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

1.1 Product identifier

Trade name	:	Helix Ultra 5W-40
Product code	:	001A9013

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 UK Oil Products Limited Shell Centre London SE1 7NA United Kingdom
Telephone	: (+44) 08007318888
Telefax	
Email Contact for Safety Data Sheet	: If you have any enquiries about the content of this SDS please email lubricantSDS@shell.com

1.4 Emergency telephone number

: +44-(0) 151-350-4595

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Based on available data this substance / mixture does not meet the classification criteria.

2.2 Label elements

Labelling (REGULATION (E	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.

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		HEALTH HAZARDS: Not classified as a health criteria. ENVIRONMENTAL HAZ Not classified as environ according to CLP criteria	ARDS: mental hazard
Precautionary statements :	Prevention:		
Stor	Response:	No precautionary phrase	
	Storage:	No precautionary phrase	S.
	Disposal:	No precautionary phrase	S.
	Disposal.	No precautionary phrase	S.

Safety data sheet available on request.

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

 Synthetic base oil and additives. Highly refined mineral oil. The highly refined mineral oil contains <3% (w/w) DMSO- extract, according to IP346. The highly refined mineral oil is only present as additive.
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)	
Zinc	28629-66-5	Skin Irrit.2; H315	< 2.49
dialkyldithiophosphate	249-109-7	Eye Dam.1; H318	
		Aquatic Chronic2;	
		H411	
		Skin Irrit.2; H315	
		Eye Dam.1; H318	
		Aquatic Chronic2;	

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		H411	
Alkaryl amine	36878-20-3 253-249-4 01-2119488911-28	Aquatic Chronic4; H413	1 - 3
Distillates (Fischer - Tropsch), heavy, C18- 50 – branched, cyclic and linear	848301-69-9 482-220-0 01-0000020163-82	Asp. Tox.1; H304	0 - 90

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

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. Remove contact lenses, if present and easy to do. Continue rinsing. 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 an	nd e	ffects, 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 r	med	lical attention and special treatment needed

Treatment : Notes to doctor/physician: Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

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Suitable extinguishing media	: Foam, water spray or fog. Dry chemie dioxide, sand or earth may be used for	
Unsuitable extinguishing media 5.2 Special hazards arising from	: Do not use water in a jet. the substance or mixture	
Specific hazards during firefighting	: Hazardous combustion products may mixture of airborne solid and liquid pa (smoke). Carbon monoxide may be e combustion occurs. Unidentified orga compounds.	articulates and gases evolved if incomplete
5.3 Advice for firefighters		
Special protective equipment for firefighters	: Proper protective equipment including gloves are to be worn; chemical resist large contact with spilled product is e Breathing Apparatus must be worn w a confined space. Select fire fighter's relevant Standards (e.g. Europe: EN	stant suit is indicated if xpected. Self-Contained hen approaching a fire in clothing approved to
Specific extinguishing methods	: Use extinguishing measures that are circumstances and the surrounding e	appropriate 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
	Soak up residue with an absorbent such as day, sand of other

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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 vapours, mists or aerosols. Use the information in this data sheet as input to a risk assessment of local circumstances to help determine appropriate controls for safe handling, storage and disposal of this material. 	
7.1 Precautions for safe handling	I		
Advice on safe handling	:	Avoid prolonged or repeated contact with skin. Avoid inhaling vapour and/or mists. When handling product in drums, safety footwear should be worn and proper handling equipment should be used. Properly dispose of any contaminated rags or cleaning materials in order to prevent fires.	
Product Transfer	:	Proper grounding and bonding procedures should be used during all bulk transfer operations to avoid static accumulation.	
7.2 Conditions for safe storage, i	ncl	uding any incompatibilities	
		Keep container tightly closed and in a cool, well-ventilated place. Use properly labeled and closable containers.	
		Store at ambient temperature.	
		Refer to section 15 for any additional specific legislation covering the packaging and storage of this product.	
		The storage of this product may be subject to the Control of Pollution (Oil Storage) (England) Regulations. Further guidance may be obtained from the local environmental agency office.	
Packaging material	:	Suitable material: For containers or container linings, use mild steel or high density polyethylene. Unsuitable material: PVC.	
Container Advice	:	Polyethylene containers should not be exposed to high temperatures because of possible risk of distortion.	
7.3 Specific end use(s)			
Specific use(s)	:	Not applicable.	

