Shell Tellus S1 V 68

Version 1.1

Revision Date 08.06.2018 Print Date 09.06.2018

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

- Product name : Shell Tellus S1 V 68
- Product code : 001G8169

Manufacturer or supplier's details

Manufacturer/Supplier	: Shell India Markets Private Limited (U23201TN2004PTC053147) 2nd Floor, Campus 4A RMZ Millenia Park 143 Dr. MGR Road, Perungudi CHENNAI 600096 India
Telephone	: (+91) 04443450000
Telefax	: (+91) 04443451516
Emergency telephone number	: +91 22 6516 1058
Recommended use of the ch	nemical and restrictions on use
Recommended use	: Hydraulic oil

2. 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. EC-No. Registration number	Classification (67/548/EEC)	Classification (REGULATION (EC) No 1272/2008)	Concentration [%]
Interchangeable low viscosity base oil (<20,5 cSt @40°C) *	Not Assigned		Asp. Tox. 1; H304	0 - 90
2,6-di-tert-butyl phenol	128-39-2	Xi-N; R38- R50/53	Skin Irrit. 2; H315 Aquatic Acute 1; H400 Aquatic Chronic 1; H410	0.9

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For explanation of abbreviations see section 16.

3. 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: No precautionary phrases. Disposal: No precautionary phrases.

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.

4. FIRST-AID MEASURES

If inhaled	: No treatment necessary under normal conditions of use. If symptoms persist, obtain medical advice.
In case of skin contact	 Remove contaminated clothing. Flush exposed area with water and follow by washing with soap if available. If persistent irritation occurs, obtain medical attention.
	When using high pressure equipment, injection of product

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	under the skin can occur. If high casualty should be sent immedi for symptoms to develop. Obtain medical attention even in wounds.	ately to a hospital. Do not wait
In case of eye contact	: Flush eye with copious quantitie Remove contact lenses, if prese rinsing. If persistent irritation occurs, ob	ent and easy to do. Continue
If swallowed	: In general no treatment is necesare swallowed, however, get mo	
Most important symptoms and effects, both acute and delayed	: Oil acne/folliculitis signs and syn of black pustules and spots on t Ingestion may result in nausea,	the skin of exposed areas.
	Local necrosis is evidenced by tissue damage a few hours follo	
Protection of first-aiders	: When administering first aid, en appropriate personal protective incident, injury and surrounding	equipment according to the
Notes to physician	: Treat symptomatically.	
	High pressure injection injuries intervention and possibly steroid damage and loss of function. Because entry wounds are sma seriousness of the underlying d determine the extent of involver anaesthetics or hot soaks shou can contribute to swelling, vaso surgical decompression, debrid foreign material should be perfor anaesthetics, and wide explorat	d therapy, to minimise tissue all and do not reflect the amage, surgical exploration to ment may be necessary. Local Id be avoided because they spasm and ischaemia. Prompt ement and evacuation of prmed under general

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media		er spray or fog. Dry chemical powder, carbon nd or earth may be used for small fires only.
Unsuitable extinguishing media	Do not use	water in a jet.
Specific hazards during firefighting	A complex Jases (smc Carbon mo Doccurs.	combustion products may include: mixture of airborne solid and liquid particulates and ke). noxide may be evolved if incomplete combustion d organic and inorganic compounds.

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Specific extinguishing methods	: Use extinguishing measures that circumstances and the surroundir	
Special protective equipment for firefighters	: Proper protective equipment inclu gloves are to be worn; chemical re large contact with spilled product Breathing Apparatus must be wor a confined space. Select fire fight relevant Standards (e.g. Europe:	esistant suit is indicated if is expected. Self-Contained n when approaching a fire in er'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 Chapter 8 of this Safety Data Sheet. For guidance on disposal of spilled material see Chapter 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 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

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	materials in order to prevent fires.	
Avoidance of contact	: Strong oxidising agents.	
Product Transfer	: This material has the potential to Proper grounding and bonding pr during all bulk transfer operations	ocedures should be used
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

