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

1.1 Product identifier

Trade name	:	Shell Turbo S4 X 32
Product code	:	001F4447

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

Use of the Substance/Mixture	:	Turbine 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 Telefax Email Contact for Safety Data Sheet	 : (+44) 08007318888 : : 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 (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.	

SAFETY DATA SHEET

According to EC No	1907/2006 as amended as at the	date of this SDS

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HEALTH HAZARDS: Not classified as a health hazard under CLP criteria. ENVIRONMENTAL HAZARDS: Not classified as environmental hazard according to CLP criteria.

Precautionary statements	:	Prevention:	
·		_	No precautionary phrases.
		Response:	
		Storage:	No precautionary phrases.
		eterager	No precautionary phrases.
		Disposal:	
			No precautionary phrases.

Safety data sheet available on request.

Sensitising components	:	Contains Alkaryl Carboxylic Acid Derivative
		May produce an allergic reaction.

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 : Fischer-Tropsch derived hydrocarbon base oil.

Hazardous components

Chemical name	CAS-No. EC-No.	Classification (REGULATION	Concentration [%]
	Registration	(EC) No	
	number	1272/2008)	
Distillates (Fischer -	848301-69-9	Asp. Tox.1; H304	20 - 40
Tropsch), heavy, C18-	482-220-0		
50 – branched, cyclic	01-0000020163-82		
and linear			
(4-	3115-49-9	Acute Tox.4; H302	0.01 - 0.09
nonylphenoxy)acetic	221-486-2	Skin Corr.1B;	
acid		H314	
		Skin Sens.1A;	
		H317	

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	Aquatic Chronic1; H411	
	here intime and easting 40	

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid meas	ures		
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 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 medical attention and special treatment needed			
Treatment	: Notes to doctor/physician: Treat symptomatically.		

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media Unsuitable extinguishing	 Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only. Do not use water in a jet.
media 2 Special hazards arising from	·
Specific hazards during	: Hazardous combustion products may include: A complex

5.2

Specific hazards during	:	Hazardous combustion products may include: A complex
firefighting		mixture of airborne solid and liquid particulates and gases

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	(smoke). Carbon monoxide may be evolved if incomplete combustion occurs. Unidentified organic and inorganic compounds.	
5.3 Advice for firefighters		
Special protective equipment for firefighters	: Proper protective equipment includir gloves are to be worn; chemical resi large contact with spilled product is e Breathing Apparatus must be worn v a confined space. Select fire fighter's relevant Standards (e.g. Europe: EN	stant suit is indicated if expected. Self-Contained when approaching a fire in s clothing approved to
Specific extinguishing methods	: Use extinguishing measures that are circumstances and the surrounding of	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.
	Avoid contact with skin and eyes.

6.2 Environmental precautions

contar	ppropriate containment to avoid environmental nination. Prevent from spreading or entering drains, s or rivers by using sand, earth, or other appropriate rs.
--------	--

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.
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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.

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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				
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, ir	ncluding any incompatibilities			
Other data	: 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 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.

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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

The provided information is made in consideration of the PPE directive (Council Directive 89/686/EEC) and the CEN European Committee for Standardisation (CEN) standards.

Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers.

Eye protection	:	If material is handled such that it could be splashed into eyes,
		protective eyewear is recommended.
		Approved to EU Standard EN166.

Hand protection

Remarks	:	Where hand contact with the product may occur the use of gloves approved to relevant standards (e.g. Europe: EN374, US: F739) made from the following materials may provide suitable chemical protection. PVC, neoprene or nitrile rubber gloves Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturizer is recommended. For continuous contact we recommend gloves with breakthrough time of more than 240 minutes with preference for > 480 minutes where suitable gloves can be identified. For short-term/splash protection we recommend the same but recognize that suitable gloves offering this level of protection may not be available and in this case a lower breakthrough time maybe acceptable so long as appropriate maintenance and replacement regimes are followed. Glove thickness is not a good predictor of glove resistance to a chemical as it is dependent on the exact composition of the glove material. Glove thickness should be typically greater than 0.35 mm depending on the glove make and model.
Skin and body protection	:	Skin protection is not ordinarily required beyond standard work clothes. It is good practice to wear chemical resistant gloves.
Respiratory protection	:	No respiratory protection is ordinarily required under normal conditions of use.

