

# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

**SDS # :** 087692

# QUARTZ 9000 FUTURE FGC 5W-30

Date of the previous version:	not applicable <b>Revision Date:</b> 2017-07-10	Version 1
	TION OF THE SUBSTANCE/MIXTURE AND OF THE	
COMPANY/UNDERTAKI	NG	
1.1. Product identifier	-	
Product name Number	QUARTZ 9000 FUTURE FGC 5W-30 7SO	
Substance/mixture	Mixture	
1.2. Relevant identified	d uses of the substance or mixture and uses advised against	
Identified uses	Engine oil.	
1.3. Details of the sup	plier of the safety data sheet	
Supplier	TOTAL LUBRIFIANTS 562 Avenue du Parc de L'ile 92029 Nanterre Cedex FRANCE Tél: +33 (0)1 41 35 40 00 Fax: +33 (0)1 41 35 84 71	
For further information, please	e contact:	
Contact Point E-mail Address	HSE rm.msds-lubs@total.com	
1.4. Emergency teleph	one number	
Emergency telephone: +44 1238 France - ORFILA (INRS) Tél : +3 In France - Poison centers: ANGERS : 02 41 48 21 21 BORDEAUX : 05 56 96 40 80 LILLE : 08 00 59 59 59 LYON : 04 72 11 69 11 MARSEILLE : 04 91 75 25 25 NANCY : 03 83 22 50 50 DAPIS : 01 40 05 48 48		

Section 2: HAZARDS IDENTIFICATION

PARIS: 01 40 05 48 48

STRASBOURG : 03 88 37 37 37 TOULOUSE : 05 61 77 74 47

2.1. Classification of the substance or mixture



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#### 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 tris(branched-alkyl) borate. May produce an allergic reaction

#### 2.3. Other hazards

Physical-Chemical Properties Contaminated surfaces will be extremely slippery.

**Environmental properties** 

Contaminated surfaces will be extremely suppery.

I properties The 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 Hazardous ingredients

### Mineral oil of petroleum origin.

nuzul uouo mgi culento					
Chemical Name	EC-No	REACH registration No	CAS-No	Weight %	Classification (Reg. 1272/2008)
Distillates (petroleum), hydrotreated heavy paraffinic	265-157-1	01-2119484627-25	64742-54-7	40-<50	Asp. Tox. 1 (H304)
Distillates (petroleum), solvent-dewaxed heavy paraffinic	265-169-7	01-2119471299-27	64742-65-0	5-<10	Asp. Tox. 1 (H304)
zinc O,O,O',O'-tetrakis(1,3-dimet hylbutyl)	218-679-9	01-2119953275-34	2215-35-2	1-<2.5	Aquatic Chronic 2 H411 Eye Dam.1 H318 Skin Irrit. 2 H315



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bis(phosphorodithioate)					
bis(nonylphenyl)amine	253-249-4	01-2119488911-28	36878-20-3	1-<2.5	Aquatic Chronic 4 (H413)
tris(branched-alkyl) borate	-	01-2120079516-48	٨	0.3-<1	Skin Sens. 1 (H317)

Additional information 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
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# 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 Center 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 sympt	oms and effects, both acute and delayed
Eye contact	Not classified based on available data. The supplier of some components contained within this formulation has indicated that the classification as irritant is not required.
Skin contact	Not classified based on available data. May produce an allergic reaction.
Inhalation	Not classified based on available data. Inhalation of vapors in high concentration may cause irritation of respiratory system.
Ingestion	Not classified based on available data. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.
4.3. Indication of any imm	ediate medical attention and special treatment needed
Notes to physician	Treat symptomatically.

Treat symptomatically.



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### Section 5: FIRE-FIGHTING MEASURES

### 5.1. Extinguishing media

Suitable Extinguishing Media	Carbon dioxide (C	O 2). ABC powde	r. Foam. Water sp	ray or fog.

**Unsuitable Extinguishing Media** Do not use a solid water stream as it may scatter and spread fire.

### 5.2. Special hazards arising from the substance or mixture

Special Hazard 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.