CAS-No. Components Value type Control Basis (Form of parameters / exposure) Permissible concentration Oil mist, mineral TWA (Mist) IN OEL Not Assigned 5 mg/m3 STEL (Mist) IN OEL Oil mist, mineral Not Assigned 10 mg/m3 US. ACGIH Oil mist, mineral Not Assigned TWA 5 mg/m3 (inhalable Threshold fraction) Limit Values Oil mist, mineral TWA (Mist) India. Not Assigned 5 mg/m3 Permissible levels of certain chemical substances in work environment. Oil mist, mineral Not Assigned (Mist) 10 mg/m3 India. Permissible levels of certain chemical substances in work environment. Oil mist, mineral Not Assigned TWA (Mist) 5 mg/m3 OSHA Z-1 Oil mist, mineral Not Assigned TWA 5 mg/m3 ACGIH

Components with workplace control parameters

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(Inhalable	
fraction)	

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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Protective measures		
Personal protective equipme PPE suppliers.	ent (PPE) should meet recommended r	national standards. Check wit
Respiratory protection	 No respiratory protection is ordin conditions of use. In accordance with good industri precautions should be taken to a If engineering controls do not ma concentrations to a level which is health, select respiratory protect specific conditions of use and ma Check with respiratory protective Where air-filtering respirators are appropriate combination of mask Select a filter suitable for the cor and vapours [Type A/Type P bo 	al hygiene practices, avoid breathing of material. aintain airborne s adequate to protect worker ion equipment suitable for the eeting relevant legislation. e equipment suppliers. e suitable, select an c and filter. nbination of organic gases
Hand protection Remarks	: Where hand contact with the pro	
	gloves approved to relevant star US: F739) made from the followi suitable chemical protection. PV gloves Suitability and durability of usage, e.g. frequency and durati resistance of glove material, dex 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 m	Ing materials may provide C, neoprene or nitrile rubber of a glove is dependent on ion of contact, chemical terity. Always seek advice ted gloves should be key element of effective hand on clean hands. After using and dried thoroughly.
	For continuous contact we recombreakthrough time of more than a 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 a and replacement regimes are fol a good predictor of glove resistadependent on the exact compos Glove thickness should be typicadepending on the glove make ar	240 minutes with preference e gloves can be identified. For recommend the same, but fering this level of protection case a lower breakthrough as appropriate maintenance lowed. Glove thickness is no nce to a chemical as it is ition of the glove material. ally greater than 0.35 mm
Eye protection	: If material is handled such that it protective eyewear is recommen	
Skin and body protection	: Skin protection is not ordinarily r work clothes. It is good practice to wear chemi	
	: Not applicable	

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Environmental exposure controls				
General advice : Take appropriate measures to fulfill the requirements of				

vapour.	before discharge to surface water. Local guidelines on emission limits for volatile substances	being discharged to waste water. Waste water should be	contamination of the environment by following advice given in	relevant environmental protection legislation. Avoid	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 plar before discharge to surface water. Local guidelines on emission limits for volatile substances must be observed for the discharge of exhaust air containing
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	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	contamination of the environment by following advice give	relevant environmental protection legislation. Avoid		. Take appropriate measures to runni the requirements of

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	liquid
Colour	:	amber
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	:	>= 195 °C / >= 383 °F Method: DIN 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	:	0.877 (15 °C / 59 °F)
Density	:	877 kg/m3 (15.0 °C / 59.0 °F) Method: ISO 12185
Solubility(ies)		
Water solubility	:	negligible
Solubility in other solvents	:	Data not available

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Partition coefficient: n- octanol/water	: log Pow: > 6(based on informatio	n on similar products)
Auto-ignition temperature	: > 320 °C / 608 °F	
Decomposition temperature	: Data not available	
Viscosity		
Viscosity, dynamic	: Data not available	
Viscosity, kinematic	: 61.2 - 74.8 mm2/s (40.0 °C / 104 Method: ASTM D445	.0 °F)
Explosive properties	: Not classified	
Oxidizing properties	: Data not available	
Conductivity	: This material is not expected to b	e 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:		
	Acute oral toxicity	:	LD50 rat: > 5,000 mg/kg

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	Remarks: Low toxicity: Based on available data, the classificati	ion 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 classificati	ion 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.

