Version 1.1

Revision Date 20.01.2016

Print Date 21.01.2016

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name	:	Helix HX8 Synthetic 5W-30
Product code	:	001E9067

1.2 Relevant identified uses of the substance or mixture and uses advised against

Use of the Substance/Mixture	:	Engine oil.
Uses advised against	:	This product must not be used in applications other than those listed in Section 1 without first seeking the advice of the supplier.

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier	: Shell Deutschland Oil GmbH Suhrenkamp 71-77
	D-22335 Hamburg
Telephone	: (+49) 40 6324-6255
Telefax	: (+49) 40 6321-051
Email Contact for Safety Data	
Sheet	please email lubricantSDS@shell.com

1.4 Emergency telephone number

: (+49) 30 3068 6790 (Giftnotruf Berlin)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms	: No Hazard Symbol required	
Signal word	: No signal word	
Hazard statements	: PHYSICAL HAZARDS: Not classified as a physical hazard according to CLP criteria. HEALTH HAZARDS:	

Version 1.1	Revision Date	Revision Date 20.01.2016	
		Not classified as a hea criteria. ENVIRONMENTAL H/ Not classified as envir according to CLP crite	AZARDS: onmental hazard
Precautionary statements :	: Prevention:		
	Response:	No precautionary phra	
	Storage:	No precautionary phras Storage:	ISES.
	•	No precautionary phra	ISES.
	Disposal:	No precautionary phra	ISES.

2.3 Other hazards

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

Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis.

Used oil may contain harmful impurities.

Not classified as flammable but will burn.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature

 Synthetic base oil and additives. Highly refined mineral oil. The highly refined mineral oil contains <3% (w/w) DMSOextract, according to IP346. The highly refined mineral oil is only present as additive diluent.

Hazardous components

Chemical name	CAS-No.	Classification	Concentration
	EC-No.	(REGULATION	[%]
	Registration	(EC) No	
	number	1272/2008)	
Sulphurised calcium		Aquatic Chronic4;	1-3
phenate		H413	
Distillates (Fischer -	848301-69-9	Asp. Tox.1; H304	0 - 90
Tropsch), heavy, C18-	482-220-0 / 01-		
50 – branched, cyclic	0000020163-82		
and linear			

For explanation of abbreviations see section 16.

Version 1.1

Revision Date 20.01.2016

SECTION 4: First aid measures

4.1 Description of first aid measures				
General advice	:	Not expected to be a health hazard when used under normal conditions.		
Protection of first-aiders	:	When administering first aid, ensure that you are wearing the appropriate personal protective equipment according to the incident, injury and surroundings.		
If inhaled	:	No treatment necessary under normal conditions of use. If symptoms persist, obtain medical advice.		
In case of skin contact	:	Remove contaminated clothing. Flush exposed area with water and follow by washing with soap if available. If persistent irritation occurs, obtain medical attention.		
In case of eye contact	:	Flush eye with copious quantities of water. If persistent irritation occurs, obtain medical attention.		
If swallowed	:	In general no treatment is necessary unless large quantities are swallowed, however, get medical advice.		
4.2 Most important symptoms and effects, both acute and delayed				
Symptoms	:	Oil acne/folliculitis signs and symptoms may include formation of black pustules and spots on the skin of exposed areas. Ingestion may result in nausea, vomiting and/or diarrhoea.		
4.3 Indication of any immediate m	nec	lical attention and special treatment needed		
Treatment	:	Notes to doctor/physician: Treat symptomatically.		

SECTION 5: Firefighting measures

5.1 Extinguishing media Suitable extinguishing media Foam, water spray or fog. Dry chemical powder, carbon : dioxide, sand or earth may be used for small fires only. Unsuitable extinguishing : Do not use water in a jet. media 5.2 Special hazards arising from the substance or mixture Specific hazards during : Hazardous combustion products may include: A complex firefighting mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide may be evolved if incomplete combustion occurs. Unidentified organic and inorganic compounds.

Version 1.1	Revision Date 20.01.2016	Print Date 21.01.2016
5.3 Advice for firefighters		
Special protective equipment for firefighters	: Proper protective equipment including che gloves are to be worn; chemical resistant large contact with spilled product is expec Breathing Apparatus must be worn when a confined space. Select fire fighter's cloth relevant Standards (e.g. Europe: EN469)	suit is indicated if ted. Self-Contained approaching a fire in ning approved to
Specific extinguishing methods	: Use extinguishing measures that are appr circumstances and the surrounding enviro	opriate to local

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions	: 6.1.1 For non emergency personnel:
	Avoid contact with skin and eyes.
	6.1.2 For emergency responders:
	Avoid contact with skin and eyes.

