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Shell Tellus S2 VX 68

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SECTION 1. PRODUCT AND CO	MPANY IDENTIFICATION	
Product name	: Shell Tellus S2 VX 68	
Product code	: 001F9575	
Manufacturer or supplier's Supplier Telephone Telefax	details : Ixom Operations Pty Ltd (NZBN – 9429041465226) 166 Totara Street, Mt Maunganui South, New Zealand : +64 9 3682700 ; : +64 9 3682710	
Emergency telephone number	: 0800 734 607 (ALL HOURS)	
Recommended use of the c Recommended use	hemical and restrictions on use : Hydraulic oil	

SECTION 2. HAZARDS IDENTIFICATION

NON-HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS. Not classified as hazardous according to criteria in the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001., Not classified as Dangerous Goods for transport, according to NZS 5433:2012 Transport of Dangerous Goods on Land.

Hazard classification

GHS Classification

Not a dangerous substance or mixture according to the Globally Harmonised System (GHS).

GHS label elements

Hazard pictograms	:	No Hazard Symbol required
Signal word	: 1	No signal word
Hazard 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.
Precautionary statements	:	

Prevention:

No precautionary phrases.

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Response: No precautionary phrases.

Storage:

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.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

Chemical nature	:	Highly refined mineral oils and additives. The highly refined mineral oil contains <3% (w/w) DMSO- extract, according to IP346.
	:	* contains one or more of the following CAS-numbers: 64742- 53-6, 64742-54-7, 64742-55-8, 64742-56-9, 64742-65-0, 68037-01-4, 72623-86-0, 72623-87-1, 8042-47-5, 848301-69- 9.

Hazardous components

Chemical name	CAS-No.	Classification	Concentration [%]
Interchangeable low viscosity base oil (<20,5 cSt @40°C) *	0	Asp. Tox.1; H304	0 - 90

For explanation of abbreviations see section 16.

SECTION 4. FIRST-AID MEASURES General advice : Not expected to be a health hazard when used under normal conditions. 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.

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In case of eye contact	: Flush eye with copious quantities of water. If persistent irritation occurs, obtain medical attention.
If swallowed	: In general no treatment is necessary unless large quantities are swallowed, however, get medical advice.
Most important symptoms and effects, both acute and delayed	 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.
	Local necrosis is evidenced by delayed onset of pain and tissue damage a few hours following injection.
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.
Notes to physician	: Treat symptomatically.
	High pressure injection injuries require prompt surgical intervention an d possibly steroid therapy, to minimise tissue damage and loss of function. Because entry wounds are small and do not reflect the seriousness of the underlying damage, surgical exploration to determine the extent of involvement may be necessary. Local anaesthetics or hot soaks should be avoided because they can contribute to swelling, vasospasm and ischaemia. Prompt surgical decompression, debridement and evacuation of foreign material should be performed under general anaesthetics, and wide exploration is essential.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	:	Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.
Unsuitable extinguishing media	:	Do not use water in a jet.
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.

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Specific extinguishing methods	:	Use extinguishing measures that are a circumstances and the surrounding er		
Special protective equipment for firefighters	:	Proper protective equipment including gloves are to be worn; chemical resist large contact with spilled product is ex Breathing Apparatus must be worn wh a confined space. Select fire fighter's relevant Standards (e.g. Europe: EN4	ant suit is indicated if spected. Self-Contained nen approaching a fire in clothing approved to	

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	:	Avoid contact with skin and eyes.
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.
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.

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.
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

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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 temperatures because of possible risk of distortion.

SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Oil mist, mineral	Not Assigned	TWA ((inhalable fraction))	5 mg/m3	US. ACGIH Threshold Limit Values
Oil mist, mineral	Not Assigned	TWA (Mist)	5 mg/m3	New Zealand. Workplace Exposure Standards for Atmospheric Contaminant s
Oil mist, mineral	Not Assigned	(Mist)	10 mg/m3	New Zealand. Workplace Exposure Standards for Atmospheric Contaminant s

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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

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

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sion 1.0 Protective measures	Revision Date 19.04.2016	Print Date 20.04.20
	ent (PPE) should meet recommended	d national standards. Check w
Respiratory protection	 No respiratory protection is ord conditions of use. In accordance with good indus precautions should be taken to If engineering controls do not r concentrations to a level which health, select respiratory prote specific conditions of use and Check with respiratory protecti Where air-filtering respirators a appropriate combination of ma Select a filter suitable for the c and vapours [Type A/Type P I 	trial hygiene practices, o avoid breathing of material. maintain airborne i is adequate to protect worke ction equipment suitable for th meeting relevant legislation. ve equipment suppliers. are suitable, select an sk and filter. ombination of organic gases
Hand protection		
Remarks	: Where hand contact with the p gloves approved to relevant st US: F739) made from the follo suitable chemical protection. F gloves Suitability and durability usage, e.g. frequency and dura resistance of glove material, de from glove suppliers. Contamin replaced. Personal hygiene is care. Gloves must only be wor gloves, hands should be wash Application of a non-perfumed	andards (e.g. Europe: EN374, wing materials may provide VC, neoprene or nitrile rubber of a glove is dependent on ation of contact, chemical exterity. Always seek advice nated gloves should be a key element of effective har n on clean hands. After using ed and dried thoroughly.
	For continuous contact we rec breakthrough time of more tha for > 480 minutes where suitat short-term/splash protection w recognize that suitable gloves may not be available and in thi time maybe acceptable so long and replacement regimes are a good predictor of glove resis dependent on the exact compo Glove thickness should be type depending on the glove make	n 240 minutes with preference ole gloves can be identified. For e recommend the same, but offering this level of protection s case a lower breakthrough g as appropriate maintenance followed. Glove thickness is no tance to a chemical as it is osition of the glove material. cally greater than 0.35 mm
Eye protection	: If material is handled such that protective eyewear is recommended	
Skin and body protection	: Skin protection is not ordinarily work clothes. It is good practice to wear cher	
Thermal hazards	: Not applicable	

