

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

SDS #: 35930

Date of the previous version: 2017-10-31

QUARTZ 9000 ENERGY 0W-30

Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE

Revision Date: 2018-04-05

COMPANY/UNDERTAKING 1.1. Product identifier QUARTZ 9000 ENERGY 0W-30 Product name Number LLU Substance/mixture Mixture 1.2. Relevant identified uses of the substance or mixture and uses advised against Motor oil. **Identified uses** 1.3. Details of the supplier of the safety data sheet A - TOTAL UK LIMITED Supplier 183 Eversholt St, Kings Cross London, NW1 1BU UNITED KINGDOM Tel: +44 (0)20 7339 8000 Fax: +44 (0)20 7339 8033 **B - TOTAL LUBRIFIANTS** 562 Avenue du Parc de L'ile 92029 Nanterre Cedex

For further information, please contact:

Contact Point	A - HSE
E-mail Address	B - HSE A - rm.gb-msds@total.co.uk
	B - rm.msds-lubs@total.com

FRANCE

Tél: +33 (0)1 41 35 40 00 Fax: +33 (0)1 41 35 84 71

1.4. Emergency telephone number

Emergency telephone: +44 1235 239670

UK: National Poisons Information Service (NPIS): NHS on 111 or a doctor

Section 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Version 4



QUARTZ 9000 ENERGY 0W-30

Revision Date: 2018-04-05

Version 4

REGULATION (EC) No 1272/2008 ***

For the full text of the H-Statements mentioned in this Section, see Section 2.2.***

Classification

The product is not classified as dangerous according to Regulation (EC) No. 1272/2008***

2.2. Label elements

Labelled according to

REGULATION (EC) No 1272/2008***

Signal word None***

Hazard Statements *** None***

Precautionary statements None***

Supplemental Hazard Statements EUH210 - Safety data sheet available on request***

EUH208 - Contains C14-16-18 Alkyl phenol. May produce an allergic reaction***

2.3. Other hazards

Physical-Chemical PropertiesContaminated surfaces will be extremely slippery.***Environmental propertiesThe product may form an oil film on the water surface that may stop the oxygen

exchange.***

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixture***

Chemical nature

The product is made from refined mineral base oils and synthetic oils.***

Hazardous components	***				
Chemical Name	EC-No	REACH Registration Number	CAS-No	Weight %	Classification (Reg. 1272/2008)
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based***	276-738-4***	01-2119474889-13	72623-87-1	10-<20	Asp. Tox. 1 (H304)
Reaction products of 1-decene, 1-dodecene and 1-octene, hydrogenated***	605-315-2***	01-2119543695-30** *	163149-28-8	10-<20	Asp. Tox. 1 (H304) ***
Reaction products of 1-decene, hydrogenated***	-	01-2119527646-33	68649-12-7	10-<20	Asp.Tox. 1 (H304)
10-ethyl-12-heptyl-11,13-dim	604-767-8***	01-2119523580-47**	151006-60-9	10-<20	Asp. Tox. 1 (H304)



QUARTZ 9000 ENERGY 0W-30

Revision Date: 2018-04-05

Version 4

ethyltricosane; 8-ethyl-9,11-dimethyl-10-non vlnonadecane ***		*			***
Distillates (petroleum), hydrotreated heavy paraffinic***	265-157-1***	01-2119484627-25	64742-54-7	1-<3	Asp. Tox. 1 (H304)
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based***	276-737-9***	01-2119474878-16	72623-86-0	1-<3	Asp. Tox. 1 (H304)
bis(nonylphenyl)amine***	253-249-4***	01-2119488911-28	36878-20-3	1-<2.5	Aquatic Chronic 4 (H413)
C14-16-18 Alkyl phenol***	931-468-2***	01-2119498288-19	^	1-<3	STOT RE 2 (H373) Skin Sens. 1B (H317)

Additional information Product of

Product containing mineral oil with less than 3% DMSO extract as measured by IP 346.***

For the full text of the H-Statements mentioned in this Section, see Section 16.

