Shell Omala S4 GX 150

Version 3.1	Revision Date 26.09.2018	Print Date 27.09.2018				
SECTION 1. PRODUCT AND C	OMPANY IDENTIFICATION					
Product name	: Shell Omala S4 GX 150					
Product code	: 001D7850					
Manufacturer or supplier'	Manufacturer or supplier's details					
Supplier	: Viva Energy Australia Pty Ltd (Formerly: The Shell Company of (ABN 46 004 610 459) 720 Bourke Street Docklands Victoria 3008 Australia	Australia)				
Telephone	: +61 (0)3 8823 4444					
Telefax	: +61 (0)3 8823 4800					
Emergency telephone number	: 1800 651 818 (Australia). ; POISC CENTRE: 13 11 26 (Australia).	ONS INFORMATION				
Recommended use of the	chemical and restrictions on use					
Recommended use	: Gear oil					
SECTION 2. HAZARDS IDENTI	FICATION					
GHS Classification						
Based on available data this	s substance / mixture does not meet the o	classification criteria.				
GHS label elements						
Hazard pictograms	: No Hazard Symbol required					

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:

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Other hazards which do not result in classification

Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis.Used oil may contain harmful impurities.Not classified as flammable but will burn.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature : Blend of polyolefins and additives.

Hazardous components

SECTION 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.
In case of eye contact	 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.
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.
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.

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.

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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 are appropriate to local circumstances 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).
Hazchem Code	: NONE
SECTION 6. ACCIDENTAL RELEA	ASE MEASURES
Personal precautions, protective equipment and emergency procedures Environmental precautions	: Avoid contact with skin and eyes.
	: 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

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	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 worn and proper handling equipment should be used. Properly dispose of any contaminated rags or cleaning materials in order to prevent fires. 	be
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 use 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.	d
	Store at ambient temperature.	
Packaging material	 Suitable material: For containers or container linings, use steel or high density polyethylene. Unsuitable material: PVC. 	mild
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

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

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L'Institut National de Reche	erche et de Securité, (INRS), France http:/	//www.inrs.fr/accueil
Engineering measures	: The level of protection and types vary depending upon potential exp controls based on a risk assessme Appropriate measures include: Adequate ventilation to control air	oosure conditions. Select ent of local circumstances.
	Where material is heated, sprayed greater potential for airborne conc	
	General Information: Define procedures for safe handlir controls. Educate and train workers in the h measures relevant to normal activ product. Ensure appropriate selection, testi equipment used to control exposu equipment, local exhaust ventilation Drain down system prior to equipm maintenance. Retain drain downs in sealed stora subsequent recycle. Always observe good personal hys washing hands after handling the drinking, and/or smoking. Routine protective equipment to remove co contaminated clothing and footwea Practice good housekeeping.	azards and control ities associated with this ing and maintenance of re, e.g. personal protective on. nent break-in or age pending disposal or giene measures, such as material and before eating, ely wash work clothing and ontaminants. Discard

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 conditions of use. In accordance with good industrial hygiene practices, precautions should be taken to avoid breathing of material. If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker health, select respiratory protection equipment suitable for the specific conditions of use and meeting relevant legislation. Check with respiratory protective equipment suppliers. Where air-filtering respirators are suitable, select an appropriate combination of mask and filter. Select a filter suitable for the combination of organic gases and vapours [Type A/Type P boiling point >65°C (149°F)].
Hand protection Remarks	: Where hand contact with the product may occur the use of

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	 gloves approved to relevant standards (e.g. Europe: EN374, US: F739) made from the following materials may provide suitable chemical protection. PVC, neoprene or nitrile rubber gloves Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturizer is recommended. For continuous contact we recommend gloves with breakthrough time of more than 240 minutes with preference for > 480 minutes where suitable gloves can be identified. For short-term/splash protection we recommend the same, but recognize that suitable gloves offering this level of protection may not be available and in this case a lower breakthrough time maybe acceptable so long as appropriate maintenance and replacement regimes are followed. Glove thickness is not a good predictor of glove resistance to a chemical as it is
	dependent on the exact composition of the glove material. Glove thickness should be typically greater than 0.35 mm depending on the glove make and model.
Eye protection	: If material is handled such that it could be splashed into eyes protective eyewear is recommended.
Skin and body protection	 Skin protection is not ordinarily required beyond standard work clothes. It is good practice to wear chemical resistant gloves.
Thermal hazards	: Not applicable
Environmental exposure c	ontrols
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 plan before discharge to surface water. Local guidelines on emission limits for volatile substances must be observed for the discharge of exhaust air containing vapour.
CTION 9. PHYSICAL AND CI	HEMICAL PROPERTIES
Appearance	: Liquid at room temperature.
Colour	: amber
Odour	: Slight hydrocarbon
Odour Threshold	: Data not available