### 5.3. Advice for fire-fighters

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 RELEASE 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 precautions

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.				

#### 6.4. Reference to other sections



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Personal Protective Equipment	See Section 8 for more detail.
Waste treatment	See section 13.
Section 7: HANDLING AND	) STORAGE
7.1. Precautions for safe	handling
Advice on safe handling	For personal protection see section 8. Use only in well-ventilated areas. Do not breathe vapors 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 s	torage, including any incompatibilities
Technical measures/Storage conditions	Keep away from food, drink and animal feedingstuffs. Keep in a bunded area. Keep container tightly closed. Keep preferably in the original container. Otherwise reproduce a indication of the regulation label on the new container. Do not remove the hazard labels of the containers (even if they are empty). Design the installations in order to avoid accident emissions of product (due to seal breakage, for example) onto hot casings or electrical

Materials to Avoid Strong oxidizing agents.

### 7.3. Specific end uses

**Specific use(s)** Please refer to Technical Data Sheet for further information.

# Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1. Control parameters

Exposure limits	Mineral oil mist: USA: OSHA (PEL) TWA 5 mg/m <sup>3</sup> , NIOSH (REL) TWA 5 mg/m <sup>3</sup> , STEL 10 mg/m <sup>3</sup> , ACGIH (TLV) TWA 5 mg/m <sup>3</sup> (highly refined)
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contacts. Store at room temperature. Protect from moisture.

Legend See section 16

### Derived No Effect Level (DNEL)

DNEL Worker (Industrial/Professional)



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Chemical Name	Short term, systemic effects	Short term, local effects	Long term, systemic effects	Long term, local effects
Distillates (petroleum), hydrotreated heavy paraffinic 64742-54-7				5.4 mg/m <sup>3</sup> /8h (aerosol - inhalation)
Distillates (petroleum), solvent-dewaxed heavy paraffinic 64742-65-0				5.4 mg/m <sup>3</sup> /8h (aerosol - inhalation)
zinc O,O,O',O'-tetrakis(1,3-di methylbutyl) bis(phosphorodithioate) 2215-35-2			8.6 mg/m³ Inhalation 12.2 mg/kg bw/day Dermal	
bis(nonylphenyl)amine 36878-20-3			0.62 mg/kg bw/day Dermal 4.37 mg/m³ Inhalation	
DNEL Consumer				
Chemical Name	Short term, systemic effects	Short term, local effects	Long term, systemic effects	Long term, local effects
Distillates (petroleum), hydrotreated heavy paraffinic 64742-54-7				1.2 mg/m <sup>3</sup> /24h (aerosol - inhalation)
Distillates (petroleum), solvent-dewaxed heavy paraffinic 64742-65-0				1.2 mg/m³/24h (aerosol - inhalation)
zinc O,O,O',O'-tetrakis(1,3-di methylbutyl) bis(phosphorodithioate) 2215-35-2			2.13 mg/m³ Inhalation 6.1 mg/kg bw/day Dermal 0.24 mg/kg bw/day Oral	
bis(nonylphenyl)amine 36878-20-3 Predicted No Effect Com			0.31 mg/kg bw/day Dermal 1.09 mg/m³ Inhalation 0.31 mg/kg bw/day Oral	

# Predicted No Effect Concentration (PNEC)

Chemical Name	Water	Sediment	Soil	Air	STP	Oral
zinc	0.004 mg/l fw	0.06 mg/kg dw fw	0.01 mg/kg dw		100 mg/l	10.67 mg/kg food
O,O,O',O'-tetrakis(1,	0.0046 mg/l mw	0.006 mg/kg dw				
3-dimethylbutyl)	0.045 mg/l or	mw				
bis(phosphorodithio						
ate)						
2215-35-2						
bis(nonylphenyl)ami	0.1 mg/l fw	132000 mg/kg dw	263000 mg/kg dw		1 mg/l	
ne	0.01 mg/l mw	fw			-	