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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.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	liquid
Colour	:	clear
Odour	:	Slight hydrocarbon
Odour Threshold	:	Data not available
рН	:	Not applicable
pour point	:	-30 °C / -22 °FMethod: ISO 3016
Initial boiling point and boiling range	:	> 280 °C / 536 °Festimated value(s)
Flash point	:	230 °C / 446 °F Method: ISO 2592
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	:	> 1estimated value(s)
Relative density	:	0.860 (15 °C / 59 °F)
Density	:	860 kg/m3 (15.0 °C / 59.0 °F) Method: ISO 12185

Solubility(ies)

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Water solubility	: negligible	
Solubility in other solvents	: Data not available	
Partition coefficient: n- octanol/water	: Pow: > 6(based on information on	similar products)
Auto-ignition temperature	: > 320 °C / 608 °F	
Viscosity		
Viscosity, dynamic	: Data not available	
Viscosity, kinematic	: 68 mm2/s (40.0 °C / 104.0 °F) Method: ASTM D445	
	10.5 mm2/s (100 °C / 212 °F) Method: ASTM D445	
Explosive properties	: Not classified	
Oxidizing properties	: Data not available	
Conductivity	: This material is not expected to be	a static accumulator.
Decomposition temperature	: Data not available	

SECTION 10. STABILITY AND REACTIVITY

Reactivity	The product does not pose any further reactivity haza addition to those listed in the following sub-paragraph	
Chemical stability	Stable.	
Possibility of hazardous reactions	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 during normal storage.	to form

SECTION 11. TOXICOLOGICAL INFORMATION

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Information on likely routes of exposure	Skin and eye contact are the primary routes although exposure may occur following acc	•
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 inhalatic normal conditions of use.	on hazard under
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.

Respiratory or skin sensitisation

Product:

Remarks: Not expected to be a skin sensitiser.

Chronic toxicity

Germ cell mutagenicity

Product:

: Remarks: Not considered a mutagenic hazard.

Carcinogenicity

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).

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:

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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 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: High pressure injection of product into the skin may lead to local necrosis if the product is not surgically removed.

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

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	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).
Ecotoxicity	
Product:	
Toxicity to fish (Acute toxicity)	: 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
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
Persistence and degradability	
Product:	
Biodegradability	: Remarks: Expected to be not readily biodegradable., Major constituents are expected to be inherently biodegradable, but contains components that may persist in the environment.
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)
Mobility in soil	
Product:	
Mobility	 Remarks: Liquid under most environmental conditions., If it enters soil, it will adsorb to soil particles and will not be mobile. Remarks: Floats on water.
Other adverse effects	

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no data available <u>Product:</u>		
Additional ecological information	 Product is a mixture of non-volatile expected to be released to air in a Not expected to have ozone deple photochemical ozone creation pote potential. Poorly soluble mixture., May cause organisms. Mineral oil is not expected to caus aquatic organisms at concentration 	ny significant quantities., ation potential, ential or global warming e physical fouling of aquatic e any chronic effects to

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 national requirements and must be complied with.
Contaminated packaging :	Dispose in accordance with prevailing regulations, preferably to a recognized collector or contractor. The competence of the collector or contractor should be established beforehand. Disposal should be in accordance with applicable regional, national, and local laws and regulations.

SECTION 14. TRANSPORT INFORMATION

National Regulations

Land Transport Rule: Dangerous Goods 2012 -NZS 5433 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

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Ship type	: Not applicable	
Product name	: Not applicable	
Special precautions	: Not applicable	
Special precautions for user		
Remarks	: Special Precautions: Refer to Cha for special precautions which a use needs to comply with in connection	er needs to be aware of or
Additional Information	: MARPOL Annex 1 rules apply for I	oulk shipments by sea.

SECTION 15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture				
R-phrase(s)	:	Not classified.		
S-phrase(s)	:	Not classified.		

New Zealand Workplace Exposure Limits 2002 (WES). New Zealand Standard 5433:2012 Transport of Dangerous Goods on Land.

Other international regulations

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

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

SECTION 16. OTHER INFORMATION

Full text of H-Stateme	nts		
H304 Full text of other abbr	May be fatal if swallowed and enters airways. eviations		
Asp. Tox.	Aspiration hazard		
Abbreviations and Acro	nyms : The standard abbreviations and acronyms used in this document can be looked up in reference literature (e.g. scientific dictionaries) and/or websites.		
Further information	· A vertical bar (I) in the left margin indicates an amendment		
	: A vertical bar () in the left margin indicates an amendment from the previous version.		

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.

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