6.2 Environmental precautions

Environmental precautions : Use appropriate containment to avoid environmental contamination. Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers.

Local authorities should be advised if significant spillages cannot be contained.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up	: Slippery when spilt. Avoid accidents, clean up immediately.
	Prevent from spreading by making a barrier with sand, earth
	or other containment material.
	Reclaim liquid directly or in an absorbent.
	Soak up residue with an absorbent such as clay, sand or other
	suitable material and dispose of properly.

6.4 Reference to other sections

For guidance on selection of personal protective equipment see Chapter 8 of this Safety Data Sheet., For guidance on disposal of spilled material see Chapter 13 of this Safety Data Sheet.

SECTION 7: Handling and storage

General Precautions : Use local exhaust ventilation if there is risk of inhalation of

SAFETY DATA SHEET Regulation 1907/2006/EC Helix HX8 Synthetic 5W-30

Version 1.1		Revision Date 20.01.2016	Print Date 21.01.2016
		vapours, mists or aerosols. Use the information in this data sheet assessment of local circumstances to appropriate controls for safe handling, this material.	help determine
7.1 Precautions for safe handlir	ıg		
Advice on safe handling	:	Avoid prolonged or repeated contact of Avoid inhaling vapour and/or mists. When handling product in drums, safe worn and proper handling equipment Properly dispose of any contaminated materials in order to prevent fires.	ety footwear should be should be used.
Product Transfer	:	This material has the potential to be a Proper grounding and bonding proceed during all bulk transfer operations.	
Fire-fighting class	:	Fires involving liquids or liquid contain includes substances which become lic temperatures.	
7.2 Conditions for safe storage,	, inc	uding any incompatibilities	
Storage class (TRGS 510)	:	10, Combustible liquids	
Other data	:	Keep container tightly closed and in a place. Use properly labeled and closa	
		Store at ambient temperature.	
		Refer to section 15 for any additional covering the packaging and storage o	
Packaging material	:	Suitable material: For containers or co steel or high density polyethylene. Unsuitable material: PVC.	ontainer linings, use mild
Container Advice	:	Polyethylene containers should not be temperatures because of possible risk	
7.3 Specific end use(s)			
Specific use(s)	:	Not applicable	

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

SAFETY DATA SHEET Regulation 1907/2006/EC Helix HX8 Synthetic 5W-30

Version 1.1

Revision Date 20.01.2016

Print Date 21.01.2016

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Oil mist, mineral		TWA	5 mg/m3	US. ACGIH Threshold Limit Values

Biological occupational exposure limits

No biological limit allocated.

Monitoring Methods

Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls. For some substances biological monitoring may also be appropriate.

Validated exposure measurement methods should be applied by a competent person and samples analysed by an accredited laboratory.

Examples of sources of recommended exposure measurement methods are given below or contact the supplier. Further national methods may be available.

National Institute of Occupational Safety and Health (NIOSH), USA: Manual of Analytical Methods http://www.cdc.gov/niosh/

Occupational Safety and Health Administration (OSHA), USA: Sampling and Analytical Methods http://www.osha.gov/

Health and Safety Executive (HSE), UK: Methods for the Determination of Hazardous Substances http://www.hse.gov.uk/

Institut für Arbeitsschutz Deutschen Gesetzlichen Unfallversicherung (IFA), Germany http://www.dguv.de/inhalt/index.jsp

L'Institut National de Recherche et de Securité, (INRS), France http://www.inrs.fr/accueil

8.2 Exposure controls

Engineering measures The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances. Appropriate measures include: Adequate ventilation to control airborne concentrations.

Where material is heated, sprayed or mist formed, there is greater potential for airborne concentrations to be generated.

General Information:

Define procedures for safe handling and maintenance of controls.

Educate and train workers in the hazards and control measures relevant to normal activities associated with this product.

Ensure appropriate selection, testing and maintenance of equipment used to control exposure, e.g. personal protective equipment, local exhaust ventilation.

Drain down system prior to equipment break-in or maintenance.

Retain drain downs in sealed storage pending disposal or subsequent recycle.

Always observe good personal hygiene measures, such as washing hands after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping.

