SAFETY DATA SHEET

Q8 Marine Engine Oil O-278-2 SAE 40



SECTION 1: Identific undertaking	ation of the substance/mixture and of the company/
1.1 Product identifier	
Product name	: Q8 Marine Engine Oil O-278-2 SAE 40
Viscosity or Type	: SAE 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	: Q8Oils Italia S.r.l. Via Volpedo 2 15050 Castellar Guidobono (AL) Tel. +39 02-90595.1, Fax +39 02-90076347 e-mail: Q8OilsItalia@Q8.it
Manufacturer / Distributor	: Q8Oils Italia S.r.I. Via Volpedo 2 15050 Castellar Guidobono (AL) Italy Italy Januar Januar
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
Italy	• 800 600 702 (Tall frag)
Europe	: +44 (0) 1235 239 670
Global (English only)	: +44 (0) 1865 407 333
National advisory body/Po	
Italy	: CAV "Osp. Pediatrico Bambino Gesù" Dip. Emergenza e Accettazione DEA (ROMA) : 06 68593726 Az. Osp. Univ. Foggia (FOGGIA) : 800183459 Az. Osp. "A. Cardarelli" (NAPOLI) : 081-5453333 CAV Policlinico "Umberto I" (ROMA) : 06-49978000 CAV Policlinico "A. Gemelli" (ROMA) : 06-3054343 Az. Osp. "Careggi" U.O. Tossicologia Medica (FIRENZE) : 055-7947819 CAV Centro Nazionale di Informazione Tossicologica (PAVIA) : 0382-24444 Osp. Niguarda Ca' Granda (MILANO) : 02-66101029 Azienda Ospedaliera Papa Giovanni XXII (BERGAMO) : 800883300 Azienda Ospedaliera Integrata Verona (VERONA) : 800011858

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture Product definition : Mixture <u>Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]</u>

Not classified.

The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.

Ingredients of unknown : None. toxicity

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SECTION 2: Hazards identification

- Ingredients of unknown
- ecotoxicity

: None.

See Section 11 for more detailed information on health effects and symptoms.

0.0 Label elemente		
2.2 Label elements		Nie eine eine eine
Signal word		No signal word.
Hazard statements	÷	No known significant effects or critical hazards.
Precautionary statements		
Prevention	÷	Not applicable.
Response	4	Not applicable.
Storage	1	Not applicable.
Disposal	:	Not applicable.
Supplemental label elements	:	Contains Reaction products of benzenesulfonic acid, mono-C20-24 (even)-sec-alkyl derivs. para-, calcium salts and maleic anhydride. 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	en	<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	1	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
Severely refined mineral oil (C15 - C50) * - Not classified.	-	≥75 - ≤90	Not classified.	-	[2]
Severely refined mineral oil (C15 - C50) * - H304	-	≤10	Asp. Tox. 1, H304	-	[1] [2]
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]
Reaction products of	REACH #:	≤3	Skin Sens. 1B, H317	Skin Sens. 1, H317:	[1]
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SECTION 3: Composition/information on ingredients						
benzenesulfonic acid, mono-C20-24 (even)-sec- alkyl derivs. para-, calcium salts maleic anhydride	01-2119521205-53 01-2120765489-36 EC: 947-519-7 CAS: 1078715-97-5 REACH #: 01-2119472428-31 EC: 203-571-6 CAS: 108-31-6 Index: 607-096-00-9	<0.001	Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Resp. Sens. 1, H334 Skin Sens. 1A, H317 STOT RE 1, H372 (inhalation)	C ≥ 4.654% ATE [Oral] = 400 mg/kg Skin Sens. 1, H317: C ≥ 0.001%	[1]	

EUH071

above.

See Section 16 for the full text of the H statements declared

CAS: 64742-57-0, EC: 265-160-8, EU REACH: 01-2119489287-22 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. Type

[1] Substance classified with a health or environmental hazard

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

[2] Substance with a workplace exposure limit

Contains one or more of the following:

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

SECTION 4: First aid measures

4.1 Description of first aid n	neasures
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.
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.
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.
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SECTION 4: First aid measures

Over-exposure signs/symp	toms
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 immedia	ate medical attention and special treatment needed
Notes to physician	 Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	: No specific treatment.
SECTION 5: Firefight	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 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 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 chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective 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".				

SECTION 6: Accidental release measures

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 material	s for containment 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.
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 Advice on general occupational hygiene	 Put on appropriate personal protective equipment (see Section 8). 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.
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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.

1.3 5	pecific	end	use	S)

Recommendations

: Not available.

