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SECTIO	N 1. IDENTIFICATION			
Pro	duct name	:	Shell Spirax S 75	W-140
Pro	duct code	:	001B2198	
Mar	nufacturer or supplier's	deta	ails	
Mar	nufacturer/Supplier	:	Shell Canada Pr 400 - 4th Avenue Calgary AB T2P Canada	S.W
Tele Tele	ephone efax	:	(+1) 8006611600 (+1) 4033848345	
Em ber	ergency telephone num-	:	(US)	hr): 1 (703) 527-3887 or 1 (800) 424-9300 :): (+1) 613-996-6666; Toll Free: 1-888-CAN-)
	commended use of the o commended use	cher :	nical and restriction Gear lubricant.	ons on use
SECTIO	N 2. HAZARDS IDENTIF	ICA	TION	

GHS Classification

Not a hazardous substance or mixture.

GHS label elements

1/			800001004304
Preca	utionary statements	:	Prevention: No precautionary phrases. Response: No precautionary phrases. Storage:
Hazar	d statements	:	PHYSICAL HAZARDS: Not classified as a physical hazard under GHS criteria. HEALTH HAZARDS: Not classified as a health hazard under GHS criteria. ENVIRONMENTAL HAZARDS: Not classified as an environmental hazard under GHS criteria.
Signal	word	:	No signal word
Hazar	d pictograms	:	No Hazard Symbol required

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No precautionary phrases. **Disposal:** No precautionary phrases.

Other hazards which do not result in classification

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

Substance name	: Shell Spirax S 75W-14	0
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Chemical nature : Blend of polyolefins and additives.

Hazardous components

Chemical name	CAS-No.	Concentration (% w/w)
Polyalphaolefin	68037-01-4	10 - 20
Dialkylpolysulphide	68937-96-2	1 - 5
Amine phosphate	91745-46-9	1 - 2.5

SECTION 4. FIRST-AID MEASURES

General advice	Not expected to be a health hazard when used under normal conditions.	
If inhaled	lo treatment necessary under normal co symptoms persist, obtain medical advic	
In case of skin contact	Remove contaminated clothing. Flush exert ar and follow by washing with soap if avait persistent irritation occurs, obtain medi	ailable.
In case of eye contact	lush eye with copious quantities of wate persistent irritation occurs, obtain medi	
If swallowed	n general no treatment is necessary unle re swallowed, however, get medical adv	
Most important symptoms and effects, both acute and delayed	Dil acne/folliculitis signs and symptoms r f black pustules and spots on the skin o ngestion may result in nausea, vomiting	f exposed areas.
Protection of first-aiders	Vhen administering first aid, ensure that ppropriate personal protective equipme ncident, injury and surroundings.	
Notes to physician	reat symptomatically.	

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SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	:	Foam, water spray or fog. Dry chemical powder, carbon diox- ide, sand or earth may be used for small fires only.
Unsuitable extinguishing media	:	Do not use water in a jet.
Specific hazards during fire- fighting	:	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.
Specific extinguishing meth- ods	:	Use extinguishing measures that are appropriate to local cir- cumstances and the surrounding environment.
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 in a confined space. Select fire fighter's clothing approved to relevant Standards (e.g. Europe: EN469).

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protec- tive equipment and emer- gency procedures	:	Avoid contact with skin and eyes.
Environmental precautions	:	Use appropriate containment to avoid environmental contami- nation. 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.
Methods and materials for containment and 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.
Additional advice	:	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 as- sessment of local circumstances to help determine appropri- ate controls for safe handling, storage and disposal of this material.
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 mate- rials in order to prevent fires.
Avoidance of contact	:	Strong oxidising agents.
Product Transfer	:	This material has the potential to be a static accumulator. Proper grounding and bonding procedures should be used during all bulk transfer operations.
Storage		
Other data	:	Keep container tightly closed and in a cool, well-ventilated place. Use properly labeled and closable containers.
		Store at ambient temperature.
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 tem- peratures because of possible risk of distortion.

SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type	Control parame-	Basis
		(Form of	ters / Permissible	
		exposure)	concentration	
Oil mist, mineral	Not Assigned	TWA ((inhal-	5 mg/m3	US. ACGIH
		able frac-		Threshold
		tion))		Limit Values

Biological occupational exposure limits

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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

Engineering measures

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

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

General Information:

Define procedures for safe handling and maintenance of controls.