Personal protective equipment

rsion 1.1	Revision Date 20.01.2016	Print Date 21.01.2016
	s made in consideration of the PPE direction I European Committee for Standardisation	
Personal protective equipr PPE suppliers.	ment (PPE) should meet recommended na	tional standards. Check with
Eye protection	 If material is handled such that it c protective eyewear is recommende Approved to EU Standard EN166. 	ed.
Hand protection		
Remarks	: Where hand contact with the product gloves approved to relevant stands US: F739) made from the following suitable chemical protection. PVC, gloves Suitability and durability of usage, e.g. frequency and duration resistance of glove material, dexte from glove suppliers. Contaminate replaced. Personal hygiene is a key care. Gloves must only be worn or gloves, hands should be washed a Application of a non-perfumed mod	ards (e.g. Europe: EN374, g materials may provide , neoprene or nitrile rubber a glove is dependent on n of contact, chemical wity. Always seek advice d gloves should be ey element of effective hand n clean hands. After using and dried thoroughly.
	For continuous contact we recomm breakthrough time of more than 24 for > 480 minutes where suitable g short-term/splash protection we re recognize that suitable gloves offe may not be available and in this ca time maybe acceptable so long as and replacement regimes are follo a good predictor of glove resistant dependent on the exact composition Glove thickness should be typically depending on the glove make and	40 minutes with preference gloves can be identified. For commend the same, but ring this level of protection ase a lower breakthrough appropriate maintenance wed. Glove thickness is not ce to a chemical as it is on of the glove material. y greater than 0.35 mm
Skin and body protection	 Skin protection is not ordinarily rec work clothes. It is good practice to wear chemica 	
Respiratory protection	 No respiratory protection is ordinal conditions of use. In accordance with good industrial precautions should be taken to ave If engineering controls do not mair concentrations to a level which is a health, select respiratory protection specific conditions of use and meet 	hygiene practices, oid breathing of material. ntain airborne adequate to protect worker n equipment suitable for the

Version 1.1	Revision Date 20.01.2016	Print Date 21.01.2016
	Check with respiratory protective eq Where air-filtering respirators are su appropriate combination of mask an Select a filter suitable for combined and vapours [Type A/Type P boiling meeting EN14387 and EN143.	itable, select an d filter. particulate/organic gases
Thermal hazards	: Not applicable	
Environmental exposu	e controls	
General advice	: Take appropriate measures to fulfill relevant environmental protection le contamination of the environment by Chapter 6. If necessary, prevent un being discharged to waste water. W treated in a municipal or industrial w before discharge to surface water. Local guidelines on emission limits f must be observed for the discharge vapour.	gislation. Avoid y following advice given in idissolved material from aste water should be vaste water treatment plant for volatile substances

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	:	Liquid at room temperature.
Colour	:	amber
Odour	:	Slight hydrocarbon
Odour Threshold	:	Data not available
рН	:	Not applicable
pour point	:	-48 °CMethod: ASTM D97
Initial boiling point and boiling range	:	> 280 °Cestimated value(s)
Flash point	:	244 °C Method: ASTM D92
Evaporation rate	:	Data not available
Flammability (solid, gas)	:	Data not available
Upper explosion limit	:	Typical 10 %(V)

Helix HX8 Synthetic 5W	V-3U	
Version 1.1	Revision Date 20.01.2016	Print Date 21.01.2016
Lower explosion limit	: Typical 1 %(V)	
Vapour pressure	: < 0,5 Pa (20 °C) estimated value(s)	
Relative vapour density	: > 1estimated value(s)	
Relative density	: 0,8413 (15 °C)	
Density	: 841,3 kg/m3 (15,0 °C) Method: ASTM D4052	
Solubility(ies)		
Water solubility	: negligible	
Solubility in other solvents	: Data not available	
Partition coefficient: n- octanol/water	: Pow: > 6(based on information on s	similar products)
Auto-ignition temperature	: > 320 °C	
Viscosity		
Viscosity, dynamic	: Data not available	
Viscosity, kinematic	: 71,69 mm2/s (40,0 °C) Method: ASTM D445	
	11,93 mm2/s (100 °C) Method: ASTM D445	
Explosive properties	: Not classified	
Oxidizing properties	: Data not available	
9.2 Other information		
Conductivity Decomposition temperature	This material is not expected to be aData not available	a static accumulator.