Section 4: FIRST AID MEASURES

4.1. Description of first aid measures

General advice	IN CASE OF SERIOUS OR PERSISTENT CONDITIONS, CALL A DOCTOR OR EMERGENCY MEDICAL CARE.***
Eye contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing.***
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse.***
Inhalation	Remove casualty to fresh air and keep at rest in a position comfortable for breathing. If not breathing, give artificial respiration.***
Ingestion	Clean mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Call a physician or poison control centre immediately.***
Protection of first-aiders	First aider needs to protect himself. See Section 8 for more detail. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.***
4.2. Most important sympto	ms and effects, both acute and delayed
Eye contact	Not classified based on available data.***
Skin contact	Not classified based on available data. May produce an allergic reaction.***
Inhalation	Not classified based on available data. Inhalation of vapours in high concentration may cause irritation of respiratory system.***
Ingestion	Not classified based on available data. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.***



QUARTZ 9000 ENERGY 0W-30

Revision Date: 2018-04-05

Version 4

4.3. Indication of any imme	ediate medical attention and special treatment needed
Notes to physician	Treat symptomatically.***
Section 5: FIRE-FIGHTING N	MEASURES
5.1. Extinguishing media	
Suitable extinguishing media	Carbon dioxide (CO 2). ABC powder. Foam. Water spray or fog.***
Unsuitable Extinguishing Media	Do not use a solid water stream as it may scatter and spread fire.
5.2. Special hazards arising	g from the substance or mixture
Special hazard	Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot. These may be highly dangerous if inhaled in confined spaces or at high concentration. Phosphorous oxides, Nitrogen oxides (NOx), Zinc oxides, Combustion products include sulphur oxides (SO2 and SO3) and Hydrogen sulphide H2S, Mercaptans.***
5.3. Precautions for fire-fig	hters
Special protective equipment for fire-fighters	Wear self-contained breathing apparatus and protective suit.
Other information	Cool containers / tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
Section 6: ACCIDENTAL RE	LEASE MEASURES
6.1. Personal precautions,	protective equipment and emergency procedures
General Information	Do not touch or walk through spilled material. Contaminated surfaces will be extremely slippery. Use personal protective equipment. Ensure adequate ventilation. Remove all sources of ignition.***
6.2. Environmental precaut	ions_
General Information	Do not allow material to contaminate ground water system. Prevent entry into waterways, sewers, basements or confined areas. Local authorities should be advised if significant spillages cannot be contained.***
6.3. Methods and material	for containment and cleaning up
Methods for containment	Dike to collect large liquid spills. If necessary dike the product with dry earth, sand or similar non-combustible materials.***
Methods for cleaning up	Dispose of contents/container in accordance with local regulation. In case of soil contamination, remove contaminated soil for remediation or disposal, in accordance with local regulations.***
	Version EUUK



QUARTZ 9000 ENERGY 0W-30

Revision Date: 2018-04-05

Version 4

6.4. Reference to other se	ctions
Personal protective equipment	See Section 8 for more detail.
Waste treatment	See section 13.
Section 7: HANDLING AND	STORAGE
7.1. Precautions for safe h	andling
Advice on safe handling	For personal protection see section 8. Use only in well-ventilated areas. Do not breathe vapours or spray mist. Avoid contact with skin, eyes and clothing.***
Prevention of fire and explosion	Take precautionary measures against static discharges.***
Hygiene measures	Ensure the application of strict rules of hygiene by the personnel exposed to the risk of contact with the product. When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product. Regular cleaning of equipment, work area and clothing is recommended. Do not use abrasives, solvents or fuels. Do not dry hands with rags that have been contaminated with product. Do not put product contaminated rags into workwear pockets.***
7.2. Conditions for safe sto	prage, including any incompatibilities
Technical measures/Storage conditions	Keep away from food, drink and animal feedingstuffs. Keep in a bunded area. Keep container tightly closed. Preferably keep in the original container. Otherwise, reproduce all the statutory information from the labels onto the new container. Do not remove the hazard labels of the containers (even if they are empty). Design the installations in order to avoid accidental emissions of product (due to seal breakage, for example) onto hot casings or electrical contacts. Store at room temperature. Protect from moisture.***
Materials to avoid	Strong oxidising agents.***
7.3. Specific use(s)	
Specific use(s)	Please refer to Technical Data Sheet for further information.***
Section 8: EXPOSURE CON	ITROLS / PERSONAL PROTECTION
8.1. Control parametres	
Exposure limits	Mineral oil mist: USA: OSHA (PEL) TWA 5 mg/m³, NIOSH (REL) TWA 5 mg/m³, STEL 10 mg/m³, ACGIH (TLV) TWA 5 mg/m³ (highly refined)
Legend	See section 16
Derived No Effect Level (DNEL)	***