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36878-20-3	1 mg/l or	13200 mg/kg dw mw				
8.2. Exposure	controls					
Occupational Expos	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 ITSELF. 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 with the product, it standards, protecti These values are i glove, its technical appropriateness of regarding permeat gloves. Also take in used, such as the	is recommended to ng at least for 480 ndicative only. The characteristics, its fits use and its rep pility and breakthro nto consideration to	to wear gloves cor minutes and having level of protection resistance to the placement frequent ough time which ar he specific local co	nplying with EN 42 ng a thickness of 0 n is provided by the chemicals to be ha cy. Please observe e provided by the conditions under wh	0 and EN 374 ,38 mm at least. e material of the andled, the e the instructions supplier of the

#### **Environmental exposure controls**

**General Information** 

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

# Section 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

### Appearance

limpid



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Color Physical State @20°C		yellow liquid		
Odor		Characteristic		
Odor Threshold		No information available		
Property	Values	<u>Remarks</u>	Method	
рН		Not applicable		
Melting point/range		Not applicable		
Boiling point/boiling range		No information available		
Flash point	<b>232 °C</b> 450 °F			
Evaporation rate	430 1	No information available		
Flammability Limits in Air		No information available		
upper		No information available		
Lower		No information available		
Vapor Pressure		No information available		
Vapor density		No information available		
Relative density	0.851	@ 15 °C		
Density	851 kg/m³	@ 15 °C		
Water solubility		Insoluble		
Solubility in other solvents		No information available		
logPow		No information available		
Autoignition temperature		No information available		
Decomposition temperature		No information available		
Viscosity, kinematic	59.9 mm2/s	@ 40 °C	ISO 3104	
Explosive properties	Not explosive			
Oxidizing Properties	Not applicable			
Possibility of hazardous reactions	None under normal proce	essing		
9.2. Other information				
Freezing Point		No information available		
Section 10: STABILITY AND REACTIVITY				
10.1. Reactivity				
General Information	None under normal proce	essing.		
	•	-		

# 10.2. Chemical stability

### Stability

Stable under recommended storage conditions.

# 10.3. Possibility of hazardous reactions

# Hazardous Reactions

No dangerous reaction known under conditions of normal use.



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### 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 materials

Materials to Avoid Strong oxidizing agents.

10.6. Hazardous Decomposition Products

Hazardous Decomposition Products Incomplete combustion and thermolysis may produce gases of varying toxicity such as carbon monoxide, carbon dioxide, various hydrocarbons, aldehydes and soot. Other decomposition products. Phosphorous oxides. Nitrogen oxides (NOx). Zinc oxides.

# Section 11: TOXICOLOGICAL INFORMATION

### 11.1. Information on toxicological effects

#### Acute toxicity Local effects Product Information

Skin contact	. Not classified based on available data. May produce an allergic reaction.
Eye contact	. Not classified based on available data. The supplier of some components contained within this formulation has indicated that the classification as irritant is not required.
Inhalation	. Not classified based on available data. Inhalation of vapors in high concentration may cause irritation of respiratory system.
Ingestion	. Not classified based on available data. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

#### Acute toxicity - Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Distillates (petroleum), hydrotreated heavy	LD50 > 5000 mg/kg bw (rat -	LD50 > 5000 mg/kg bw (rabbit -	LC50 (4h) > 5 mg/l (aerosol) (rat -
paraffinic	OECD 420)	OECD 402)	OECD 403)
Distillates (petroleum), solvent-dewaxed heavy paraffinic	LD50 > 5000 mg/kg bw (rat - OECD 420)	LD50 > 5000 mg/kg bw (rabbit - OECD 402)	LC50 (4h) > 5.53 mg/l (aerosol) (rat - OECD 403)
zinc O,O,O',O'-tetrakis(1,3-dimethylbutyl) bis(phosphorodithioate)	LD50 2230 mg/kg (Rat - OECD 401)	LD50 > 25000 mg/kg (Rabbit - OECD 402)	
bis(nonylphenyl)amine	LD50 > 5000 mg/kg (Rat - OECD 401)	LD50 > 2000 mg/kg (Rat - OECD 402)	
tris(branched-alkyl) borate	LD50 2000 mg/kg bw (rat)	LD50 2000 mg/kg bw (rat)	

#### Sensitization

#### Sensitization

Not classified based on available data. Contains sensitizer(s). May produce an allergic reaction.