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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

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 hiip://www.cdc.gov/niosh/

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

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

Institut für Arbeitsschutz Deutschen Gesetzlichen Unfallversicherung (IFA), Germany hiip://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 measuresThe 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.

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Retain drain downs in sealed Always observe good persona and before eating, drinking, ar	uipment break-in or maintenance. storage pending disposal or subsequent r al hygiene measures, such as washing ha nd/or smoking. Routinely wash work cloth card contaminated clothing and footwear t	nds after handling the material ning and protective equipment
Personal protective equipm	ent	
	ade in consideration of the PPE directive propean Committee for Standardisation (C	
Personal protective equipmer PPE suppliers.	nt (PPE) should meet recommended natio	nal standards. Check with
Eye protection	: If material is handled such that it cou protective eyewear is recommended. Approved to EU Standard EN166.	
Hand protection		
Remarks	: Where hand contact with the product gloves approved to relevant standard US: F739) made from the following n suitable chemical protection. PVC, ne gloves Suitability and durability of a g usage, e.g. frequency and duration of resistance of glove material, dexterity from glove suppliers. Contaminated g replaced. Personal hygiene is a key care. Gloves must only be worn on c gloves, hands should be washed and Application of a non-perfumed moister	ds (e.g. Europe: EN374, naterials may provide eoprene or nitrile rubber glove is dependent on of contact, chemical y. Always seek advice gloves should be element of effective hand lean hands. After using d dried thoroughly.
	For continuous contact we recomme breakthrough time of more than 240 for > 480 minutes where suitable glov short-term/splash protection we reco recognize that suitable gloves offerin may not be available and in this case time maybe acceptable so long as ap and replacement regimes are followed a good predictor of glove resistances dependent on the exact composition Glove thickness should be typically g depending on the glove make and m	minutes with preference ves can be identified. For mmend the same, but og this level of protection e a lower breakthrough opropriate maintenance ed. Glove thickness is not to a chemical as it is of the glove material. greater than 0.35 mm
Skin and body protection	 Skin protection is not ordinarily requi work clothes. It is good practice to wear chemical r 	-

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lelix Ultra 5W-40			
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Respiratory protection	 No respiratory protection is ordinarily required under normal conditions of use. In accordance with good industrial hygiene practices, precautions should be taken to avoid breathing of material. If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation. Check with respiratory protective equipment suppliers. Where air-filtering respirators are suitable, select an appropriate combination of mask and filter. Select a filter suitable for combined particulate/organic gases and vapours [Type A/Type P boiling point > 65°C (149°F)] meeting EN14387 and EN143. 		
Thermal hazards	: Not applicable		
Hygiene measures	reasonably practicable.	: Exposure to this product should be reduced as low as reasonably practicable. Reference should be made to the Health and Safety Executive's publication "COSHH Essentials".	
Environmental exposure	ontrols		
General advice	relevant environmental p contamination of the env Chapter 6. If necessary being discharged to was treated in a municipal or before discharge to surfa Local guidelines on emis	ures to fulfill the requirements of protection legislation. Avoid vironment by following advice given in , prevent undissolved material from ste water. Waste water should be industrial waste water treatment plant ace water. ssion limits for volatile substances e discharge of exhaust air containing	

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

: Liquid at room temperature.
: amber
: Slight hydrocarbon
: Data not available
: Not applicable
: -45 °CMethod: ASTM D97

vapour.