QUARTZ 9000 ENERGY 0W-30

Revision Date: 2018-04-05

Version 4

Chemical Name	Short term, systemic effects	Short term, local effects	Long term, systemic effects	Long term, local effects
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based*** 72623-87-1				5.4 mg/m ³ /8h (aerosol - inhalation)
Distillates (petroleum), hydrotreated heavy paraffinic*** 64742-54-7				5.4 mg/m ³ /8h (aerosol - inhalation)
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based*** 72623-86-0				5.4 mg/m ³ /8h (aerosol - inhalation)
bis(nonylphenyl)amine*** 36878-20-3			0.62 mg/kg bw/day Dermal 4.37 mg/m³ Inhalation	
C14-16-18 Alkyl phenol*** ^			1.17 mg/m ³ (inhalation) 0.30 mg/kg bw/day (dermal)	
DNEL Consumer***		•	, , , , , , , , , , , , , , , , , , ,	•
Chemical Name	Short term, systemic effects	Short term, local effects	Long term, systemic effects	Long term, local effects
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based*** 72623-87-1				1.2 mg/m³/24h (aerosol - inhalation)
Distillates (petroleum), hydrotreated heavy paraffinic*** 64742-54-7				1.2 mg/m³/24h (aerosol - inhalation)
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based*** 72623-86-0				1.2 mg/m³/24h (inhalatior -aerosol)
bis(nonylphenyl)amine*** 36878-20-3			0.31 mg/kg bw/day Dermal 1.09 mg/m ³ Inhalation 0.31 mg/kg bw/day Oral	

Predicted No Effect Concentration *** (PNEC)

Chemical Name	Water	Sediment	Soil	Air	STP	Oral
Lubricating oils						9.33 mg/kg food
(petroleum),						
C20-50,						
hydrotreated neutral						



QUARTZ 9000 ENERGY 0W-30

Revision Date: 2018-04-05

Version 4

oil-based*** 72623-87-1					
bis(nonylphenyl)ami ne*** 36878-20-3	0.1 mg/l fw 0.01 mg/l mw 1 mg/l or	132000 mg/kg dw fw 13200 mg/kg dw mw		1 mg/l	
C14-16-18 Alkyl phenol*** ^	0.100 mg/l (fw) 0.010 mg/l (mw) 1 mg/ (or)	4266.16 mg/kg sediment dw (fw) 426.62 mg/kg sediment dw (mw)	852.58 mg/kg soil dw	100 mg/l	

