., calcium salts	No	No	No	No	No	No	No
(tetrapropenyl)succinic acid	No	No	No	No	No	No	No
Mobility	: Not av	ailable.			1		

Conclusion/Summary

Not available.

: The product does not meet the criteria to be considered as a PMT or vPvM.

12.5 Results of PBT and vPvB assessment Regulation (EC) No. 1907/2006 [REACH]

Q8 Formula Exclusive RN FE 0W-20

SECTION 12: Ecological information

Product/ingredient name	PBT	Р	В	Т	vPvB	vP	vB
Distillates (petroleum), hydrotreated heavy paraffinic	No	No	No	No	No	No	No
Severely refined mineral oil (C15 - C50) * - Not classified.	No	No	No	No	No	No	No
Distillates (petroleum), hydrotreated heavy paraffinic	No	No	No	No	No	No	No
Severely refined mineral oil (C15 - C50) * - H304	No	No	No	No	No	No	No
bis(nonylphenyl)amine	No	No	No	No	No	No	No
C14-16-18 Alkyl Phenol	No	No	No	No	No	No	No
Benzoic acid, 2-hydroxy-, mono-C14-18-alkyl derivs., calcium salts (2:1)	No	No	No	No	No	No	No
Benzenesulfonic acid, methyl-, mono- C20-24-branched alkyl derivs., calcium salts	No	No	No	No	No	No	No
(tetrapropenyl)succinic acid	No	No	No	No	No	No	No

egulation (EC) No. 1272/2008 [CLP]

Product/ingredient name	PBT	Р	В	т	vPvB	vP	vB
D ístillates (petroleum), hydrotreated heavy paraffinic	No	No	No	No	No	No	No
Severely refined mineral oil (C15 - C50) * - Not classified.	No	No	No	No	No	No	No
Distillates (petroleum), hydrotreated heavy paraffinic	No	No	No	No	No	No	No
Severely refined mineral oil (C15 - C50) * - H304	No	No	No	No	No	No	No
bis(nonylphenyl)amine	No	No	No	No	No	No	No
C14-16-18 Alkyl Phenol	No	No	No	No	No	No	No
Benzoic acid, 2-hydroxy-, mono-C14-18-alkyl derivs., calcium salts (2:1)	No	No	No	No	No	No	No
Benzenesulfonic acid, methyl-, mono- C20-24-branched alkyl derivs., calcium salts	No	No	No	No	No	No	No
(tetrapropenyl)succinic acid	No	No	No	No	No	No	No

Conclusion/Summary Regulation (EC) No. 1272/2008 [CLP]

: The product does not meet the criteria to be considered as a PBT or vPvB.

12.6 Endocrine disrupting properties

Not available.

Conclusion/Summary [Product]

: The product does not meet the criteria to be considered as having endocrine disrupting properties according to the criteria set out in either Regulation (EC) No. 1907/2006 or Regulation (EC) No 1272/2008.

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
13 02 05*	mineral-based non-chlorinated engine, gear and lubricating oils
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

Q8 Formula Exclusive RN FE 0W-20

SECTION 15: Regulate	ory information
15.1 Safety, health and environ	nmental regulations/legislation specific for the substance or mixture
EU Regulation (EC) No. 1907/	/2006 (REACH)
Annex XIV - List of substand	ces subject to authorization
Annex XIV	
None of the components are	e listed.
Substances of very high co	oncern
None of the components are	e listed.
Annex XVII - Restrictions on	the manufacture, placing on the market and use of certain dangerous
substances, mixtures and art	
No listed substance	
Other EU regulations	
	: Not listed
(integrated pollution	
prevention and control) - Air	
	: Not listed
(integrated pollution	
prevention and control) -	
Water	
	: Not applicable.
Ozone depleting substances	<u>s (EU 2024/590)</u>
Not listed.	
Prior Informed Consent (PIC	C) (649/2012/EU)
Not listed.	
Persistent Organic Pollutan	<u>ts (1021/2019/EU)</u>
Not listed.	
Seveso Directive	
This product is not controlled	under the Seveso Directive.
National regulations	
<u>Denmark</u>	
Product registration number	: PR-nr. 4443977
	: IV-1
	: 00-5
	: According to the regulations on work involving coded products, the following
	stipulations apply to the use of personal protective equipment:
	General: Gloves must be worn for all work that may result in soiling. Apron/ coveralls/protective clothing must be worn when soiling is so great that regular work clothes do not adequately protect skin against contact with the product. A face shield must be worn in work involving spattering if a full mask is not required. In this case, other recommended use of eye protection is not required.
	In all spraying operations in which there is return spray, the following must be worn: respiratory protection and arm protectors/apron/coveralls/protective clothing as appropriate or as instructed.