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рН		Not applicable	
pour point	•	-45 °C / -49 °FMethod: ISO 3016	
Melting / freezing point		Data not available	
Initial boiling point and boiling range	:	> 280 °C / 536 °Festimated value(s)	
Flash point	:	238 °C / 460 °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	:	0.877 (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	
Partition coefficient: n- octanol/water	:	log Pow: > 6(based on information or	n similar products)
Auto-ignition temperature	:	> 320 °C / 608 °F	
Decomposition temperature	:	Data not available	
Viscosity			
Viscosity, dynamic	:	Data not available	
Viscosity, kinematic	:	157.7 mm2/s (40.0 °C / 104.0 °F) Method: Unspecified	
		21.7 mm2/s (100 °C / 212 °F) Method: Unspecified	
Explosive properties	:	Not classified	

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Oxidizing properties	:	Data not available		
Conductivity	:	This material is not expected to be a static accumulator.		
SECTION 10. STABILITY AND RE	EAC	TIVITY		
Reactivity	:	The product does not pose any further addition to those listed in the following		
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.		
SECTION 11. TOXICOLOGICAL I				
SECTION 11. TOXICOLOGICAL I	NFC	JRMATION		
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).		
Exposure routes	:	 Skin and eye contact are the primary routes of exposure although exposure may occur following accidental ingestion. 		
Acute toxicity				
Product:				
Acute oral toxicity	:	LD50 rat: > 5,000 mg/kg Remarks: Low toxicity: Based on available data, the classificat	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 classification 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

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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.

Chronic toxicity

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.

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.

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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: Slightly irritating to respiratory system.

SECTION 12. ECOLOGICAL INFORMATION

 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).
: Remarks: LL/EL/IL50 > 100 mg/I Practically non toxic: Based on available data, the classification criteria are not met.
: Remarks: LL/EL/IL50 > 100 mg/I Practically non toxic: Based on available data, the classification criteria are not met.
: Remarks: LL/EL/IL50 > 100 mg/I Practically non toxic: Based on available data, the classification criteria are not met.
: Remarks: Data not available
: Remarks: Data not available
: Remarks: Data not available

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Persistence and degradability		
Product:		
Biodegradability	: Remarks: Not readily biodegra inherently biodegradable, but of persist in the environment.	
Bioaccumulative potential		
Product:		
Bioaccumulation	: Remarks: Contains componen bioaccumulate.	ts with the potential to
Partition coefficient: n- octanol/water	: log Pow: > 6Remarks: (based products)	on information on similar
Mobility in soil		
Product:		
Mobility	: Remarks: Liquid under most er enters soil, it will adsorb to soil mobile. Remarks: Floats on water.	
Other adverse effects		
no data available <u>Product:</u>		
Additional ecological information	 Does not have ozone depletior ozone creation potential or glo is a mixture of non-volatile con released to air in any significar conditions of use. Poorly soluble mixture., Cause organisms. 	bal warming potential., Product nponents, which will not be nt quantities under normal

SECTION 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.

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	Disposal should be in accordance national, and local laws and regul	
Local legislation Remarks	: Disposal should be in accordance national, and local laws and regulation	

SECTION 14. TRANSPORT INFORMATION

National Regulations

ADG

Not regulated as a dangerous good

International Regulations

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.

SECTION 15. REGULATORY INFORMATION

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

Standard for the Uniform : No poison schedule number allocated Scheduling of Medicines and Poisons

Product classified as per Work Health Safety Regulations – Implementation of the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) 2012 and SDS prepared as per national model code of practice for preparation of safety data sheet for Hazardous chemicals 2011 based on Globally Harmonized Classification version 3.

National Model Code of Practice for the Labelling of Workplace Hazardous Chemicals (2011).

Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG code). Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

Other international regulations

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

EINECS : All components listed or polymer exempt.

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TSCA

AIIC

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SECTION 16. OTHER INFORMATION

AIIC -Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR -Carcinogen, Mutagen or Reproductive Toxicant; CPR - Controlled Products Regulations; DIN -Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC -International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization: IECSC - Inventory of Existing Chemical Substances in China: IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 -Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch -Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS -Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative; WHMIS - Workplace Hazardous Materials Information System

Date of preparation or review : 26.09.2018

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 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).

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

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