Shell Tellus S2 VX 46

Version 1.1

Revision Date 19.04.2021

Print Date 30.09.2021

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product name : Shell Tellus S2 VX 46

Product code : 001F8433

Manufacturer or supplier's details

Manufacturer/Supplier	:	ZOKO ENTERPRISES LIMITED Company number - 52-004178-1 8 HAMANOR STREET HOLON 58101 Israel
Telephone	:	972-3-6508906
Telefax	:	972-3-5503680
Emergency telephone number	:	050-5225981, 972-50-5225981
Recommended use of the ch	nem	ical and restrictions on use

Recommended use of the chemical and restrictions on use

Recommended use : Hydraulic oil

2. HAZARDS IDENTIFICATION

Based on available data this substance / mixture does not meet the classification criteria.

Label elements

Safety data sheet available on request.

Hazard pictograms : Signal word	No Hazard Symbol required : No signal word
Hazard statements	 PHYSICAL HAZARDS: Not classified as a physical hazard according to CLP criteria. HEALTH HAZARDS: Not classified as a health hazard under CLP criteria. ENVIRONMENTAL HAZARDS: Not classified as environmental hazard according to CLP criteria.
Precautionary statements	: Prevention: No precautionary phrases. Response: No precautionary phrases. Storage:

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	No precautionary phrases. Disposal: No precautionary phrases.	
Sensitising components	: Contains triazole derivatives. May produce an allergic reaction.	

Other hazards

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.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture	:	Mixture
Chemical nature	:	Highly refined mineral oils and additives. The highly refined mineral oil contains <3% (w/w) DMSO- extract, according to IP346. Classification based on DMSO extract content < 3% (Regulation (EC) 1272/2008, Annex VI, Part 3, Note L).
	:	* 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, 68649-12-7, 151006-60-9, 163149-28-8.

Hazardous components

Chemical name	CAS-No. EC-No. Registration number	Classification (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)	Concentration (% w/w)
Interchangeable low viscosity base oil (<20,5 cSt @40°C) *	Not Assigned		Asp. Tox. 1; H304	0 - 90
Triazole derivative	91273-04-0	C-Xi-N; R34- R43-R50/53	Skin Corr. 1B; H314 Skin Sens. 1A; H317 Aquatic Chronic 1; H410	< 0,09

For explanation of abbreviations see section 16.

4. FIRST-AID MEASURES

If inhaled

: No treatment necessary under normal conditions of use.

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If symptoms persist, obtain medical advice.
 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.
 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.
: In general no treatment is necessary unless large quantities are swallowed, however, get medical advice.
 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.
: When administering first aid, ensure that you are wearing the appropriate personal protective equipment according to the incident, injury and surroundings.
: Treat symptomatically.
High pressure injection injuries require prompt surgical intervention and 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.

5. FIRE-FIGHTING MEASURES

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

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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. 	
Specific extinguishing methods	: Use extinguishing measures that circumstances and the surroundi	
Special protective equipment for firefighters	: Proper protective equipment inclu- gloves are to be worn; chemical r large contact with spilled product Breathing Apparatus must be wo a confined space. Select fire fight relevant Standards (e.g. Europe	resistant suit is indicated if is expected. Self-Contained rn when approaching a fire in ter's clothing approved to

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 Section 8 of this Safety Data Sheet. For guidance on disposal of spilled material see Section 13 of this Safety Data Sheet.

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
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	this material.			
Advice on safe handling	Avoid inhaling vapour and/or mist When handling product in drums, worn and proper handling equipm Properly dispose of any contamin	: 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.		
Avoidance of contact	: Strong oxidising agents.			
Product Transfer	: Proper grounding and bonding producing all bulk transfer operations			
Storage				
Other data	: Keep container tightly closed and place. Use properly labeled and closable			
	Store at ambient temperature.			
Packaging material	: Suitable material: For containers steel or high density polyethylene Unsuitable material: PVC.			
Container Advice	: Polyethylene containers should ne temperatures because of possible			

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 (inhalable fraction)	5 mg/m3	Israel. Safety at Work Regulations (Environment al monitoring and biological monitoring of workers)

Biological occupational exposure limits

No biological limit allocated.

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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/

Appropriate measures include:

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.

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

Adequate ventilation to control airborne concentrations.