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

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

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

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

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

Personal protective equipment

Respiratory protection

: No respiratory protection is ordinarily required under normal

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		tions should be the figure of the engineering constant of the engineering constant of the engineering constant of the engineering of the engineeri	e. with good industrial hygiene practices, precau- taken to avoid breathing of material. pontrols do not maintain airborne concentra- which is adequate to protect worker health, y protection equipment suitable for the spe- of use and meeting relevant legislation. iratory protective equipment suppliers. ng respirators are suitable, select an appro- on of mask and filter. itable for the combination of organic gases ype A/Type P boiling point >65°C (149°F)].
Hai	nd protection		
	Remarks	gloves approved US: F739) made suitable chemica gloves Suitability usage, e.g. frequ sistance of glove glove suppliers. Personal hygien Gloves must onl gloves, hands sh cation of a non-p For continuous of through time of n 480 minutes who short-term/splas recognize that si may not be avail time maybe acco and replacemen a good predictor dependent on th Glove thickness	thact with the product may occur the use of to relevant standards (e.g. Europe: EN374, e from the following materials may provide al protection. PVC, neoprene or nitrile rubber y and durability of a glove is dependent on uency and duration of contact, chemical re- e material, dexterity. Always seek advice from Contaminated gloves should be replaced. e is a key element of effective hand care. y be worn on clean hands. After using hould be washed and dried thoroughly. Appli- berfumed moisturizer is recommended. contact we recommend gloves with break- more than 240 minutes with preference for > ere suitable gloves can be identified. For h protection we recommend the same, but uitable gloves offering this level of protection lable and in this case a lower breakthrough eptable so long as appropriate maintenance t regimes are followed. Glove thickness is not of glove resistance to a chemical as it is he exact composition of the glove material. should be typically greater than 0.35 mm e glove make and model.
Eye	e protection		ndled such that it could be splashed into eyes, ear is recommended.
Ski	n and body protection	work clothes.	s not ordinarily required beyond standard e to wear chemical resistant gloves.
The	ermal hazards	: Not applicable	
Pro	tective measures		tive equipment (PPE) should meet recom- I standards. Check with PPE suppliers.

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Environmental exposure controls

General advice	 Take appropriate measures to fulfill the requirements of relevant environmental protection legislation. Avoid contamination of the environment by following advice given in Chapter 6. If necessary, prevent undissolved material from being discharged to waste water. Waste water should be treated in a municipal or industrial waste water treatment plant before discharge to surface water. Local guidelines on emission limits for volatile substances must be observed for the discharge of exhaust air containing vapour.
	vapour.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	Liquid at room temperature.
Colour	:	yellow
Odour	:	Slight hydrocarbon
Odour Threshold	:	Data not available
рН	:	Not applicable
pour point	:	-46 °C / -51 °F Method: IP 15
Initial boiling point and boiling range	:	> 280 °C / 536 °F estimated value(s)
Flash point	:	140 °C / 284 °F
		Method: IP 34
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 / 68 °F) estimated value(s)
Relative vapour density	:	> 1 estimated value(s)
Relative density	:	0.867 (15 °C / 59 °F)
Density	:	867 kg/m3 (15.6 °C / 60.1 °F)Method: Unspecified
1/		80000100/30

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N	ibility(ies) /ater solubility olubility in other solvents		negligible Data not availabl	e
	Partition coefficient: n- octanol/water		Pow: > 6 (based on inform	ation on similar products)
Auto	Auto-ignition temperature		> 320 °C / 608 °F	=
V	osity iscosity, dynamic iscosity, kinematic		Data not availabl 185 mm2/s (40.0 Method: IP 71	
			25 mm2/s (100 ° Method: IP 71	C / 212 °F)
Expl	losive properties	:	Not classified	
Oxic	lizing properties	:	Data not availabl	e
Con	ductivity	:	This material is n	ot expected to be a static accumulator.
Dec	omposition temperature	:	Data not availabl	e

SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	The product does not pose any further reactivity hazards in addition to those listed in the following sub-paragraph.
Chemical stability	:	Stable.
Possibility of hazardous reac- tions	:	Reacts with strong oxidising agents.
Conditions to avoid	:	Extremes of temperature and direct sunlight.
Incompatible materials	:	Strong oxidising agents.
Hazardous decomposition products	:	Hazardous decomposition products are not expected to form during normal storage.

SECTION 11. TOXICOLOGICAL INFORMATION

Basis for assessment	:	Information given is based on data on the components and the toxicology of similar products.Unless indicated otherwise,

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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: Expected to be of low toxicity:
Acute inhalation toxicity	:	Remarks: Not considered to be an inhalation hazard under normal conditions of use.
Acute dermal toxicity	:	LD50 (Rabbit): > 5,000 mg/kg Remarks: Expected to be of low toxicity:

Skin corrosion/irritation

Product:

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

Serious eye damage/eye irritation

Product:

Remarks: Expected to be slightly irritating.