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Initial boiling point and boiling range	:	> 280 °Cestimated value(s)	
Flash point	:	242 °C Method: ASTM D92 (COC)	
Evaporation rate	:	Data not available	
Flammability (solid, gas)	:	Data not available	
Upper explosion limit	:	Typical 10 %(V)	
Lower explosion limit	:	Typical 1 %(V)	
Vapour pressure	:	< 0.5 Pa (20 °C) estimated value(s)	
Relative vapour density	:	> 1estimated value(s)	
Relative density	:	0.8403 (15.0 °C)	
Density	:	840.3 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	:	log Pow: > 6(based on information on	similar products)
Auto-ignition temperature	:	> 320 °C	
Decomposition temperature	:	Data not available	
Viscosity			
Viscosity, dynamic	:	Data not available	
Viscosity, kinematic	:	79.1 mm2/s (40.0 °C) Method: ASTM D445	
		13.1 mm2/s (100 °C) Method: ASTM D445	
Explosive properties	:	Not classified	
Oxidizing properties	:	Data not available	

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9.2 Other information		
Conductivity	: This material is not expected to be a	a static accumulator.
SECTION 10: Stability and re	eactivity	
10.1 Reactivity		
The product does not pose a sub-paragraph.	any further reactivity hazards in addition to	those listed in the following
10.2 Chemical stability		
Stable. No hazardous reaction is ex	pected when handled and stored accordin	g to provisions
10.3 Possibility of hazardous re	eactions	
Hazardous reactions	: Reacts with strong oxidising agents.	
10.4 Conditions to avoid		
Conditions to avoid	: Extremes of temperature and direct	sunlight.
10.5 Incompatible materials		
Materials to avoid	: Strong oxidising agents.	
10.6 Hazardous decomposition	products	
Hazardous decomposition products	: No decomposition if stored and app	lied as directed.

11.1 Information on toxicological effects

Basis for 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).
Information on likely routes of exposure	:	Skin and eye contact are the primary routes of exposure although exposure may occur following accidental ingestion.
Acute toxicity		
Product:		
Acute oral toxicity	:	LD50 rat: > 5,000 mg/kg Remarks: Low toxicity: Based on available data, the classification criteria are not met.

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Acute inhalation toxicity	: Remarks: Based on available data, th are not met.	he classification criteria
Acute dermal toxicity	: LD50 Rabbit: > 5,000 mg/kg Remarks: Low toxicity: Based on available data, the classific	cation criteria are not met.

Skin corrosion/irritation

Product:

Remarks: Slightly irritating to skin., Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis., Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation

Product:

Remarks: Slightly irritating to the eye., Based on available data, the classification criteria are not met.

Components:

Zinc dialkyldithiophosphate:

Remarks: Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation

Product:

Remarks: For respiratory and skin sensitisation:, Not a sensitiser., Based on available data, the classification criteria are not met.

Germ cell mutagenicity

Product:

: Remarks: Non mutagenic, Based on available data, the classification criteria are not met.

Carcinogenicity

Product:

Remarks: Not a carcinogen., Based on available data, the classification criteria are not met.

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

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Reproductive toxicity

Product:

Remarks: Not a developmental toxicant., Does not impair fertility., Based on available data, the classification criteria are not met.

STOT - single exposure

Product:

Remarks: Based on available data, the classification criteria are not met.

STOT - repeated exposure

Product:

Remarks: Based on available data, the classification criteria are not met.

Aspiration toxicity

Product:

Not 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 -	: This product does not meet the criteria for classification in

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Assessment	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 components 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: LL/EL/IL50 > 100 mg/l Practically non toxic: Based on available data, the classification criteria are not met.
Toxicity to crustacean (Acute toxicity)	:	Remarks: LL/EL/IL50 > 100 mg/l Practically non toxic: Based on available data, the classification criteria are not met.
Toxicity to algae/aquatic plants (Acute toxicity)	:	Remarks: LL/EL/IL50 > 100 mg/l Practically non toxic: Based on available data, the classification criteria are not met.
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: Not readily biodegradable., Major constituents are inherently biodegradable, but contains components that may persist in the environment.

