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SECTION 1. IDENTIFICATION		
Product name	: Shell Tellus S2 V 22	
Product code	: 001D7748	
Manufacturer or supplier	's details	
Manufacturer/Supplier	: Shell Oil Products US USA	
SDS Request	: (+1) 877-276-7285	
Customer Service	: .	
Emergency telephone nu	ımber	
Spill Information	: 877-242-7400	
Health Information	:	
	e chemical and restrictions on use	
Recommended use	: Hydraulic oil	

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Not a hazardous substance or mixture.

GHS Label element

Hazard pictograms	: No Hazard Symbol required
Signal word	: 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. 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.

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Not classified as flammable but will burn.

The classification of this material is based on OSHA HCS 2012 criteria.

Under normal conditions of use or in a foreseeable emergency, this product does not meet the definition of a hazardous chemical when evaluated according to the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature	 Highly refined mineral oil. Synthetic base oil 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	Synonyms	CAS-No.	Concentration (%)
Interchangeable low vis- cosity base oil (<20,5 cSt @40°C) *		Not Assigned	0 - 90

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 wa- ter 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. 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	:	Oil acne/folliculitis signs and symptoms may include formation of black pustules and spots on the skin of exposed areas.
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delayed	Ingestion may result in nausea, Local necrosis is evidenced by tissue damage a few hours follo	delayed onset of pain and
Protection of first-aiders	: When administering first aid, er appropriate personal protective incident, injury and surrounding	equipment according to the
Immediate medical attention, special treatment	: Treat symptomatically.	
	High pressure injection injuries vention an d possibly steroid the age and loss of function. Because entry wounds are sma riousness of the underlying dan determine the extent of involver anaesthetics or hot soaks shou can contribute to swelling, vaso surgical decompression, debrid eign material should be perform ics, and wide exploration is ess	erapy, to minimise tissue dam- all and do not reflect the se- nage, surgical exploration to ment may be necessary. Local Id be avoided because they spasm and ischaemia. Prompt ement and evacuation of for- ned under general anaesthet-

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	:	Foam, water spray or fog. Dry chemical powder, carbon dio- xide, 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 me- thods	:	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-	:	Avoid contact with skin and eyes.
tive equipment and emer-		
gency procedures		

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Environmental precautions	nation. Prevent from spreading	: 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 advice ad	ised if significant spillages	
Methods and materials for containment and cleaning up	: Slippery when spilt. Avoid accid Prevent from spreading by mak or other containment material. Reclaim liquid directly or in an a Soak up residue with an absorb suitable material and dispose of	ing a barrier with sand, earth absorbent. bent such as clay, sand or other	
Additional advice	: For guidance on selection of pe see Chapter 8 of this Safety Da For guidance on disposal of spi this Safety Data Sheet.	ta Sheet.	

SECTION 7. HANDLING AND STORAGE

Technical measures	:	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.
Precautions for 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.

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Packaging material	: Suitable material: For containers steel or high density polyethylene Unsuitable material: PVC.	0
Container Advice	: Polyethylene containers should n peratures because of possible ris	

SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Components with workplace control parameters

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

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.