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	In accordance with good industrial hy precautions should be taken to avoid If engineering controls do not maintai concentrations to a level which is ade health, select respiratory protection e specific conditions of use and meeting Check with respiratory protective equ Where air-filtering respirators are suit appropriate combination of mask and Select a filter suitable for combined p and vapours [Type A/Type P boiling p meeting EN14387 and EN143.	breathing of material. n airborne equate to protect worker quipment suitable for the g relevant legislation. ipment suppliers. able, select an l filter. articulate/organic gases		
Thermal hazards	: Not applicable			
Hygiene measures	: Exposure to this product should be re reasonably practicable. Reference sh Health and Safety Executive's publica Essentials".	ould be made to the		
Environmental exposure controls				
General advice	: Take appropriate measures to fulfill the relevant environmental protection leg contamination of the environment by Section 6. If necessary, prevent undi being discharged to waste water. Wa treated in a municipal or industrial was before discharge to surface water. Local guidelines on emission limits for must be observed for the discharge of vapour.	islation. Avoid following advice given in ssolved material from ste water should be ste water treatment plant or volatile substances		

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	: liquid
Colour	: Colourless to pale amber
Odour	: Slight hydrocarbon
Odour Threshold	: Data not available
рН	: Not applicable
pour point	: -33 °CMethod: ISO 3016
Initial boiling point and boiling	: > 280 °Cestimated value(s)

range:230 °C Method: ISO 2592Evaporation rate:Data not availableFlammability (solid, gas):Data not availableUpper 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:> 1estimated value(s)Relative density:> 1estimated value(s)Bensity:0.827 (15 °C)Density:Data not availableSolubility(ies):Data not availableYater solubility:negligibleSolubility in other solvents:Data not availablePartition coefficient: n- octanol/water:log Pow: > 6(based on information on similar 320 °CDecomposition temperature:>Viscosity:Data not availableViscosity:Data not availableViscosity, kinematic:Data not availableViscosity, kinematic:Data not available	Print Date 05.09.2019
Flash point: $230 \ ^{\circ}$ C Method: ISO 2592Evaporation rate:Data not availableFlammability (solid, gas):Data not availableUpper 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:> 1estimated value(s)Relative density:0.827 (15 °C)Density:827 kg/m3 (15.0 °C) Method: ISO 12185Solubility(ies):negligibleSolubility in other solvents:Data not availablePartition coefficient: n- octanol/water:log Pow: > 6(based on information on similar 320 °CDecomposition temperature:>Viscosity:Data not availableViscosity:Data not availableViscosity, kinematic:Data not availableViscosity, kinematic:Data not availableViscosity, kinematic:Data not availableViscosity, kinematic:Data not available	
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Viscosity, dynamic: Data not availableViscosity, kinematic: 32 mm2/s (40.0 °C) Method: ISO 3104	
Method: ISO 3104	
Explosive properties : Not classified	
Oxidizing properties : Data not available	
0.2 Other information	
Conductivity : This material is not expected to be a static ad	ccumulator.

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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.

10.2 Chemical stability

Stable.

products

No hazardous reaction is expected when handled and stored according to provisions

10.3 Possibility of hazardous reactions

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 pr	00	lucts
Hazardous decomposition	:	No decomposition if stored and applied as directed.

SECTION 11: Toxicological information

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.
Acu	ite toxicity		
	Product:		
	Acute oral toxicity	:	LD50 rat: > 5,000 mg/kg Remarks: Low toxicity: Based on available data, the classification criteria are not met.
	Acute inhalation toxicity	:	Remarks: Based on available data, the classification criteria are not met.
	Acute dermal toxicity	:	LD50 Rabbit: > 5,000 mg/kg

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Remarks: Low toxicity: Based on available data, the classification 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.

Respiratory or skin sensitisation

Product:

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

Components:

(4-nonylphenoxy)acetic acid: Remarks: May cause an allergic skin reaction in sensitive individuals.

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	
Material	GHS/CLP Carcinogenicity Classification	
Distillates (Fischer - Tropsch), heavy, C18-50 – branched, cyclic and linear	No carcinogenicity classification.	
(4-nonylphenoxy)acetic acid	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: 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.

