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

1.1 Product identifier

Trade name	: Shell Gadus S3 V220C 2
Product code	: 001D8425

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

Use of the Substance/Mixture	:	Automotive and industrial grease.
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	r

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

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Chronic aquatic toxicity, Category 3 H412: Harmful to aquatic life with long lasting effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)		
Hazard pictograms	No Hazard Sym	bol required
Signal word	No signal word	
Hazard statements		PHYSICAL HAZARDS: Not classified as a physical hazard according to CLP criteria.

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	H412	HEALTH HAZARDS: Not classified as a heal criteria. ENVIRONMENTAL HA Harmful to aquatic life v effects.	ZARDS:
Precautionary statements :	: Prevention: P273 Response:	Avoid release to the en	vironment.
		No precautionary phras	ses.
	Storage:	No precautionary phras	Ses.
	Disposal: P501	Dispose of contents/ co approved waste dispos	

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 grease may contain harmful impurities.

High-pressure injection under the skin may cause serious damage including local necrosis. Not classified as flammable but will burn.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature : A lubricating grease containing highly-refined mineral oils and additives. The highly refined mineral oil contains <3% (w/w) DMSO-extract, according to IP346.

Hazardous components

Chemical name	CAS-No. EC-No. Registration number	Classification (REGULATION (EC) No 1272/2008)	Concentration [%]
Alkyl thiadiazole	91648-65-6 293-927-7 01-2119976351-35	Aquatic Chronic3; H412	< 3
Trimethyldihydroquino line, homopolymer	26780-96-1	Aquatic Chronic3; H412	< 3
Zinc	68457-79-4	Skin Irrit.2; H315	< 2.4

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dialkyldithiophosphate	270-608-0	Eye Dam.1; H318 Aquatic Chronic2; H411		
Zinc naphthenate	12001-85-3 234-409-2	Skin Irrit.2; H315 Aquatic Acute1; H400 Aquatic Chronic1; H410	< 2.4	
Zinc naphthenate	84418-50-8 282-762-6	Aquatic Chronic3; H412	< 2.4	

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measure	es
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.
	When using high pressure equipment, injection of product under the skin can occur. If high pressure injuries occur, the casualty should be sent immediately to a hospital. Do not wait for symptoms to develop. Obtain medical attention even in the absence of apparent wounds.
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.
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	Local necrosis is evidenced by delay tissue damage a few hours following	
4.3 Indication of any imme	diate medical attention and special treatmen	nt needed
Treatment	: Notes to doctor/physician: Treat symptomatically.	
	High pressure injection injuries requi intervention and possibly steroid the damage and loss of function. Because entry wounds are small and seriousness of the underlying damage determine the extent of involvement anaesthetics or hot soaks should be can contribute to swelling, vasospas surgical decompression, debridement foreign material should be performed anaesthetics, and wide exploration is	rapy, to minimise tissue d do not reflect the ge, surgical exploration to may be necessary. Local avoided because they m and ischaemia. Prompt nt and evacuation of d under general

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	·	
5.2 Special hazards arising from	the substance or mixture	
Specific hazards during firefighting	: Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (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 including chemical resistant gloves are to be worn; chemical resistant suit is indicated if large contact with spilled product is expected. Self-Contained Breathing Apparatus must be worn when approaching a fire a confined space. Select fire fighter's clothing approved to relevant Standards (e.g. Europe: EN469).	
Specific extinguishing methods	: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.	

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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.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up	:	Shovel into a suitable clearly marked container for disposal or
		reclamation in accordance with local regulations.

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	
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.
7.2 Conditions for safe storage, in	cluding any incompatibilities
Other data	: Keep container tightly closed and in a cool, well-ventilated place. Use properly labeled and closable containers.

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		Store at ambient temperature.	
		Refer to section 15 for any additional s covering the packaging and storage of	
		The storage of this product may be su Pollution (Oil Storage) (England) Regu guidance may be obtained from the lo agency office.	lations. Further
Packaging material		Suitable material: For containers or co steel or high density polyethylene. Unsuitable material: PVC.	ntainer 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

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/

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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 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.

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.

Due to the product's semi-solid consistency, generation of mists and dusts is unlikely to occur.

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

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	gloves, hands should be washed an Application of a non-perfumed mois	
	For continuous contact we recomme breakthrough time of more than 240 for > 480 minutes where suitable glo short-term/splash protection we reco recognize that suitable gloves offerin may not be available and in this cas time maybe acceptable so long as a and replacement regimes are follow a good predictor of glove resistance dependent on the exact composition Glove thickness should be typically depending on the glove make and n	o minutes with preference by scan be identified. For commend the same, but ing this level of protection appropriate maintenance red. Glove thickness is not to a chemical as it is n of the glove material. greater than 0.35 mm
Skin and body protection	 Skin protection is not ordinarily required work clothes. It is good practice to wear chemical 	
Respiratory protection	 No respiratory protection is ordinaril conditions of use. In accordance with good industrial h precautions should be taken to avoi If engineering controls do not mainta concentrations to a level which is ac health, select respiratory protection specific conditions of use and meeti 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. 	avgiene practices, d breathing of material. ain airborne dequate to protect worker equipment suitable for the ng relevant legislation. uipment suppliers. uitable, select an id filter. particulate/organic gases
Thermal hazards	: Not applicable	
Hygiene measures	: Exposure to this product should be reasonably practicable. Reference s Health and Safety Executive's public Essentials".	should be made to the
Environmental exposure co	ontrols	
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	gislation. Avoid y following advice given in ndissolved material from