SECTION 10: Stability and reactivity

10.1 Reactivity

The product does not pose any further reactivity hazards in addition to those listed in the following sub-paragraph.

Version 1.1	Revision Date 20.01.2016	Print Date 21.01.2016
10.2 Chemical stability		
Stable. No hazardous reaction is ex	pected when handled and stored according	to provisions
10.3 Possibility of hazardous r	eactions	
Hazardous reactions	: Reacts with strong oxidising agents.	
10.4 Conditions to avoid		
Conditions to avoid	: Extremes of temperature and direct s	unlight.
10.5 Incompatible materials		
Materials to avoid	: Strong oxidising agents.	
10.6 Hazardous decomposition	ı products	
Hazardous decomposition	: Hazardous decomposition products a	re not expected to form

during normal storage.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

products

Basis fo	or assessment	:	Information given is based on data on the components and the toxicology of similar products.Unless indicated otherwise, the data presented is representative of the product as a whole, rather than for individual component(s).
Informa exposu	ation on likely routes of re	:	Skin and eye contact are the primary routes of exposure although exposure may occur following accidental ingestion.
Acute toxic	ity		
Produc	<u>:t:</u>		
Acute c	oral toxicity	:	LD50 rat: > 5.000 mg/kg Remarks: Expected to be of low toxicity:
Acute in	nhalation toxicity	:	Remarks: Not considered to be an inhalation hazard under normal conditions of use.
Acute c	lermal toxicity	:	LD50 Rabbit: > 5.000 mg/kg Remarks: Expected to be of low toxicity:

Skin corrosion/irritation

Product:

Remarks: Expected to be slightly irritating., Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis.

Version 1.1

Revision Date 20.01.2016

Serious eye damage/eye irritation

Product:

Remarks: Expected to be slightly irritating.

Respiratory or skin sensitisation

Product:

Remarks: For respiratory and skin sensitisation:, Not expected to be a sensitiser.

Germ cell mutagenicity

Product:

: Remarks: Not considered a mutagenic hazard.

Carcinogenicity

Product:

Remarks: Not expected to be carcinogenic.

Material	GHS/CLP Carcinogenicity Classification
Highly refined mineral oil	No carcinogenicity classification.

Reproductive toxicity

Product:

Remarks: Not expected to impair fertility., Not expected to be a developmental toxicant.

STOT - single exposure

Product:

Remarks: Not expected to be a hazard.

STOT - repeated exposure

Product:

Remarks: Not expected to be a hazard.

Aspiration toxicity

Product:

11 / 18

Version 1.1

Revision Date 20.01.2016

Not considered an aspiration hazard.

Further information

Product:

Remarks: Used oils may contain harmful impurities that have accumulated during use. The concentration of such impurities will depend on use and they may present risks to health and the environment on disposal., ALL used oil should be handled with caution and skin contact avoided as far as possible.

Remarks: Continuous contact with used engine oils has caused skin cancer in animal tests.

Remarks: Slightly irritating to respiratory system.

Remarks: Classifications by other authorities under varying regulatory frameworks may exist.

Summary on	evaluation of the	CMR properties
------------	-------------------	----------------

Germ cell mutagenicity- Assessment	:	This product does not meet the criteria for classification in categories 1A/1B.
Carcinogenicity - Assessment	:	This product does not meet the criteria for classification in categories 1A/1B.
Reproductive toxicity - Assessment	:	This product does not meet the criteria for classification in categories 1A/1B.

SECTION 12: Ecological information

12.1 Toxicity

Basis for assessment	Ecotoxicological data have not been determined specifically for this product. Information given is based on a knowledge of the component and the ecotoxicology of similar products. Unless indicated otherwise, the data presented is representative of the product as a whole, rather than for individual component(s).(LL/EL/IL50 expressed as the nominal amount of product required to prepare aqueous test extract).	
Toxicity to fish (Acute toxicity)	Remarks: Expected to be practically non toxic: LL/EL/IL50 > 100 mg/l	
Toxicity to crustacean (Acute	Remarks: Expected to be practically non toxic:	

Version 1.1	Revision Date 20.01.2016	Print Date 21.01.2016
toxicity)	LL/EL/IL50 > 100 mg/l	
Toxicity to algae/aquatic plants (Acute toxicity)	: Remarks: Expected to be practically LL/EL/IL50 > 100 mg/l	non toxic:
Toxicity to fish (Chronic toxicity)	: Remarks: Data not available	
Toxicity to crustacean (Chronic toxicity)	: Remarks: Data not available	
Toxicity to microorganisms (Acute toxicity)	: Remarks: Data not available	

.