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

Protective measures

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

Respiratory protection : No respiratory protection is ordinarily required under normal

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	conditions of use. In accordance with good industr precautions should be taken to a If engineering controls do not m concentrations to a level which i health, select respiratory protect specific conditions of use and m Check with respiratory protective Where air-filtering respirators ar appropriate combination of mas Select a filter suitable for the con and vapours and particles [Type (149°F)].	avoid breathing of material. aintain airborne is adequate to protect worker tion equipment suitable for the neeting relevant legislation. e equipment suppliers. e suitable, select an k and filter. mbination of organic gases
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 resistance of glove material, dep from glove suppliers. Contamina replaced. Personal hygiene is a care. Gloves must only be worn gloves, hands should be washed Application of a non-perfumed n	ndards (e.g. Europe: EN374, ing materials may provide /C, neoprene or nitrile rubber of a glove is dependent on ion of contact, chemical kterity. Always seek advice ated gloves should be key element of effective hand on clean hands. After using d and dried thoroughly.
	For continuous contact we record breakthrough time of more than for > 480 minutes where suitable short-term/splash protection we recognize that suitable gloves of may not be available and in this time maybe acceptable so long and replacement regimes are for a good predictor of glove resistant dependent on the exact compose Glove thickness should be typic depending on the glove make an	240 minutes with preference e gloves can be identified. Fo recommend the same but ffering this level of protection case a lower breakthrough as appropriate maintenance illowed. Glove thickness is no ance to a chemical as it is sition of the glove material. ally greater than 0.35 mm
Eye protection	: If material is handled such that i protective eyewear is recommer	
Skin and body protection	: Skin protection is not ordinarily work clothes. It is good practice to wear chem	
Thermal hazards	: Not applicable	
Environmental exposure o	controls	
General advice	: Take appropriate measures to fur relevant environmental protection contamination of the environmental	on legislation. Avoid

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	Section 6. If necessary, prevent u being discharged to waste water. V treated in a municipal or industrial before discharge to surface water. Local guidelines on emission limits must be observed for the discharg vapour.	Waste water should be waste water treatment plant s for volatile substances

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: liquid
Colour	: clear
Odour Threshold	: Data not available
рН	: Not applicable
pour point	: -36 °C / -33 °FMethod: ISO 3016
Melting / freezing point	Data not available
Initial boiling point and boiling range	: > 280 °C / 536 °Festimated value(s)
Flash point	: 220 °C / 428 °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	: 0,856 (15 °C / 59 °F)
Density	: 856 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	: log Pow: > 6(based on information on similar products)
Auto-ignition temperature	: > 320 °C / 608 °F

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Decomposition temperature	: Data not available	
Viscosity		
Viscosity, dynamic	: Data not available	
Viscosity, kinematic	: 46 mm2/s (40,0 °C / 104,0 °F) Method: ASTM D445	
	7,9 mm2/s (100 °C / 212 °F) Method: ASTM D445	
	2630 mm2/s (-20 °C / -4 °F) Method: ASTM D445	
Explosive properties	: Not classified	
Oxidizing properties	: Data not available	
Conductivity	: This material is not expected to be a	static accumulator.

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 reactions	: Reacts with strong oxidising agents.
Conditions to avoid	: Extremes of temperature and direct sunlight.
Incompatible materials	: Strong oxidising agents.
Hazardous decomposition products	: No decomposition if stored and applied as directed.

11. TOXICOLOGICAL INFORMATION

	Basis for assessment	:	Information given is based on data on the components and the toxicology of similar products.Unless indicated otherwise, the data presented is representative of the product as a whole, rather than for individual component(s).
	Information on likely routes of exposure	:	Skin and eye contact are the primary routes of exposure although exposure may occur following accidental ingestion.
Αсι	ute toxicity		
	Product:		

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Acute oral toxicity	:	LD50 rat: > 5.000 mg/kg Remarks: Low toxicity: Based on available data, the classifica	tion criteria are not met.
Acute inhalation toxicity	:	Remarks: Based on available data, the are not met.	classification criteria
Acute dermal toxicity	:	LD50 Rabbit: > 5.000 mg/kg Remarks: Low toxicity: Based on available data, the classifica	tion criteria are not met.

Skin corrosion/irritation

Product:

Remarks: Slightly irritating to skin., Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis., Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation

Product:

Remarks: Slightly irritating to the eye., Based on available data, the classification criteria are not met.

Respiratory or skin sensitisation

Product:

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

Components:

Triazole derivative: Remarks: May cause an allergic skin reaction in sensitive individuals.

Germ cell mutagenicity

Product:

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

Carcinogenicity

Product:

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

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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	Material	GHS/CLP Carcinogenicity Classification	1
	Highly refined mineral oil	No carcinogenicity classification.	

Reproductive toxicity

Product:

Remarks: Not a developmental toxicant., Does not impair fertility., Based on available data, the classification criteria are not met.

STOT - single exposure

Product:

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

STOT - repeated exposure

Product:

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

Aspiration toxicity

Product:

Not an aspiration hazard.

Further information

Product:

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

Remarks: 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.