Industrial sector specific solutions

: 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

SECTION 8: Exposure controls/personal protection

Product/ingredient name	Exposure limit values
Severely refined mineral oil (C15 - C50) * - Not classified.	EU OEL (Europe) TWA 8 hours: 5 mg/m³. Form: Mist. STEL 15 minutes: 10 mg/m³. Form: Mist.
Severely refined mineral oil (C15 - C50) * - H304	EU OEL (Europe) TWA 8 hours: 5 mg/m³. Form: Mist. STEL 15 minutes: 10 mg/m³. 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	Туре	Exposure	Value	Population	Effects
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
maleic anhydride	DNEL	Long term Inhalation	0.05 mg/m ³	General population	Systemic
	DNEL	Long term Oral	0.06 mg/ kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	0.08 mg/m ³	General population	Local
	DNEL	Long term Inhalation	0.081 mg/ m³	Workers	Local
	DNEL	Long term Inhalation	0.081 mg/ m³	Workers	Systemic
	DNEL	Short term Oral	0.1 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	0.1 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	0.1 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	0.2 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Dermal	0.2 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	0.2 mg/m ³	Workers	Local
	DNEL	Short term Inhalation	0.2 mg/m ³	Workers	Systemic

PNECs

No PNECs available.

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SECTION 8: Exposure controls/personal protection

8.2 Exposure controls	
Appropriate engineering controls	: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
Individual protection meas	<u>ures</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.
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

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	: Yellowish-brown.				
Odor	: Slight				
Odor threshold	: Not available.				
Melting point/freezing point	: Not applicable.				
Pour point	: <-24°C (<-11.2°F) [ASTM D 97]				
Boiling point or initial boiling point and boiling range	: >300°C (>572°F)				
Flammability	: Not applicable.				
Lower and upper explosion limit	: Not available.				
Flash point	: Open cup: >210°C (>410°F) [ASTM D 92]				
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Auto-ignition temperature	: >300°C (>572°F)
Decomposition temperature	: >300°C
pH	: Not applicable.
Viscosity	: Kinematic (40°C (104°F)): 138 mm²/s (138 cSt) [ASTM D 445] Kinematic (100°C (212°F)): 14.6 mm²/s (14.6 cSt) [ASTM D 445]
Solubility	:
Media	Result
cold water hot water	Not soluble Not soluble
Solubility in water	: Not available.
Partition coefficient n-octanol/ water (log Pow)	: Not applicable.
Vapor pressure	: <0.01 kPa (<0.075006 mm Hg)
Density	: 0.9 g/cm³ [15°C (59°F)] [ASTM D 4052]
Relative vapor density	: Not available.
Explosive properties	: Not applicable.
Oxidizing properties	: Not applicable.
Particle characteristics	
Median particle size	: Not applicable.

- Explosive properties
- : Not applicable.
- **Oxidizing properties** : Not applicable.

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.

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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 (C15 - C50) * - Not classified.	LC50 Inhalation Dusts and mists	Rat - Male, Female	5.53 mg/l	4 hours
	LD50 Dermal LD50 Oral	Rabbit Rat	>5000 mg/kg >5000 mg/kg	-
Severely refined mineral oil (C15 - C50) * - H304	LC50 Inhalation Dusts and mists	Rat - Male, Female	5.53 mg/l	4 hours
	LD50 Dermal LD50 Oral	Rabbit Rat	>5000 mg/kg >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	-
maleic anhydride	LD50 Dermal LD50 Oral	Rabbit Rat	2620 mg/kg 400 mg/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 Phosphorodithioic acid, mixed O,O-bis (1,3-dimethylbutyl and iso-Pr) esters, zinc salts	N/A 3200	N/A N/A	N/A N/A	N/A N/A	5.53 N/A
maleic anhydride	400	2620	N/A	N/A	N/A

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Severely 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
	Skin - Edema	Rabbit	0	72 hours	7 days
	Skin - Erythema/Eschar	Rabbit	0.17	72 hours	7 days
maleic anhydride	Eyes - Severe irritant	Rabbit	-	1 %	-

Conclusion/Summary : Not available.

Respiratory or skin 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

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Conclusion/Summary

y : Not available.

Mutagenicity

Product/ingredient name	Test	Experiment	Result
Severely refined mineral oil (C15 - C50) * - Not classified. Severely refined mineral oil (C15 - C50) * - H304	474 Mammalian Erythrocyte Micronucleus Test 474 Mammalian Erythrocyte Micronucleus Test	Experiment: In vivo Subject: Mammalian-Animal Cell: Somatic Experiment: In vivo Subject: Mammalian-Animal Cell: Somatic	Negative 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

Conclusion/Summary : Not available.

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

Teratogenicity

Product/ingredient name	Result	Species	Dose	Exposure
(C15 - C50) * - Not classified.	Negative - Dermal Negative - Dermal	Rat Rat	2000 mg/kg 2000 mg/kg	7 days per week 7 days per week
(C15 - C50) * - H304			2000 mg/kg	r duys per week

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

: Not available.

Not available.