12.2 Persistence and degradability	
Product:	
Biodegradability :	Remarks: Expected to be not readily biodegradable., Major constituents are expected to be inherently biodegradable, but contains components that may persist in the environment.
12.3 Bioaccumulative potential	
Product:	
Bioaccumulation :	Remarks: Contains components with the potential to bioaccumulate.
Partition coefficient: n- : octanol/water	Pow: > 6Remarks: (based on information on similar products)
12.4 Mobility in soil	
Product:	
Mobility :	Remarks: Liquid under most environmental conditions., If it enters soil, it will adsorb to soil particles and will not be mobile. Remarks: Floats on water.
12.5 Results of PBT and vPvB asse	ssment
Product:	
Assessment :	This mixture does not contain any REACH registered substances that are assessed to be a PBT or a vPvB.
12.6 Other adverse effects	
Product:	
Additional ecological : information	Product is a mixture of non-volatile components, which are not expected to be released to air in any significant quantities., Not expected to have ozone depletion potential, photochemical ozone creation potential or global warming potential. Poorly soluble mixture., May cause physical fouling of aquatic
40/40	00000400

Version 1.1

Revision Date 20.01.2016

Print Date 21.01.2016

organisms.

SECTION	N 13: Di	isposal	considera	ations

13.1 Waste treatment methods	
Product	: Waste product should not be allowed to contaminate soil or ground water, or be disposed of into the environment. Waste, spills or used product is dangerous waste.
	Disposal should be in accordance with applicable regional, national, and local laws and regulations. Local regulations may be more stringent than regional or national requirements and must be complied with.
Contaminated packaging	: Dispose in accordance with prevailing regulations, preferably to a recognized collector or contractor. The competence of the collector or contractor should be established beforehand. Disposal should be in accordance with applicable regional, national, and local laws and regulations.
Local legislation Waste catalogue	: EU Waste Disposal Code (EWC):
Waste Code	: 13 02 06*
Remarks	: Classification of waste is always the responsibility of the end user.

SECTION 14: Transport information

14.1 UN number	
ADN	: Not regulated as a dangerous good
ADR	: Not regulated as a dangerous good
RID	: Not regulated as a dangerous good
IMDG	: Not regulated as a dangerous good
ΙΑΤΑ	: Not regulated as a dangerous good
14.2 Proper shipping name	
ADN	: Not regulated as a dangerous good
ADR	: Not regulated as a dangerous good
RID	: Not regulated as a dangerous good
IMDG	: Not regulated as a dangerous good
ΙΑΤΑ	: Not regulated as a dangerous good
14.3 Transport hazard class	
ADN	: Not regulated as a dangerous good
ADR	: Not regulated as a dangerous good

Regulation 1907/2006/EC Helix HX8 Synthetic 5W-30

Version 1.1	Revision Date 20.01.2016	Print Date 21.01.2016
RID IMDG IATA	 Not regulated as a dangerous good Not regulated as a dangerous good Not regulated as a dangerous good 	
14.4 Packing group		
ADN CDNI Inland Water Waste Agreement	Not regulated as a dangerous goodNST 3411 Engine oil	
ADR RID IMDG IATA	 Not regulated as a dangerous good 	
14.5 Environmental hazards		
ADN ADR RID IMDG	 Not regulated as a dangerous good 	
14.6 Special precautions for use		
Remarks	: Special Precautions: Refer to Chapter for special precautions which a user ne needs to comply with in connection with	eds to be aware of or
14.7 Transport in bulk according	g to Annex II of MARPOL 73/78 and the IB	C Code
Pollution category Ship type Product name Special precautions	 Not applicable Not applicable Not applicable Not applicable 	
Additional Information	: MARPOL Annex 1 rules apply for bulk	shipments by sea.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture			
REACH - List of substances sub (Annex XIV)	ject to authorisation : Product is not subject to Authorisation under REACH.		
Water contaminating class (Germany)	: WGK 2 water endangering Remarks: Classification according VwVwS, Annex 2.		
Volatile organic compounds	: 0 %		
Other regulations	: Technische Anleitung Luft: Product not listed by name. Observe section 5.2.5 in connection with section 5.4.9		
	Product is subject to Vorgaben der Betriebs-Sicherheits- Verordnung (BetrSichV).		
15 / 18	800001029662		