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).

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

Reproductive toxicity

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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 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:

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Toxicity to fish (Acute toxicity)	: Remarks: LL/EL/IL50 > 10 Practically non toxic: Based on available data, t	00 mg/l he classification criteria are not met.
Toxicity to crustacean (Acute toxicity)	: Remarks: LL/EL/IL50 > 10 Practically non toxic: Based on available data, t	00 mg/l he classification criteria are not met.
Toxicity to algae/aquatic plants (Acute toxicity)	: Remarks: LL/EL/IL50 > 10 Practically non toxic: Based on available data, t	00 mg/l he classification criteria are not met.
Toxicity to fish (Chronic toxicity)	: Remarks: Data not availab	ble
Toxicity to crustacean (Chronic toxicity)	: Remarks: Data not availab	ble
Toxicity to microorganisms (Acute toxicity)	: Remarks: Data not availal	ble
Persistence and degradability		
Product:		
Biodegradability		legradable., Major constituents are but contains components that may
Bioaccumulative potential		
Product:		
Bioaccumulation	: Remarks: Contains compo bioaccumulate.	onents with the potential to
Partition coefficient: n- octanol/water	: log Pow: > 6Remarks: (ba products)	used on information on similar
Mobility in soil		
Product:		
Mobility		ost environmental conditions., If it o soil particles and will not be
Other adverse effects		
no data available Product:		
Additional ecological information	ozone creation potential o is a mixture of non-volatile released to air in any sign conditions of use.	letion potential, photochemical r global warming potential., Product components, which will not be ificant quantities under normal auses physical fouling of aquatic
	organisms.	
10/15		

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	Mineral oil does not cause chronic organisms at concentrations less	

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. Do not dispose into the environment, in drains or in water courses
	Waste product should not be allowed to contaminate soil or ground water, or be disposed of into the environment. Waste, spills or used product is dangerous waste.
Contaminated packaging	: Dispose in accordance with prevailing regulations, preferably to a recognized collector or contractor. The competence of the collector or contractor should be established beforehand. Disposal should be in accordance with applicable regional, national, and local laws and regulations.
Local legislation Remarks	: Disposal should be in accordance with applicable regional, national, and local laws and regulations.

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 Chapter 7, Handling & Storage, for special precautions which a user needs to be aware of or needs to comply with in connection with transport.

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15. REGULATORY INFORMATION

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

The Manufacture, Storage and Import of Hazardous Chemicals Rules 1989 (amended version issued 2000). The Factories Act, 1948, The Second Schedule: Permissible levels of certain chemical substances in work environment, as amended through 1987. India Central motor Vehicles (Amendment) Rules 1993.

Other international regulations

The components of this product are reported in the following inventories:				
EINECS	:	Not established.		
TSCA	:	All components listed.		

16. OTHER INFORMATION

Full text of R-Phrases

R38	Irritating to skin.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in
	the aquatic environment.

Full text of H-Statements

H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Full text of other abbreviations

Aquatic Acute Aquatic Chronic Asp. Tox. Skin Irrit.	Acute aquatic toxicity Chronic aquatic toxicity Aspiration hazard Skin irritation		
Abbreviations and Acron	yms :	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.	

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Sources of key data used to compile the Safety Data Sheet	: The quoted data are from, but not limited to, one or more sources of information (e.g. toxicological data from Shell Health Services, material suppliers' data, CONCAWE, EU IUCLID date base, EC 1272 regulation, etc).	

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.