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treated in a municipal or industrial w before discharge to surface water.	aste water treatment plant
Local guidelines on emission limits t must be observed for the discharge	
	treated in a municipal or industrial w before discharge to surface water. Local guidelines on emission limits

SECTION 9: Physical and chemical properties

••		a	ia chemical properties
	Appearance	:	Semi-solid at ambient temperature.
	Colour	:	red
	Odour	:	Slight hydrocarbon
	Odour Threshold	:	Data not available
	рН	:	Not applicable
	Drop point	:	240 °CMethod: IP 396
	Initial boiling point and boiling range	:	Data not available
	Flash point	:	Remarks: Not applicable
	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	:	1.000 (15 °C)
	Density	:	1,000 kg/m3 (15.0 °C) Method: Unspecified
	Solubility(ies)		
	Water solubility	:	negligible
	Solubility in other solvents		Data not available
	Partition coefficient: n-	:	Pow: > 6(based on information on similar products)

9.1 Information on basic physical and chemical properties

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octanol/water		
Auto-ignition temperature	: > 320 °C	
Viscosity		
Viscosity, dynamic	: Data not available	
Viscosity, kinematic	: Not applicable	
Explosive properties	: Not classified	
Oxidizing properties	: Data not available	
9.2 Other information		
Conductivity	: This material is not expected to be a	a static accumulator.
Decomposition temperature	: Data not available	

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.

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 products		
Hazardous decomposition products	:	Hazardous decomposition products are not expected to form during normal storage.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

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Basis for assessment	: Information given is based on data or the toxicology of similar products.Unle the data presented is representative whole, rather than for individual comp	ess indicated otherwise, of the product as a
Information on likely routes of exposure	 Skin and eye contact are the primary although exposure may occur following 	routes of exposure
Acute toxicity		
Product:		
Acute oral toxicity	: LD50 rat: > 5,000 mg/kg Remarks: Expected to be of low toxic	ity:
Acute inhalation toxicity	: Remarks: Not considered to be an inl normal conditions of use.	halation hazard under
Acute dermal toxicity	: LD50 Rabbit: > 5,000 mg/kg Remarks: Expected to be of low toxic	ity:

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.

Serious eye damage/eye irritation

Product:

Remarks: Expected to be slightly irritating.

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 expected to be a sensitiser.

Germ cell mutagenicity

Product:

: Remarks: Not considered a mutagenic hazard.

Carcinogenicity

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Product:

Remarks: Not expected to be carcinogenic.

Remarks: Product contains mineral oils of types shown to be non-carcinogenic in animal skinpainting studies., Highly refined mineral oils are not classified as carcinogenic by the International Agency for Research on Cancer (IARC).

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:

Not considered an aspiration hazard.

Further information

Product:

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

Remarks: High pressure injection of product into the skin may lead to local necrosis if the

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product is not surgically removed.

Remarks: Slightly irritating to respiratory system.

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

Summary on evaluation of the Germ cell mutagenicity- Assessment	 CMR properties 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 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: Expected to be harmful:
toxicity)		LL/EL/IL50 10-100 mg/l
Toxicity to crustacean (Acute toxicity)	:	Remarks: Expected to be harmful: LL/EL/IL50 10-100 mg/l
Toxicity to algae/aquatic plants (Acute toxicity)	:	Remarks: Expected to be harmful: LL/EL/IL50 10-100 mg/l
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

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<u>Components:</u> Zinc naphthenate :	
M-Factor (Acute aquatic toxicity) Zinc naphthenate :	: 1
M-Factor (Acute aquatic toxicity)	: 1
12.2 Persistence and degradab	ility
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: Semi-solid 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 a	assessment
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 organisms. Mineral oil is not expected to cause any chronic effects to aquatic organisms at concentrations less than 1 mg/l.

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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.
Local legislation Waste catalogue	: EU Waste Disposal Code (EWC):
Waste Code	: 12 01 12*
Remarks	 Disposal should be in accordance with applicable regional, national, and local laws and regulations.
	Classification of waste is always the responsibility of the end user.
	Hazardous Waste (England and Wales) Regulations 2005.