8.2. Exposure controls

Occupational Exposure Controls

Engineering measures	Apply technical measures to comply with the occupational exposure limits. Ensure adequate ventilation, especially in confined areas. When working in confined spaces (tanks, containers, etc.), ensure that there is a supply of air suitable for breathing and wear the recommended equipment.***
Personal protective equipment	
General Information	Protective engineering solutions should be implemented and in use before personal protective equipment is considered. The personal protective equipment (PPE) recommendations apply to the product AS DELIVERED. In case of mixtures or formulations, it is suggested that you contact the relevant PPE suppliers.***
Respiratory protection	None under normal use conditions. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. Respirator with combination filter for vapour/particulate (EN 14387). Type A/P1. Warning ! filters have a limited use duration. The use of breathing apparatus must comply strictly with the manufacturer's instructions and the regulations governing their choices and uses.***
Eye protection	If splashes are likely to occur, wear:. Safety glasses with side-shields. EN 166.***
Skin and body protection	Wear suitable protective clothing. Protective shoes or boots. Long sleeved clothing. Type 4/6.***
Hand protection	Hydrocarbon-proof gloves. Fluorinated rubber. Nitrile rubber. In case of prolonged contact with the product, it is recommended to wear gloves complying with EN 420 and EN 374 standards, protecting at least for 480 minutes and having a thickness of 0,38 mm at least. These values are indicative only. The level of protection is provided by the material of the glove, its technical characteristics, its resistance to the chemicals to be handled, the appropriateness of its use and its replacement frequency. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.***

Environmental exposure controls

General Information

The product should not be allowed to enter drains, water courses or the soil.



QUARTZ 9000 ENERGY 0W-30

Revision Date: 2018-04-05

Version 4

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance Colour Physical state @20°C Odour Odour Threshold		Clear*** yellow*** liquid*** characteristic*** No information available	
Property	Values	<u>Remarks</u>	Method
рН		Not applicable***	
Melting point/range ***	***	No information available***	***
***	***	***	***
Boiling point/boiling range ***	***	No information available***	***
	***		***
Flash point ***	200*** °C***		Cleveland Open Cup (COC)***
	392*** °F***		Cleveland Open Cup (COC)***
Evapouration rate		No information available***	
Flammability Limits in Air		***	
Upper ***	***	No information available***	***
Lower ***	***	No information available***	***
Vapour pressure		No information available***	
Vapour density		No information available***	
Relative density ***	*** 0.831*** -***	@ 20 °C***	***
	0.851***		
Density	831*** - *** 851*** kg/m ^{3***}	@ 20 °C***	
Water solubility	5	Insoluble***	
Solubility in other solvents		No information available***	
logPow		No information available***	
Autoignition temperature		No information available***	
Decomposition temperature ***	***	No information available***	***
Viscosity, kinematic ***	*** 69.3*** mm2/s***	@ 40 °C ***	ISO 3104 ***
Explosive properties	Not explosive***		
Oxidising properties	Not applicable***		
Possibility of hazardous reactions	None under normal proce	essing***	
		.	

9.2. Other information

No information available***

Section 10: STABILITY AND REACTIVITY

10.1. Reactivity

General Information

Freezing point ***

None under normal processing.***



QUARTZ 9000 ENERGY 0W-30

Revision Date: 2018-04-05

Version 4

10.2. Chemical stability

Stability	Stable under recommended storage conditions.					
10.3. Possibility of hazardo	0.3. Possibility of hazardous reactions					
Hazardous reactions	No dangerous reaction known under conditions of normal use.***					
10.4. Conditions to avoid						
Conditions to avoid	Keep away from open flames, hot surfaces and sources of ignition. Keep away from heat and sparks.***					
10.5. Incompatible materia	ls_					
Materials to avoid	Strong oxidising agents.***					
10.6. Hazardous Decompos	ition Products					
Hazardous Decomposition Products Incomplete combustion and thermolysis may produce gases of varying toxicity such as						

Hazardous Decomposition Products Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot. Phosphorous oxides, Nitrogen oxides (NOx), Mercaptans, Combustion products include sulphur oxides (SO2 and SO3) and Hydrogen sulphide H2S, Zinc oxides.***

Section 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute toxicity Local effects Product Information

Ingestion	. Not classified based on available data. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.***
Inhalation	. Not classified based on available data. Inhalation of vapours in high concentration may cause irritation of respiratory system.***
Eye contact	. Not classified based on available data.***
Skin contact	. Not classified based on available data. May produce an allergic reaction.***