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	Ensure appropriate selection, te equipment used to control expo equipment, local exhaust ventila Drain down system prior to equi ance. Retain drain downs in sealed st subsequent recycle. Always observe good personal washing hands after handling th drinking, and/or smoking. Routi protective equipment to remove taminated clothing and footweat Practice good housekeeping.	sure, e.g. personal protective ation. ipment break-in or mainten- corage pending disposal or hygiene measures, such as ne material and before eating, inely wash work clothing and e contaminants. Discard con-
Personal protective equipme	ent	
Respiratory protection	 No respiratory protection is ordi conditions of use. In accordance with good industritions should be taken to avoid be lf engineering controls do not m tions to a level which is adequate select respiratory protection equivalence cific conditions of use and meet Check with respiratory protective Where air-filtering respirators are priate combination of mask and Select a filter suitable for the co and vapours [Type A/Type P between the conditions of use and the conditions of the conditio	rial hygiene practices, precau- preathing of material. maintain airborne concentra- te to protect worker health, uipment suitable for the spe- ting relevant legislation. re equipment suppliers. re suitable, select an appro- filter.
Hand protection		
Remarks	: Where hand contact with the pro- gloves approved to relevant star US: F739) made from the follow suitable chemical protection. PV gloves Suitability and durability usage, e.g. frequency and durat sistance of glove material, dexter glove suppliers. Contaminated g Personal hygiene is a key eleme Gloves must only be worn on cl- gloves, hands should be washe cation of a non-perfumed moister For continuous contact we reco through time of more than 240 r 480 minutes where suitable glove short-term/splash protection we recognize that suitable gloves o may not be available and in this time maybe acceptable so long and replacement regimes are for a good predictor of glove resistar dependent on the exact compose Glove thickness should be typic depending on the glove make a	ndards (e.g. Europe: EN374, ving materials may provide /C, neoprene or nitrile rubber of a glove is dependent on tion of contact, chemical re- erity. Always seek advice from gloves should be replaced. ent of effective hand care. ean hands. After using ed and dried thoroughly. Appli- urizer is recommended. mmend gloves with break- minutes with preference for > ves can be identified. For e recommend the same, but offering this level of protection a case a lower breakthrough as appropriate maintenance blowed. Glove thickness is not ance to a chemical as it is sition of the glove material. cally greater than 0.35 mm

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Eye protection	: If material is handled such that it protective eyewear is recommend	
Skin and body protection	: Skin protection is not ordinarily re work clothes. It is good practice to wear chemic	
Protective measures	: Personal protective equipment (F mended national standards. Chee	
Environmental exposure c	ontrols	
General advice	 Take appropriate measures to ful vant environmental protection leg of the environment by following a necessary, prevent undissolved r charged to waste water. Waste w municipal or industrial waste wate discharge to surface water. Local guidelines on emission limi must be observed for the dischar vapour. 	pislation. Avoid contamination dvice given in Chapter 6. If naterial from being dis- vater should be treated in a er treatment plant before ts for volatile substances

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Liquid at room temperature.	
Colour	: amber	
Odour	: Slight hydrocarbon	
Odour Threshold	: Data not available	
рН	: Not applicable	
pour point	: -42 °C / -44 °FMethod: ISO 3016	
Initial boiling point and boiling range	: > 280 °C / 536 °Festimated value(s)
Flash point	: 190 °C / 374 °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)	

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Relative density	: 0.872 (15 °C / 59 °F)	
Density	: 872 kg/m3 (15.0 °C / 59.0 °F) Method: ISO 12185	
Solubility(ies) Water solubility	: negligible	
Solubility in other solvents	: Data not available	
Partition coefficient: n- octanol/water	: Pow: > 6(based on information o	n similar products)
Auto-ignition temperature	: > 320 °C / 608 °F	
Viscosity Viscosity, dynamic	: Data not available	
Viscosity, kinematic	: 22 mm2/s (40.0 °C / 104.0 °F) Method: ASTM D445	
	4.8 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 b	pe a static accumulator.
Decomposition temperature	: Data not available	

SECTION 10. STABILITY AND REACTIVITY

Reactivity	The product does not pose any further reactivity hazard addition to those listed in the following sub-paragraph.	s in
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 during normal storage.	form

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CTION 11. TOXICOLOGICA	L INFORMATION	
Basis for assessment	: Information given is based on d the toxicology of similar product the data presented is represent whole, rather than for individual	s.Unless indicated otherwise, ative of the product as a
Information on likely rout Skin and eye contact are th accidental ingestion.	es of exposure e primary routes of exposure although	exposure may occur following
Acute toxicity		
Product:		
Acute oral toxicity	: LD50 (rat): > 5,000 mg/kg Remarks: Expected to be of low	<i>i</i> toxicity:
Acute inhalation toxicity	: Remarks: Not considered to be normal conditions of use.	an inhalation hazard under
Acute dermal toxicity	: LD50 (Rabbit): > 5,000 mg/kg Remarks: Expected to be of low	<i>i</i> toxicity:
Skin corrosion/irritation		
Product:		

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.