SECTION 14: Transport information

14.1 UN number ADR	: Not regulated as a dangerous good	
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RID	: Not regulated as a dangerous good	
IMDG	: Not regulated as a dangerous good	
IATA	: 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 us	ser	
Remarks	: Special Precautions: Refer to Chapter	
	for special precautions which a user new	
	needs to comply with in connection with	n transport.
14.7 Transport in bulk accordin	ng to Annex II of MARPOL 73/78 and the IB	C Code
Pollution category	: Not applicable	
Ship type	: Not applicable	
Product name	: Not applicable	
Special precautions	: 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 si (Annex XIV)	ubject to authorisation	: Product is not subject to Authorisation under REACH.
Volatile organic compounds	: 0%	
Other regulations		ction Act 1990 (as amended). Health and ct 1974. Consumers Protection Act 1987.
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GB

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	Pollution Prevention and Control Act 1995. Factories Act 1961. The Carria and Use of Transportable Pressure I Regulations 2011. Chemicals (Haza Packaging for Supply) Regulations 2 Substances Hazardous to Health Re amended). Merchant Shipping (Dang Pollutants) Regulations 1997. Repor and Dangerous Occurrences Regula Personal Protective Equipment Regula Protective Equipment at Work Regula Waste (England and Wales) Regulat Control of Major Accident Hazards R amended). Renewable Transport Fu (as amended). Energy Act 2011. Em (England and Wales) Regulations 20 (England and Wales) Regulations 20 Planning (Hazardous Substances) A regulations. The Environmental Prote	age of Dangerous Goods Equipment (Amendment) rd Information and 2009. Control of egulations 2002 (as gerous Goods and Marine ting of Injuries, Diseases ations 1995 (as amended). ulations 2002. Personal lations 1992. Hazardous tions 2005(as amended). Regulations 1999 (as lel Obligations Order 2007 vironmental Permitting 010 (as amended). Waste 011 (as amended). Lot 1990 and associated ection (Controls on

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

REGULATION (EC) No 1272/2008	
Chronic aquatic toxicity, Category 3,	
H412	

Classification procedure: Expert judgement and weight of evidence determination.

Full text of H-Statements

H315	Causes skin irritation.
H318	Causes serious eye damage.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Full text of other abbreviations

Aquatic Acute	Acute aquatic toxicity
Aquatic Chronic	Chronic aquatic toxicity
Eye Dam.	Serious eye damage
Skin Irrit.	Skin irritation
Abbreviations and A	cronyms : The standard abbreviations and acronyms used in this

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	document can be looked up in reference literature (e.g. scientific dictionaries) and/or websites.	
	ACGIH = American Conference of Govern Hygienists ADR = European Agreement concerning th Carriage of Dangerous Goods by Road AICS = Australian Inventory of Chemical S ASTM = American Society for Testing and BEL = Biological exposure limits BTEX = Benzene, Toluene, Ethylbenzene CAS = Chemical Abstracts Service CEFIC = European Chemical Industry Cou CLP = Classification Packaging and Label COC = Cleveland Open-Cup DIN = Deutsches Institut fur Normung DMEL = Derived Minimal Effect Level DNEL = Derived No Effect Level DSL = Canada Domestic Substance List EC = European Commission EC50 = Effective Concentration fifty ECETOC = European Center on Ecotoxico	he International Substances Materials e, Xylenes uncil ling
	Toxicology Of Chemicals ECHA = European Chemicals Agency EINECS = The European Inventory of Exis Chemical Substances EL50 = Effective Loading fifty ENCS = Japanese Existing and New Cher Inventory EWC = European Waste Code GHS = Globally Harmonised System of Cl	nical Substances
	Labelling of Chemicals IARC = International Agency for Research IATA = International Air Transport Associa IC50 = Inhibitory Concentration fifty IL50 = Inhibitory Level fifty IMDG = International Maritime Dangerous INV = Chinese Chemicals Inventory IP346 = Institute of Petroleum test metho determination of polycyclic aromatics DMS KECI = Korea Existing Chemicals Inventor LC50 = Lethal Concentration fifty LD50 = Lethal Dose fifty per cent.	tion Goods d N° 346 for the O-extractables
	LL/EL/IL = Lethal Loading/Effective Loadir LL50 = Lethal Loading fifty MARPOL = International Convention for th Pollution From Ships NOEC/NOEL = No Observed Effect Conce Observed Effect Level OE_HPV = Occupational Exposure - High PBT = Persistent, Bioaccumulative and To PICCS = Philippine Inventory of Chemicals Substances	e Prevention of entration / No Production Volume oxic

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PNEC = Predicted No Effect Concentration REACH = Registration Evaluation And Auth Chemicals RID = Regulations Relating to International Dangerous Goods by Rail SKIN_DES = Skin Designation STEL = Short term exposure limit TRA = Targeted Risk Assessment TSCA = US Toxic Substances Control Act TWA = Time-Weighted Average vPvB = very Persistent and very Bioaccumu		And Authorisation Of national Carriage of trol Act
Further information		
Training advice	: Provide adequate information, instru- operators.	uction and training for
Other information	: A vertical bar () in the left margin in from the previous version.	ndicates an amendment
Sources of key data used to compile the Safety Data Sheet	 The quoted data are from, but not li sources of information (e.g. toxicolo Health Services, material suppliers' IUCLID date base, EC 1272 regulat 	ogical data from Shell data, 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.