Acute toxicity - Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Lubricating oils (petroleum), C20-50,	LD50 > 5000 mg/kg bw (rat -	LD50 > 5000 mg/kg bw (rabbit -	LC50 (4h) > 5 mg/l (aerosol) (rat -
hydrotreated neutral oil-based***	OECD 401)	OECD 402)	OECD 403)
Reaction products of 1-decene,	LD50 5000 mg/kg bw (rat -	LD50 2000 mg/kg bw (rat - OECD	
1-dodecene and 1-octene, hydrogenated***	OECD 403)***	402)***	
Reaction products of 1-decene,	LD50 > 5000 mg/kg (Rat - OECD	LD50 > 2000 mg/kg (Rabbit -	LC50 (4h) > 5000 mg/m3 (Rat -
hydrogenated***	401)	OECD 402)	Aerosol - OECD 403)



QUARTZ 9000 ENERGY 0W-30

Revision Date: 2018-04-05

Version 4

10-ethyl-12-heptyl-11,13-dimethyltricosane; 8-ethyl-9,11-dimethyl-10-nonylnonadecane	LD50 5000 mg/kg bw (rat) ***	LD50 2000 mg/kg bw (rat - OECD 402)***	LC50(4h) 5mg/L (rat - OECD 403)***	
Distillates (petroleum), hydrotreated heavy paraffinic***	LD50 > 5000 mg/kg bw (rat - OECD 420)	LD50 > 5000 mg/kg bw (rabbit - OECD 402)	LC50 (4h) > 5 mg/l (aerosol) (rat - OECD 403)	
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based***	LD50 > 5000 mg/kg bw (Rat - OECD TG 401)	LD50 > 2000 mg/kg (Rabbit - OECD 402)	LD50 (4h) > 5.53 mg/l (Rat - OECD 403)	
bis(nonylphenyl)amine***	LD50 > 5000 mg/kg (Rat - OECD 401)	LD50 > 2000 mg/kg (Rat - OECD 402)		
C14-16-18 Alkyl phenol***	LD50 2000 mg/kg bw (rat)	LD50 2000 mg/kg bw (rat)		
<u>Sensitisation</u>				
Sensitisation	Not classified based on available data. The supplier of one of the components contained within this formulation has indicated that they have data, which confirms that at the concentration used, no sensitisation classification is required. Contains senitizer(s). May produce an allergic reaction.***			
Specific effects				
Carcinogenicity	Not classified based on available data. During use in engines, contamination of oil with low levels of combustion products occurs. Used motor oils have been shown to cause skin cancer in mice following repeated application and continuous exposure. Brief or intermittent skin contact with used motor oil is not expected to have serious effects in humans if the oil is thoroughly removed by washing with soap and water.***			
Mutagenicity Germ cell mutagenicity	.*** Not classified based on available data.***			
Reproductive toxicity	Not classified based on available data.***			
Repeated Dose Toxicity				
Target Organ Effects (STOT)				
Specific target organ systemic toxicity (single exposure)	Not classified based on available data.***			
Specific target organ toxicity - repeated exposure	Not classified based on available data.***			
Aspiration toxicity	Not classified based on available data.***			
Other information				
Other adverse effects	Characteristic skin lesions (oil blisters) may develop following prolonged and repeated exposures (contact with contaminated clothing).***			

Section 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Not classified based on available data.***