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
maleic anhydride	Category 1	inhalation	-

Aspiration hazard

Product/ingredient name	Result
Severely refined mineral oil (C15 - C50) * - H304	ASPIRATION HAZARD - Category 1

Information on the likely : Not available. routes of exposure Potential acute health effects

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SECTION 11: Toxico	logical information				
Eye contact	: No known significant effects	No known significant effects or critical hazards.			
Inhalation	: No known significant effects	s or critical hazard	ls.		
Skin contact	: Defatting to the skin. May c	ause skin drynes	s and irritation.		
Ingestion	: No known significant effects	No known significant effects or critical hazards.			
Symptoms related to the phy	vsical, chemical and toxicolog	ical characterist	ics		
Eye contact	: No specific data.				
Inhalation	: No specific data.				
Skin contact	: Adverse symptoms may inc irritation dryness cracking	Adverse symptoms may include the following: irritation dryness			
Ingestion	: No specific data.				
Delayed and immediate effect	ts and also chronic effects fro	om short and lor	ng term exposure		
Short term exposure					
Potential immediate effects	: Not available.				
Potential delayed effects	: Not available.	Not available.			
Long term exposure Potential immediate effects	: Not available.	: Not available.			
Potential delayed effects	: Not available.				
Potential chronic health eff	<u>ects</u>				
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	Sub-acute LOAEL Oral Rat - Male 125 mg/kg 13 weeks; 5				

	Sub-chronic NOAEL Oral Sub-acute NOAEL Inhalation Vapor	Rat - Male, Female Rat - Male	≥2000 mg/kg >980 mg/m³	13 weeks; 5 days per week 4 weeks; 5 days per week
Conclusion/Summary	: Not available.			
General	: Prolonged or repeated conta or dermatitis.	act can defat the sl	kin and lead to irrita	ition, cracking and/
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

11.2.1 Endocrine disrupting properties

Not available.

11.2.2 Other information

(C15 - C50) * - H304

Not available.

hours per day

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 - <i>Daphnia Magma</i>	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 - <i>Daphnia Magma</i>	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
maleic anhydride	Acute LC50 230 ppm Fresh water	Fish - Gambusia affinis - Adult	96 hours

12.2 Persistence and degradability

Conclusion/Summary : Not available. Product/ingredient name Aquatic half-life Photolycic

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

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Phosphorodithioic acid, mixed O,O-bis (1,3-dimethylbutyl and iso- Pr) esters, zinc salts	0.56	-	Low
maleic anhydride	-2.78	-	Low

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

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SECTION 15: Regulatory information 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture EU Regulation (EC) No. 1907/2006 (REACH) 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 on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

No listed substance	
Other EU regulations	
Industrial emissions (integrated pollution prevention and control) - Air	: Not listed
Industrial emissions (integrated pollution prevention and control) - Water	: Not listed
Explosive precursors	: Not applicable.
Ozone depleting substance Not listed.	es (1005/2009/EU)
Prior Informed Consent (P Not listed.	<u>IC) (649/2012/EU)</u>

Persistent Organic Pollutants (1021/2019/EU) Not listed.

Seveso Directive

This product is not controlled under the Seveso Directive.

National regulations

Germany Hazard class for water : 1 (WGK) Italy : Not determined. D.Lgs. 152/06 D.Lgs. 81/2008 : Health and Safety in the workplace. D.Lgs. 25/2002 : Protection against risks from chemical agents. D.Lgs. 65/2003 : Classification Labelling and Packaging of Dangerous Products. D.M. 14/01/2008 : List of work related deseases that require notification. **Switzerland 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.

SECTION 15: Regulatory information

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Assessment

Inventory list		
Australia	:	All components are listed or exempted.
Canada	:	All components are listed or exempted.
China	:	All components are listed or exempted.
Eurasian Economic Union	:	Russian Federation inventory: Not determined.
Japan	:	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	:	All 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	:	Not determined.
15.2 Chemical Safety	:	Chemical Safety Assessments for all substances in this product are either Complete

SECTION 16: Other information

or Not applicable.

Indicates information that	t has changed from previously issued version.
Abbreviations and acronyms	 chas changed from previously issued version. 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 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 Maritime Organisation ISO = International Concentration 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
Determine (Determinister)	

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SECTION 16: Other information

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
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

Harmful if swallowed.
May be fatal if swallowed and enters airways.
Causes severe skin burns and eye damage.
Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye damage.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Causes damage to organs through prolonged or repeated exposure.
Toxic to aquatic life with long lasting effects.
Corrosive to the respiratory tract.

Full text of classifications [CLP/GHS]

Acute Tox. 4	ACUTE TOXICITY - Category 4		
Aquatic Chronic 2	AQUATIC HAZARD (LONG-TERM) - Category 2		
Asp. Tox. 1	ASPIRATION HAZARD - Category 1		
Eye Dam. 1	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1		
Resp. Sens. 1	RESPIRATORY SENSITIZATION - Category 1		
Skin Corr. 1B	SKIN CORROSION/IRRITATION - Category 1B		
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2		
Skin Sens. 1A	SKIN SENSITIZATION - Category 1A		
Skin Sens. 1B	SKIN SENSITIZATION - Category 1B		
STOT RE 1	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1		
Training advice	: Ensure operatives are trained to minimise exposures.		
Date of printing	: 15-04-2024		
Date of issue/ Date of revision	: 15-04-2024		
Date of previous issue	e : 12-04-2023		
Version	: 1.01		
Prepared by	: Kuwait Petroleum Research & Technology B.V., The Netherlands		
Date of issue/Date of revision	on : 15-04-2024 Date of previous issue : 12-04-2023 Version : 1.01 16	6/17	

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SECTION 16: Other information

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.