12.3 Bioaccumulative potential

Product:

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Remarks: Contains components with the potential to bioaccumulate.	
: log Pow: > 6Remarks: (based on inforr products)	mation on similar
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.	
essment	
: This mixture does not contain any REACH registered substances that are assessed to be a PBT or a vPvB.	
 Does not have ozone depletion potential, photochemical ozone creation potential or global warming potential., Product is a mixture of non-volatile components, which will not be released to air in any significant quantities under normal conditions of use. Poorly soluble mixture., Causes physical fouling of aquatic organisms. 	
	 Remarks: Contains components with the bioaccumulate. log Pow: > 6Remarks: (based on inform products) Remarks: Liquid under most environmenters soil, it will adsorb to soil particle mobile. Remarks: Floats on water. Essment This mixture does not contain any REA substances that are assessed to be a log substance that are assessed to be a log some creation potential or global warr is a mixture of non-volatile components released to air in any significant quantic conditions of use. Poorly soluble mixture., Causes physic

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product	 Recover or recycle if possible. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste classification and disposal methods in compliance with applicable regulations. Do not dispose into the environment, in drains or in water courses
	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.
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.

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Local legislation		
Waste catalogue	:	
	EU Waste Disposal Code (EWC):	
Waste Code	:	
	13 02 06*	
Remarks	: Disposal should be in accordance with national, and local laws and regulation	
	Classification of waste is always the user.	responsibility of the end

SECTION 14: Transport information

14.1 UN number	
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	
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	
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
14.4 Packing group	
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
14.5 Environmental hazards	
ADR	Not regulated as a dangerous good
RID	Not regulated as a dangerous good
IMDG	Not regulated as a dangerous good
14.6 Special precautions for user	
Remarks	Special Precautions: Refer to Chapter 7, Handling & Storage, for special precautions which a user needs to be aware of or needs to comply with in connection with transport.

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14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied. MARPOL Annex 1 rules apply for bulk shipments by sea.

SECTION 15: Regulatory information

15.1	1 Safety, health and environme	Safety, health and environmental regulations/legislation specific for the substance or mixture					
	REACH - List of substances subj (Annex XIV)		ect to authorisation : Product is not subject to Authorisation under REACH.				
	Volatile organic compounds	:	0 %				
	Other regulations	:	The regulatory information is not intended to be comprehensive. Other regulations may apply to this material. Environmental Protection Act 1990 (as amended). Health and Safety at Work etc. Act 1974. Consumers Protection Act 1987. Pollution Prevention and Control Act 1999. Environment Act 1995. Factories Act 1961. The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment (Amendment) Regulations 2011. Chemicals (Hazard Information and Packaging for Supply) Regulations 2009. Control of Substances Hazardous to Health Regulations 2002 (as amended). Merchant Shipping (Dangerous Goods and Marine Pollutants) Regulations 1997. Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995 (as amended). Personal Protective Equipment Regulations 2002. Personal Protective Equipment at Work Regulations 2005 (as amended). Control of Major Accident Hazards Regulations 1999 (as amended). Energy Act 2011. Environmental Permitting (England and Wales) Regulations 2010 (as amended). Control of Major Accident Hazards Regulations Order 2007 (as amended). Energy Act 2011. Environmental Permitting (England and Wales) Regulations 2011 (as amended). Planning (Hazardous Substances) Act 1990 and associated regulations. The Environmental Protection (Controls on Ozone-Depleting Substances) Regulations 2011. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), annex XIV. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), annex XVI.				

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	Directive 2012/18/EU on the control involving dangerous substances (Se Directive 2004/37/EC on the protect risks related to exposure to carcinog and its amendments. Directive 1994/33/EC on the protect work and its amendments. Council Directive 92/85/EEC on the to encourage improvements in the s pregnant workers and workers who or are breastfeeding and its amendment	eveso III). ion of workers from the gens or mutagens at work ion of young people at introduction of measures afety and health at work of have recently given birth

The components of this product are reported in the following inventories:

EINECS	:	All components listed or polymer exempt.
TSCA	:	All components listed.