Acute aquatic toxicity - Product Information***



QUARTZ 9000 ENERGY 0W-30

Revision Date: 2018-04-05

Version 4

No information available.***

Acute aquatic toxicity - Component Information

Chemical Name	Toxicity to algae	Toxicity to daphnia and other aquatic invertebrates.	Toxicity to fish	Toxicity to microorganisms
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based*** 72623-87-1	EL50 (48h) > 100 mg (Pseudokirchnerella subcapitata - OECD 201)	EL50 (48h) > 10000 mg/l (Daphnia magna - OECD 202) LL50 (24h) > 10000 mg/l (Gammarus pulex - OECD 202) LL50 (48h) > 10000 mg/l (Gammarus pulex - OECD 202) LL50 (72h) > 10000 mg/l (Gammarus pulex - OECD 202) LL50 (96h) > 10000 mg/l (Gammarus pulex - OECD 202)	LL50 (96h) > 100 mg/l (Oncorhynchus mykiss - OECD 203)	
Reaction products of 1-decene, hydrogenated*** 68649-12-7	EL50 (72h) > 1000 mg/l (WAF - Scenedesmus capricornutum - static - OECD 201)	EL50 (48h) > 1000 mg/l (WAF - Daphnia magna - static - OECD 202)	LC50 (96h) > 1000 mg/l (WAF - Oncorhynchus mykiss - semi static)	
10-ethyl-12-heptyl-11,13-dim ethyltricosane; 8-ethyl-9,11-dimethyl-10-non ylnonadecane *** 151006-60-9				EC50(16h) 10000 mg/L***
Distillates (petroleum), hydrotreated heavy paraffinic*** 64742-54-7	EL50 (48h) > 100 mg/l (Pseudokirchnerella subcapitata - OECD 201)	EL50 (48h) > 10000 mg/l (Daphnia magna - OECD 202)	LL50 (96h) > 100 mg/l (Oncorhynchus mykiss - OECD 203)	
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based*** 72623-86-0		EL50(48h) >1000 mg/l (OECD TG 202)	LL50 (96h) > 100 mg/l (OECD TG 203)	
bis(nonylphenyl)amine*** 36878-20-3	EC50 (72h) > 100 mg/l (Desmodesmus subspicatus - OECD 201)	EC50 (48h) > 100 mg/l (Daphnia magna - OECD 202)	LC50 (96h) > 100 mg/l (Brachyanio rerio - OECD 203)	
C14-16-18 Alkyl phenol*** ^		EC50(48h) > 100 mg/l (Daphnia magna - static - OECD202)		

Chronic aquatic toxicity - Product Information

No information available.**

Chronic aquatic toxicity - Component Information

Chemical Name	Toxicity to algae	Toxicity to daphnia and other aquatic invertebrates.	Toxicity to fish	Toxicity to microorganisms
Lubricating oils (petroleum),	NOEL (72h) >= 100 mg/l	NOEL (21d) 10 mg/l	NOEL (14/28d) > 1000 mg/l	
C20-50, hydrotreated neutral	(Pseudokirchnerella	(Daphnia magna - OECD	(Oncorhynchus mykiss -	
oil-based***	subcapitata - OECD 201)	211)	QSAR Petrotox)	



QUARTZ 9000 ENERGY 0W-30

Revision Date: 2018-04-05

Version 4

72623-87-1		NOEL (96h) > 100 mg/l (Pimephales promelas - OECD 203)	
Reaction products of 1-decene, hydrogenated*** 68649-12-7	NOELr(21d) 125 mg/l (Daphnia magna)		
Distillates (petroleum), hydrotreated heavy paraffinic*** 64742-54-7	NOEL (21d) 10 mg/l (Daphnia magna - QSAR Petrotox)	NOEL (14/28d) > 1000 mg/l (Oncorhynchus mykiss - QSAR Petrotox)	
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based*** 72623-86-0	NOEL (21d) = 10 mg/l (OECD TG 202)	NOELR (14d) > 1000 mg/l (QSAR modelled data)	

Effects on terrestrial organisms

No information available.***

12.2. Persistence and Degradability

General Information

No information available.