Q8 Formula Exclusive RN FE 0W-20

SECTION 15: Regulatory information

ezerient ier kegalak	, y momaton			
	MAL-code: 00-5 Application: When using scraper or knife, brush, roller etc. for pre- and post- treatments in a spray booth where the operator is outside the spray zone and when working in similar new* facilities of the combined-cabin, spray-cabin and spray-booth type where the operator is working inside the spray zone. When spraying in new* booths and cabins with non-atomizing guns. During downtimes, cleaning and repair of closed facilities, spray booths or cabins, if there is a risk of contact with wet paint or organic solvents. During non-atomizing spraying in existing* facilities of the combined-cabin, spray-cabin and spray-booth type where the operator is working inside the spray zone. When using scraper or knife, brush, roller, etc. for pre- and post-treatments in cabins or booths of the existing* facility type, if the operator is inside the spray zone. When using scraper or knife, brush, roller, etc. for pre- and post-treatments outside a closed facility, spray booth or spray cabin.			
	- Protective clothing must be worn.			
	When spraying in existing* spray booths, if the operator is outside the spray zone.			
	- Air-supplied full mask and protective clothing must be worn.			
	During all spraying where atomization occurs in cabins or spray booths where the operator is inside the spray zone and during spraying outside a closed facility, cabin or booth.			
	- Air-supplied full mask, protective clothing and hood must be worn.			
	Drying: Items for drying/drying ovens that are temporarily placed on such things as rack trolleys, etc. must be equipped with a mechanical exhaust system to prevent fumes from wet items from passing through workers' inhalation zone.			
	Polishing: When polishing treated surfaces, a mask with dust filter must be worn. When machine grinding, eye protection must be worn. Work gloves must always be worn.			
	Caution The regulations contain other stipulations in addition to the above.			
	*See Regulations.			
<u>Germany</u> Hazard class for water : (WGK)	1			
International regulations	Exempt.			
Not listed.	n List Schedules I, II & III Chemicals			
Montreal Protocol Not listed.				
Stockholm Convention on Persistent Organic Pollutants Not listed.				
Rotterdam Convention on Pri- Not listed.	or Informed Consent (PIC)			

SECTION 15: Regulatory information

UNECE Aarhus	Protocol	on	POPs	and	Heavy	Metals
Natiatad						

Not listed.

Assessment

Inventory list		
Australia	:	Al components are listed or exempted.
Canada	:	All components are listed or exempted.
China	:	Not determined.
Eurasian Economic Union	:	Russian Federation inventory: Not determined.
Japan	1	Japan inventory (CSCL): All components are listed or exempted. Japan inventory (ISHL): Not determined.
New Zealand	:	All components are listed or exempted.
Philippines	:	All components are listed or exempted.
Republic of Korea	:	Al components are listed or exempted.
Taiwan	:	All components are listed or exempted.
Thailand	:	Not determined.
Turkey	:	Not determined.
United States of America	:	All components are active or exempted.
Viet Nam	1	Not determined.
15.2 Chemical Safety	:	Chemical Safety Assessments for all substances in this product are either Complete

SECTION 16: Other information

Indicates information that has changed from previously issued version

or Not applicable.

NOEL / NOEC = No Observed Effect Level / Concentration	Abbreviations and acronyms	 ADN = European Provisions concerning the International Carriage of Dangerous 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 EC5 = 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 ID50 = Median lethal concentration ID50 = 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 	5
OECD = Organisation for Economic Co-operation and Development		NOAEL / NOAEC = No Observed Adverse Effect Level / Concentration	

Q8 Formula Exclusive RN FE 0W-20

SECTION 16: Other information

OEL = Occupational Exposure Limit PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration 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

⊮ 304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H361	Suspected of damaging fertility or the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.

Full text of classifications [CLP/GHS]

Aquatic Chronic 3	AQUATIC HAZARD (LONG-TERM) - Category 3
Asp. Tox. 1	ASPIRATION HAZARD - Category 1
Eye Dam. 1	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
Repr. 2	TOXIC TO REPRODUCTION - Category 2
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1B	SKIN SENSITIZATION - Category 1B
STOT RE 2	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
Training advice	: Ensure operatives are trained to minimise exposures.
Date of printing	: 13-03-2025
Date of issue/ Date of	: 13-03-2025
revision	
Date of previous issue	e : 20-11-2024
Version	: 1.02
Prepared by	: Kuwait Petroleum Research & Technology B.V., The Netherlands
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.