Version 1.1		Revision Date 20.01.2016	Print Date 21.01.2016
		Youth Employment Law Not Applicat	ble.
		Maternity Protection Act Not Applical	ble
The components	of this produ	ct are reported in the following inve	ntories:
EINECS TSCA		All components listed or polymer exe All components listed.	empt.
5.2 Chemical safety	assessment		
No Chemical Safe	y Assessmen	t has been carried out for this substanc	e/mixture by the supplier.
SECTION 16: Other	information		
,			
Full text of H-Stat H304 H413	May be	fatal if swallowed and enters airways. use long lasting harmful effects to aqua	atic life.
Full text of other	abbreviations	6	
Aquatic Chronic Asp. Tox. Abbreviations and	Aspirati	aquatic toxicity on hazard The standard abbreviations and acro document can be looked up in refere scientific dictionaries) and/or website ACGIH = American Conference of G Hygienists ADR = European Agreement concern Carriage of Dangerous Goods by Ro AICS = Australian Inventory of Chem ASTM = American Society for Testin BEL = Biological exposure limits BTEX = Benzene, Toluene, Ethylber CAS = Chemical Abstracts Service CEFIC = European Chemical Industr CLP = Classification Packaging and COC = Cleveland Open-Cup DIN = Deutsches Institut fur Normung DMEL = Derived Minimal Effect Level DSL = Canada Domestic Substance EC = European Commission EC50 = Effective Concentration fifty ECETOC = European Center on Eco Toxicology Of Chemicals ECHA = European Inventory O	ence literature (e.g. es. overnmental Industrial ning the International ad nical Substances g and Materials nzene, Xylenes ry Council Labelling g l List

rsion 1.1	Revision Date 20.01.2016	Print Date 21.01.2016
	Chemical Substances	
	EL50 = Effective Loading fifty	
	ENCS = Japanese Existing and New	v Chemical Substances
	Inventory	
	EWC = Éuropean Waste Code	
	GHS = Globally Harmonised System	n of Classification and
	Labelling of Chemicals	
	IARC = International Agency for Res	search on Cancer
	IATA = International Air Transport A	
	IC50 = Inhibitory Concentration fifty	
	IL50 = Inhibitory Level fifty	
	IMDG = International Maritime Dang	erous Goods
	INV = Chinese Chemicals Inventory	
	IP346 = Institute of Petroleum test	method N° 346 for the
	determination of polycyclic aromatics	s DMSO-extractables
	KECI = Korea Existing Chemicals In	ventory
	LC50 = Lethal Concentration fifty	
	LD50 = Lethal Dose fifty per cent.	
	LL/EL/IL = Lethal Loading/Effective I	Loading/Inhibitory loading
	LL50 = Lethal Loading fifty	
	MARPOL = International Conventior	n for the Prevention of
	Pollution From Ships	
	NOEC/NOEL = No Observed Effect	Concentration / No
	Observed Effect Level	
	OE_HPV = Occupational Exposure -	
	PBT = Persistent, Bioaccumulative a	
	PICCS = Philippine Inventory of Che	emicals and Chemical
	Substances	
	PNEC = Predicted No Effect Concer	
	REACH = Registration Evaluation A	nd Authorisation Of
	Chemicals	ational Carriage of
	RID = Regulations Relating to Intern	ational Carnage of
	Dangerous Goods by Rail	
	SKIN_DES = Skin Designation	
	STEL = Short term exposure limit TRA = Targeted Risk Assessment	
	TSCA = US Toxic Substances Contr	ol Act
		OI ACI
	TWA = Time-Weighted Average vPvB = very Persistent and very Bio	accumulative
	vi vB very recision and very Bio	
Further information		
Other information	: No Exposure Scenario annex is atta	ched to this safety data
	sheet. It is a non-classified mixture of	

No Exposure Scenario annex is attached to this safety data sheet. It is a non-classified mixture containing hazardous substances as detailed in Section 3; relevant information from Exposure Scenarios for the hazardous substances contained have been integrated into the core sections 1-16 of this SDS.

A vertical bar (|) in the left margin indicates an amendment from the previous version.

SAFETY DATA SHEET Regulation 1907/2006/EC Helix HX8 Synthetic 5W-30

Version 1.1

Revision Date 20.01.2016

Print Date 21.01.2016

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.