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Reproductive toxicity - Assessment	: This product does not meet the crite categories 1A/1B.	eria for classification in

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		Remarks: LL/EL/IL50 > 100 mg/l
toxicity)		Practically non toxic:
		Based on available data, the classification criteria are not met.
Toxicity to crustacean (Acute	:	Remarks: LL/EL/IL50 > 100 mg/l
toxicity)		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	:	Remarks: Data not available
toxicity)		
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 information products)	on on similar
Remarks: Liquid under most environmenta enters soil, it will adsorb to soil particles an mobile. Remarks: Floats on water.	
ssment	
This mixture does not contain any REACH substances that are assessed to be a PBT	
Does not have ozone depletion potential, p ozone creation potential or global warming is a mixture of non-volatile components, wh released to air in any significant quantities conditions of use. Poorly soluble mixture., Causes physical for organisms.	potential., Product hich will not be under normal
	Remarks: Contains components with the p bioaccumulate. log Pow: > 6Remarks: (based on information products) Remarks: Liquid under most environmentate enters soil, it will adsorb to soil particles and mobile. Remarks: Floats on water. Inis mixture does not contain any REACH substances that are assessed to be a PBT Does not have ozone depletion potential, p ozone creation potential or global warming is a mixture of non-volatile components, wir released to air in any significant quantities conditions of use. Poorly soluble mixture., Causes physical for

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 win 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 Section 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	Safety, health and environme	ent	al regulations/legislation specific for the substance or mixture
	REACH - List of substances su (Annex XIV)	bje	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 1992. Hazardous Waste (England and Wales) 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). 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 XIV.

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	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 amendr	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 proc	nucl are reported in the following invento	JIIC3.
EINECS	· All components listed or polymer even	nt

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

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Full text of H-Statements

H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H411	Toxic to aquatic life with long lasting effects.

Full text of other abbreviations

Acute Tox. Aquatic Chronic Asp. Tox. Skin Corr. Skin Sens. Abbreviations and Acro		
	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 CEFIC = European Chemical Industry Council	

SAFETY DATA SHEET

According to EC No 1907/2006 as amended as at the date of this SDS

/ersion 1.5	Revision Date 03.09.2019	Print Date 05.09.2019
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	CLP = Classification Packaging a	ind Labelling
	COC = Cleveland Open-Cup	5
	DIN = Deutsches Institut fur Norm	nung
	DMEL = Derived Minimal Effect L	evel
	DNEL = Derived No Effect Level	
	DSL = Canada Domestic Substar	nce List
	EC = European Commission	
	EC50 = Effective Concentration fi	
	ECETOC = European Center on	Ecotoxicology and
	Toxicology Of Chemicals	
	ECHA = European Chemicals Ag	
	EINECS = The European Invento	bry of Existing Commercial
	Chemical Substances EL50 = Effective Loading fifty	
	ENCS = Japanese Existing and N	lew Chemical Substances
	Inventory	vew Chemical Substances
	EWC = European Waste Code	
	GHS = Globally Harmonised Syst	tem of Classification and
	Labelling of Chemicals	
	IARC = International Agency for F	Research on Cancer
	IATA = International Air Transpor	
	IC50 = Inhibitory Concentration fi	fty
	IL50 = Inhibitory Level fifty	
	IMDG = International Maritime Da	
	INV = Chinese Chemicals Invento	
	IP346 = Institute of Petroleum te	
	determination of polycyclic aroma	
	KECI = Korea Existing Chemicals	
	LC50 = Lethal Concentration fifty LD50 = Lethal Dose fifty per cent	
	LL/EL/IL = Lethal Loading/Effectiv	
	LL50 = Lethal Loading fifty	
	MARPOL = International Conventional	tion for the Prevention of
	Pollution From Ships	
	NOEC/NOEL = No Observed Effe	ect Concentration / No
	Observed Effect Level	
	OE_HPV = Occupational Exposu	re - High Production Volume
	PBT = Persistent, Bioaccumulativ	
	PICCS = Philippine Inventory of C	Chemicals and Chemical
	Substances	
	PNEC = Predicted No Effect Con	
	REACH = Registration Evaluation	n And Authorisation Of
	Chemicals	
	RID = Regulations Relating to Int	emational Carriage of
	Dangerous Goods by Rail	
	SKIN_DES = Skin Designation	H
	STEL = Short term exposure limit TRA = Targeted Risk Assessmer	
	TSCA = US Toxic Substances Co	
	TWA = Time-Weighted Average	
	vPvB = very Persistent and very I	

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Further information		
Training advice	:	
	Provide adequate information, instructi operators.	on and training for
Other information	 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 fro Exposure Scenarios for the hazardous substances containe 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.	
Sources of key data used to compile the Safety Data Sheet	:	
	The quoted data are from, but not limite sources of information (e.g. toxicologic Health Services, material suppliers' dat IUCLID date base, EC 1272 regulation	al data from Shell ta, 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.