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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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 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 toxic-	
ity)	Remarks: Expected to be practically non toxic:
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		LL/EL/IL50 > 100 mg/l	
Toxicity to daphnia and other aquatic invertebrates (Acute toxicity)	:	Remarks: Expected to be practic LL/EL/IL50 > 100 mg/l	ally non toxic:
Toxicity to algae (Acute toxic- ity)	:	Remarks: Expected to be practic LL/EL/IL50 > 100 mg/l	ally non toxic:
Toxicity to fish (Chronic toxic- ity)	:	Remarks: Data not available	
Toxicity to daphnia and other aquatic invertebrates (Chron- ic toxicity)	:	Remarks: Data not available	
Toxicity to bacteria (Acute toxicity)	:	Remarks: Data not available	
Persistence and degradabilit	ty		
<u>Product:</u> Biodegradability	:	Remarks: Expected to be not rea Major constituents are expected ble, but contains components tha ment.	to be inherently biodegra
Bioaccumulative potential			
Product: Bioaccumulation	÷	Remarks: Contains components cumulate.	with the potential to bioa
Mobility in soil			
<u>Product:</u> Mobility	:	Remarks: Liquid under most env If it enters soil, it will adsorb to so mobile.	
		Remarks: Floats on water.	
Other adverse effects no data available			
Product:			
Additional ecological informa- tion	:	Product is a mixture of non-volati expected to be released to air in Not expected to have ozone dep cal ozone creation potential or gl	any significant quantities letion potential, photoche
		Poorly soluble mixture. May cause physical fouling of aq	uatic organisms

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Mineral oil is not expected to cause any chronic effects to aquatic organisms at concentrations less than 1 mg/l.

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

US Department of Transportation Classification (49 CFR Parts 171-180)

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 Ship type Product name Special precautions	:	Not applicable Not applicable 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 1 rules apply for bulk shipments by sea.

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DSL : All components listed.

SECTION 16. OTHER INFORMATION

Further information

NFPA Rating (Health, Fire, Reac-0, 1, 0 tivity)

A vertical bar (1) in the left margin indicates an amendment from the previous version.

	Abbreviations and Acronyms :	The standard abbreviations and acronyms used in this docu- ment can be looked up in reference literature (e.g. scientific dictionaries) and/or websites.
		ACGIH = American Conference of Governmental Industrial Hygienists
		ADR = European Agreement concerning the International Carriage of Dangerous Goods by Road
		AICS = Australian Inventory of Chemical Substances
		ASTM = American Society for Testing and Materials BEL = Biological exposure limits
		BTEX = Benzene, Toluene, Ethylbenzene, Xylenes
		CAS = Chemical Abstracts Service
		CEFIC = European Chemical Industry Council
		CLP = Classification Packaging and Labelling
		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 Ecotoxicology and Toxicolo- gy Of Chemicals
		ECHA = European Chemicals Agency
		EINECS = The European Inventory of Existing Commercial
		Chemical Substances
		EL50 = Effective Loading fifty
		ENCS = Japanese Existing and New Chemical Substances
		Inventory EWC = European Waste Code
		GHS = Globally Harmonised System of Classification and
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	Labelling of Chemicals IARC = International Agency for IATA = International Air Transpo IC50 = Inhibitory Concentration f IL50 = Inhibitory Level fifty IMDG = International Maritime D INV = Chinese Chemicals Invent IP346 = Institute of Petroleum t determination of polycyclic arom KECI = Korea Existing Chemical LC50 = Lethal Concentration fifty LD50 = Lethal Dose fifty per cen LL/EL/IL = Lethal Loading/Effect LL50 = Lethal Loading fifty MARPOL = International Conver Pollution From Ships NOEC/NOEL = No Observed Eff served Effect Level OE_HPV = Occupational Exposu PBT = Persistent, Bioaccumulati PICCS = Philippine Inventory of Substances PNEC = Predicted No Effect Cor REACH = Registration Evaluatio Chemicals RID = Regulations Relating to In gerous Goods by Rail SKIN_DES = Skin Designation STEL = Short term exposure limi TRA = Targeted Risk Assessme TSCA = US Toxic Substances C TWA = Time-Weighted Average vPvB = very Persistent and very	Research on Cancer rt Association iifty pangerous Goods tory test method N° 346 for the atics DMSO-extractables Is Inventory y t. ive Loading/Inhibitory loading ntion for the Prevention of fect Concentration / No Ob- ure - High Production Volume ive and Toxic Chemicals and Chemical ncentration on And Authorisation Of ternational Carriage of Dan- it nt control Act
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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.