Components:

Amine phosphate:

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

Respiratory or skin sensitisation

Product:

Remarks: Not expected to be a skin sensitiser.

Components:

Dialkylpolysulphide:

Remarks: Experimental data has shown that the concentration of potentially sensitising components present in this product does not induce skin sensitisation. May cause an allergic skin reaction in sensitive individuals.

Amine phosphate:

Remarks: Experimental data has shown that the concentration of potentially sensitising components present in this product does not induce skin sensitisation. May cause an allergic skin reaction in sensitive individuals.

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Germ cell mutagenicity

Product:

Genotoxicity in vivo

: Remarks: Not considered a mutagenic hazard.

Carcinogenicity

Product:

Remarks: Not expected to be carcinogenic.

Reproductive toxicity

Product:

Effects on fertility

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 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.

SECTION 12. ECOLOGICAL INFORMATION

Basis for assessment	:	Ecotoxicological data have not been determined specifically for this product. Information given is based on a knowledge of the components
		information given is based on a knowledge of the components

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			Unless indicated tive of the product ponent(s).(LL/EL/	ology of similar products. otherwise, the data presented is representa- t as a whole, rather than for individual com- IL50 expressed as the nominal amount of to prepare aqueous test extract).
Ecoto	oxicity			
	Product: Toxicity to fish (Acute toxici- ty)		Remarks: Expected to be practically non toxic: LL/EL/IL50 > 100 mg/l	
	Toxicity to crustacean (Acute toxicity)		Remarks: Expected to be practically non toxic: LL/EL/IL50 > 100 mg/l	
	Toxicity to algae/aquatic plants (Acute toxicity)		Remarks: Expected to be practically non toxic: LL/EL/IL50 > 100 mg/l	
Toxic icity)	Toxicity to fish (Chronic tox- icity)		Remarks: Data not available	
(Chro Toxic	Toxicity to crustacean (Chronic toxicity) Toxicity to microorganisms (Acute toxicity)		Remarks: Data not available Remarks: Data not available	
•	stence and degradabili	ity		
	Product: Biodegradability		Remarks: Expected to be not readily biodegradable. Major constituents are expected to be inherently biodegrada ble, but contains components that may persist in the environ ment.	
Bioad	cumulative potential			
	Product: Bioaccumulation		Remarks: Contains components with the potential to bioaccumulate.	
	Partition coefficient: n- octanol/water		Pow: > 6 Remarks: (based on information on similar products)	
Mobi	lity in soil			
Prode Mobil		:		under most environmental conditions. will adsorb to soil particles and will not be 800001004304

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Remarks: Floats on water.				
Other adverse effects				
Product: Additional ecological infor- mation		 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, photochemi- cal ozone creation potential or global warming potential. Poorly soluble mixture. May cause physical fouling of aquatic organisms. 		

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods	
Waste from residues	: Waste product should not be allowed to contaminate soil or ground water, or be disposed of into the environment. Waste, spills or used product is dangerous waste.
	Disposal should be in accordance with applicable regional, national, and local laws and regulations. Local regulations may be more stringent than regional or na- tional requirements and must be complied with.
Contaminated packaging	: Dispose in accordance with prevailing regulations, preferably to a recognized collector or contractor. The competence of the collector or contractor should be established beforehand. Disposal should be in accordance with applicable regional, national, and local laws and regulations.

SECTION 14. TRANSPORT INFORMATION

National Regulations

TDG

Not regulated as a dangerous good

International Regulation

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

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

Pollution category	: Not applicable
Ship type	: Not applicable

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Product name Special precautions		: Not applicable : Not applicable			
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.			
Additional Information		: MARPOL Annex	: MARPOL Annex 1 rules apply for bulk shipments by sea.		

SECTION 15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR.

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

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

SECTION 16. OTHER INFORMATION

Full text of other abbreviations

AICS - Australian Inventory of Chemical Substances; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR -Carcinogen, Mutagen or Reproductive Toxicant; CPR - Controlled Products Regulations; DIN -Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide: GHS - Globally Harmonized System: GLP - Good Laboratory Practice: IARC - International Agency for Research on Cancer: IATA - International Air Transport Association: IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk: IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC -No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Preven-

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tion; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS -Workplace Hazardous Materials Information System

A vertical bar (|) in the left margin indicates an amendment from the previous version. Revision Date : 2016-04-25

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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