15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16: Other information

,

Full text of H-Statemer	nts		
H304	May be fatal if swallowed and enters airways.		
H315	Causes skin irritation.		
H318	Causes serious eye damage.		
H411	Toxic to a	aquatic life with long lasting effects.	
H413	May caus	se long lasting harmful effects to aquatic life.	
Full text of other abbre	eviations		
Aquatic Chronic Asp. Tox.	Long-terr Aspiratio	n (chronic) aquatic hazard n hazard	
Eye Dam.		eye damage	
Skin Irrit.	Skin irrita		
		The standard abbreviations and acronyms used in this document can be looked up in reference literature (e.g. scientific dictionaries) and/or websites.	
		ACGIH = American Conference of Governmental Industrial Hygienists	
		ADR = European Agreement concerning the International Carriage of Dangerous Goods by Road	
		AICS = Australian Inventory of Chemical Substances	
		ASTM = American Society for Testing and Materials	
		BEL = Biological exposure limits	
		BTEX = Benzene, Toluene, Ethylbenzene, Xylenes CAS = Chemical Abstracts Service	

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	CEEIC = European Chemical Indus	CEFIC = European Chemical Industry Council			
	CLP = Classification Packaging and				
	COC = Cleveland Open-Cup	2g			
	DIN = Deutsches Institut fur Normu	ng			
	DMEL = Derived Minimal Effect Lev				
	DNEL = Derived No Effect Level				
	DSL = Canada Domestic Substance	e List			
	EC = European Commission				
	EC50 = Effective Concentration fifty	/			
	ECETOC = European Center on Ec	cotoxicology and			
	Toxicology Of Chemicals				
	ECHA = European Chemicals Ager				
	EINECS = The European Inventory	of Existing Commercial			
	Chemical Substances				
	EL50 = Effective Loading fifty				
	ENCS = Japanese Existing and Ne	w Chemical Substances			
	Inventory				
	EWC = European Waste Code	en of Oleonitian in a			
	GHS = Globally Harmonised Syster	m of Classification and			
	Labelling of Chemicals	accept on Concer			
	IARC = International Agency for Re				
	IATA = International Air Transport A IC50 = Inhibitory Concentration fifty				
	IL50 = Inhibitory Concentration my				
	IMDG = International Maritime Dan	aerous Goods			
	INV = Chinese Chemicals Inventory				
	IP346 = Institute of Petroleum test				
	determination of polycyclic aromatic				
	KECI = Korea Existing Chemicals Ir				
	LC50 = Lethal Concentration fifty				
	LD50 = Lethal Dose fifty per cent.				
	LL/EL/IL = Lethal Loading/Effective	Loading/Inhibitory loading			
	LL50 = Lethal Loading fifty	3			
	MARPOL = International Conventio	on for the Prevention of			
	Pollution From Ships				
	NOEC/NOEL = No Observed Effect	t Concentration / No			
	Observed Effect Level				
	OE_HPV = Occupational Exposure				
	PBT = Persistent, Bioaccumulative				
	PICCS = Philippine Inventory of Ch	emicals and Chemical			
	Substances				
	PNEC = Predicted No Effect Conce				
	REACH = Registration Evaluation A	And Authorisation Of			
	Chemicals				
	RID = Regulations Relating to Inter	national Carriage of			
	Dangerous Goods by Rail				
	SKIN_DES = Skin Designation				
	STEL = Short term exposure limit				
	TRA = Targeted Risk Assessment	tral A at			
	TSCA = US Toxic Substances Cont				
	TWA = Time-Weighted Average				
	vPvB = very Persistent and very Bio	baccumulative			

Version 3.7	Revision Date 18.09.2018	Print Date 19.09.2018
Further information		
Training advice	:	
	Provide adequate information, instruction operators.	ction and training for
Other information	: No Exposure Scenario annex is attact sheet. It is a non-classified mixture or substances as detailed in Section 3; Exposure Scenarios for the hazardou have been integrated into the core se	ontaining hazardous relevant information from is substances contained
	A vertical bar () in the left margin ind from the previous version.	icates an amendment
Sources of key data used to compile the Safety Data Sheet	:	
	The quoted data are from, but not lim sources of information (e.g. toxicolog Health Services, material suppliers' d IUCLID date base, EC 1272 regulation	ical data from Shell lata, CONCAWE, EU

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.