12.3. Bioaccumulative potential

Product Information

No information available.***

logPow

No information available***

Component Information

Chemical Name	log Pow
Lubricating oils (petroleum), C20-50, hydrotreated neutral oil-based*** - 72623-87-1	4.1
Reaction products of 1-decene, hydrogenated*** - 68649-12-7	5
Distillates (petroleum), hydrotreated heavy paraffinic*** - 64742-54-7	-
Lubricating oils (petroleum), C15-30, hydrotreated neutral oil-based*** - 72623-86-0	6.1
bis(nonylphenyl)amine*** - 36878-20-3	7.7

12.4. Mobility in soil

Soil Given its physical and chemical characteristics, the product generally shows low soil mobility.***

Air Loss by evaporation is limited.***

Water The product is insoluble and floats on water.***

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment No information available.***

12.6. Other adverse effects



QUARTZ 9000 ENERGY 0W-30

Revision Date: 2018-04-05

Version 4

General Information	No information available.***
Section 13: DISPOSAL CO	NSIDERATIONS
13.1. Waste treatment me	ethods
Waste from residues / unused products	Should not be released into the environment. Do not empty into drains. Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in accordance with local regulations. Where possible recycling is preferred to disposal or incineration.***
Contaminated packageing	Empty containers should be taken to an approved waste handling site for recycling or disposal.***
EWC Waste Disposal No	According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used. The following Waste Codes are only suggestions:. 13 02 05.***
Other information	Refer to section 8 for safety and protective measures for disposal personnel.***
Section 14: TRANSPORT	NFORMATION
ADR/RID	not regulated
IMDG/IMO	not regulated
ICAO/IATA	not regulated
ADN	not regulated

Section 15: REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

European Union

Further information

No information available***

15.2. Chemical Safety Assessment



QUARTZ 9000 ENERGY 0W-30

Revision Date: 2018-04-05

Version 4

Chemical Safety Assessment No information available***

15.3. National regulatory information

The United Kingdom

• Avoid exceeding occupational exposure limits (see section 8).

<u>Ireland</u>

• Avoid exceeding occupational exposure limits (see section 8).

Section 16: OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3

H304 - May be fatal if swallowed and enters airways

H317 - May cause an allergic skin reaction

H373 - May cause damage to organs through prolonged or repeated exposure

H413 - May cause long lasting harmful effects to aquatic life***

Abbreviations, acronyms

ACGIH = American Conference of Governmental Industrial Hygienists bw = body weight bw/day = body weight/day EC x = Effect Concentration associated with x% response GLP = Good Laboratory Practice IARC = International Agency for Research of Cancer LC50 = 50% Lethal concentration - Concentration of a chemical in air or a chemical in water which causes the death of 50% (one half) of a group of test animals LD50 = 50% Lethal Dose - Chemical amount, given at once, which causes the death of 50% (one half) of a group of test animals LL = Lethal Loading NIOSH = National Institute of Occupational Safety and Health NOAEL = No Observed Adverse Effect Level NOEC = No Observed Effect Concentration NOEL = No Observed Effect Level OECD = Organization for Economic Co-operation and Development OSHA = Occupational Safety and Health Administration UVCB = Substance of unknown or Variable composition, Complex reaction products or Biological material DNEL = Derived No Effect Level PNEC = Predicted No Effect Concentration dw = dry weight fw = fresh water mw = marine water or = occasional release Legend Section 8 TWA: Time Weight Average

STEL: Short Time Exposure Limit

+	Sensitiser	*	Skin designation
**	Hazard Designation	C:	Carcinogen



Version 4

SDS #: 35930

QUARTZ 9000 ENERGY 0W-30

Revision Date: 2018-04-05

M: Mutagen R: Toxic to reproduction

 Revision Date:
 2018-04-05

 Revision Note
 *** Indicates updated section.

 This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

This safety data sheet serves to complete but not to replace the technical product sheets. The information contained herein is given in good faith and is accurate to the best of knowledge at the date indicated above. It is understood by the user that any use of the product for purposes other than those for which it was designed entails potential risk. The information given herein in no way dispenses the user from knowing and applying all provisions regulating his activity. The user bears sole liability for the precautions required when using the product. The regulatory texts indicated herein are intended to aid the user to fulfil his obligations. This list is not to be considered complete and exhaustive. It is the user's responsibility to ensure that he is subject to no other obligations than those mentioned.

End of Safety Data Sheet