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Specific effects		
Carcinogenicity	Not classified based on available data. During use in engines, contaminat levels of combustion products occurs. Used motor oils have been shown cancer in mice following repeated application and continuous exposure. E skin contact with used motor oil is not expected to have serious effects in is thoroughly removed by washing with soap and water. Product contains a suspected carcinogen.	to cause skin Brief or intermittent humans if the oil
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)		
Target Organ Effects (STOT)	Not classified based on available data.	
Specific target organ systemic toxicity (single exposure)	Not classified based on available data.	
Specific target organ systemic 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 (pimples) may develop following prolonged and exposures (contact with contaminated clothing).	d repeated

# Section 12: ECOLOGICAL INFORMATION

# 12.1. Toxicity

Not classified based on available data.

### Acute aquatic toxicity - Product Information

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
ſ	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)	



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Distillates (petroleum), solvent-dewaxed heavy paraffinic 64742-65-0		EL50 (48h) > 10000 mg/l (Daphnia magna - OECD 202)	LL50 (96h) > 100 mg/l (Oncorhynchus mykiss - OECD 203)	
zinc O,O,O',O'-tetrakis(1,3-dimet hylbutyl) bis(phosphorodithioate) 2215-35-2	EL50 (72h) 21 mg/l (Desmodesmus subspicatus - Static - OECD 201)	EL50 (48h) 23 mg/l (Daphnia magna - static - OECD 202)	LL50 (96h) 4.5 mg/l (Oncorhynchus mykiss - semi static - OECD203)	
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)	
tris(branched-alkyl) borate ^	EC50(72h) 9 mg/l (Green algae-Selenastrum capricornutum)	EC50(48h) 5.7 mg/l (Daphnia magna)	LC50(96h) 6.4 mg/l	

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
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)	
Distillates (petroleum), solvent-dewaxed heavy paraffinic 64742-65-0		NOEL (21d) 10 mg/l (Daphnia magna - OECD 211)	NOEL (14/28d) > 1000 mg/l (Oncorhynchus mykiss - QSAR Petrotox)	
zinc O,O,O',O'-tetrakis(1,3-dimet hylbutyl) bis(phosphorodithioate) 2215-35-2		NOEC (21d) 0.4 mg/l (Daphnia magna - OECD 211)		
tris(branched-alkyl) borate		NOEC(21d) 1.9 mg/l (Daphnia Magna)		

### 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



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Component Information						
Chemical Na	-	log Pow				
Distillates (petroleum), hydrotreated h		-				
zinc O,O,O',O'-tetrakis(1,3-dimethylbu		2.21				
bis(nonylphenyl)amine		7.7				
	- 30070-20-3	1.1				
<u>12.4. Mobility in soil</u>	Given its physical and che mobility.	mical characteristics, the product generally shows low soil				
Air	Loss by evaporation is limited.					
Water	The product is insoluble a	nd floats on water.				
12.5. Results of PBT and v	PvB assessment					
PBT and vPvB assessment	No information available.					
12.6. Other adverse effect	IS					
General Information	No information available.					
Section 13: DISPOSAL CON	ISIDERATIONS					
13.1. Waste treatment me	thods					
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 packaging	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 INFORMATION						
ADR/RID	Not regulated					
IMDG/IMO_	Not regulated					



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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

Chemical Safety Assessment No information available

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

H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

H318 - Causes serious eye damage

H411 - Toxic to aquatic life with long lasting effects

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



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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 PEL: Permissible exposure limit **REL:** Recommended exposure limit TLV: Threshold Limit Values Sensitizer Skin designation + \*\* Hazard Designation C: Carcinogen M: Mutagen R: Toxic to reproduction

Revision Date: Revision Note 2017-07-10 \*\*\* 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 the Safety Data Sheet