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
	6, 1

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	representative of the product as a individual component(s).(LL/EL/IL nominal amount of product requir extract).	50 expressed as the
Ecotoxicity		
Product:		
Toxicity to fish (Acute toxicity)	: Remarks: Based on available dat are not met. Practically non toxic: LL/EL/IL50 > 100 mg/I	a, the classification criteria
Toxicity to crustacean (Acute toxicity)	: Remarks: Based on available dat are not met. Practically non toxic: LL/EL/IL50 > 100 mg/l	a, the classification criteria
Toxicity to algae/aquatic plants (Acute toxicity)	: Remarks: Based on available dat are not met. Practically non toxic: LL/EL/IL50 > 100 mg/l	a, the classification criteria
Toxicity to fish (Chronic toxicity)	: Remarks: Based on available dat are not met.	a, the classification criteria
Toxicity to crustacean (Chronic toxicity)	: Remarks: Based on available dat are not met.	a, the classification criteria
Toxicity to microorganisms (Acute toxicity)	: Remarks: Based on available dat are not met.	a, the classification criteria
<u>Components:</u> Triazole derivative :		
M-Factor (Short-term (acute)	: 1	
aquatic hazard) M-Factor (Long-term (chronic) aquatic hazard)	: 1	
Persistence and degradability		
Product:		
Biodegradability	: Remarks: Not readily biodegradal inherently biodegradable, but con persist in the environment., Persis International Oil Pollution Compe definition: "A non-persistent oil is shipment, consists of hydrocarbo of which, by volume, distills at a to and (b) at least 95% of which, by temperature of 370°C (700°F) wh Method D-86/78 or any subseque	tains components that may stent per IMO criteria., nsation (IOPC) Fund oil, which, at the time of n fractions, (a) at least 50% emperature of 340°C (645°F) volume, distils at a en tested by the ASTM

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Bioaccumulative potential		
Product:		
Bioaccumulation	: Remarks: Contains components w bioaccumulate.	vith the potential to
Partition coefficient: n- octanol/water	: log Pow: > 6Remarks: (based on i products)	nformation on similar
Mobility in soil		
Product:		
Mobility	 Remarks: Liquid under most environmenters soil, it will adsorb to soil part mobile. Remarks: Floats on water. 	
Other adverse effects		
no data available <u>Product:</u>		
Additional ecological information	 Does not have ozone depletion por ozone creation potential or global is a mixture of non-volatile compor released to air in any significant qui conditions of use. Poorly soluble mixture., Causes pli organisms. Mineral oil does not cause chronic organisms at concentrations less to 	warming potential., Product nents, which will not be uantities under normal hysical fouling of aquatic toxicity to aquatic

13. DISPOSAL CONSIDERATIONS

Disposal methods	
Waste from residues	 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. Waste product should not be allowed to contaminate soil or ground water, or be disposed of into the environment. Do not dispose into the environment, in drains or in water courses Do not dispose of tank water bottoms by allowing them to drain into the ground. This will result in soil and groundwater contamination. Waste arising from a spillage or tank cleaning should be disposed of in accordance with prevailing regulations, preferably to a recognised collector or contractor. The competence of the collector or contractor should be established beforehand.
	MARPOL - see International Convention for the Prevention of

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	Pollution from Ships (MARPOL 73/78) technical aspects at controlling pollution	
Contaminated packaging	Dispose in accordance with prevailing to a recognized collector or contractor. the collector or contractor should be es Disposal should be in accordance with national, and local laws and regulation	The competence of stablished beforehand. applicable regional,
Local legislation Remarks	Disposal should be in accordance with	applicable regional
Kemano	national, and local laws and regulation	

14. TRANSPORT INFORMATION

International Regulations

ADR

Not regulated as a dangerous good

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

Not applicable for product as supplied. MARPOL Annex 1 rules apply for bulk shipments by sea.

Special precautions for user

Remarks

: Special Precautions: Refer to Section 7, Handling & Storage, for special precautions which a user needs to be aware of or needs to comply with in connection with transport.

15. REGULATORY INFORMATION

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

The regulatory information is not intended to be comprehensive. Other regulations may apply to this material.

Other international regulations

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

REACH	:	All components listed or polymer exempt.
TSCA	:	All components listed.

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16. OTHER INFORMATION

Full text of R-Phrases					
R34 R43 R50/53	Causes burns. May cause sensitisation by skin contact. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.				
Full text of H-Statements					
H304 H314 H317 H410	May be fatal if swallowed and enters airways. Causes severe skin burns and eye damage. May cause an allergic skin reaction. Very toxic to aquatic life with long lasting effects.				
Full text of other abbreviations					
Aquatic Chronic Asp. Tox. Skin Corr. Skin Sens.	Long-term (chronic) aquatic hazard Aspiration hazard Skin corrosion Skin sensitisation				
Abbreviations and Acronyms : The standard abbreviations and acronyms used in this document can be looked up in reference literature (e.g. scientific dictionaries) and/or websites.					
SDS Regulation	: Regulation 1907/2006/EC				
Further information					
Training advice	: Provide adequate information, instruction and training for operators.				
Other information	: A vertical bar () in the left margin indicates an amendment from the previous version.				
Sources of key data use compile the Safety Data Sheet					

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.