Shell Omala S4 GXV 320

Version 1.6	Revision Date 27.11.2023	Print Date 28.11.2023			
1. PRODUCT AND COMPANY IDENTIFICATION					
Product name	: Shell Omala S4 GXV 320				
Product code	: 001F8459				
Manufacturer or supplier's o Supplier	: Shell Singapore Pte. Ltd. (196000089G) The Metropolis Tower 1, 9 North Buona Vista Drive, #07-01 Singapore 138588 Singapore				
Telephone Telefax	: (+65) 62632975 : (+65) 62632049				
Emergency telephone number	: +65 6263 2975				
Contact for Safety Data Sheet	: If you have any enquiries about th please email lubricantSDS@shell.				
Recommended use of the chemical and restrictions on use Recommended use : Gear oil					

2. HAZARDS IDENTIFICATION

GHS Classification

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

GHS label elements 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:

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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.Not classified as flammable but will burn.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture	:	Mixture		
Chemical nature	:	Blend of polyolefins and additives.		
Hazardous components Contains no hazardous ingredients according to GHS				

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.

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5. FIRE-FIGHTING MEASURES		
Suitable extinguishing media	: Foam, water spray or fog. Dry che dioxide, sand or earth may be use	
Unsuitable extinguishing media	: Do not use water in a jet.	
Specific hazards during firefighting	 Hazardous combustion products in A complex mixture of airborne soling gases (smoke). Carbon monoxide may be evolved occurs. Unidentified organic and inorganic 	lid and liquid particulates and dif incomplete combustion
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 rn 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 Section 8 of this Safety Data Sheet. For guidance on disposal of spilled material see Section 13 of this Safety Data Sheet.

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7. HANDLING AND STORAGE		
General Precautions	: Use local exhaust ventilation if ther vapours, mists or aerosols. Use the information in this data she assessment of local circumstances appropriate controls for safe handli this material.	eet as input to a risk to help determine
Advice on safe handling	: Avoid prolonged or repeated conta Avoid inhaling vapour and/or mists When handling product in drums, s worn and proper handling equipme Properly dispose of any contamina materials in order to prevent fires.	afety footwear should be ent should be used.
Avoidance of contact	: Strong oxidising agents.	
Product Transfer	: Proper grounding and bonding prod during all bulk transfer operations t	
Storage		
Other data	: Keep container tightly closed and in place. Use properly labeled and closable	
	Store at ambient temperature.	
Packaging material	: Suitable material: For containers of steel or high density polyethylene. Unsuitable material: PVC.	r container linings, use mild
Container Advice	: Polyethylene containers should not temperatures because of possible	

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.

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ersion 1.6 Examples of sources of reco	Revision Date 27.11.2023 mmended exposure measurement meth	Print Date 28.11.202
	national methods may be available.	ious are given below of
	tional Safety and Health (NIOSH), USA:	Manual of Analytical Metho
http://www.cdc.gov/niosh/		
http://www.osha.gov/	alth Administration (OSHA), USA: Samp	ling and Analytical Methods
	e (HSE), UK: Methods for the Determinat	ion of Hazardous Substanc
	utschen Gesetzlichen Unfallversicherung	(IFA), Germany
http://www.dguv.de/inhalt/ind		,, , , ,
L'Institut National de Recher	che et de Securité, (INRS), France http:.	//www.inrs.fr/accueil
Engineering measures	: The level of protection and types of	of controls necessary will
0	vary depending upon potential exp	posure conditions. Select
	controls based on a risk assessme	ent of local circumstances.
	Appropriate measures include:	harna appaantrationa
	Adequate ventilation to control air	bome concentrations.
	Where material is heated, sprayed	d or mist formed, there is
	greater potential for airborne conc	entrations to be generated
	General Information:	
	Define procedures for safe handlin controls.	-
	Educate and train workers in the h	
	measures relevant to normal activ product.	ities associated with this
	Ensure appropriate selection, test	ing and maintenance of
	equipment used to control exposu	
	equipment, local exhaust ventilation	
	Drain down system prior to equipr	nent break-in or
	maintenance. Retain drain downs in sealed stora	ago ponding disposal or
	subsequent recycle.	age perioring disposal of
	Always observe good personal hy	giene measures, such as
	washing hands after handling the	material and before eating
	drinking, and/or smoking. Routine	
	protective equipment to remove c	
	contaminated clothing and footwe Practice good housekeeping.	ar mat cannot be cleaned.
Personal protective equip	ment	

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

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	health, select respiratory protection equipment suitable for t 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 and particles [Type A/Type P boiling point >65 (149°F)].
Hand protection	
Remarks	 Where hand contact with the product may occur the use of 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 rubbe 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 ha 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. If 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 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 eye 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 Section 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 pl

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	before discharge to surface water. Local guidelines on emission limits for volatile substances must be observed for the discharge of exhaust air containing vapour.
. PHYSICAL AND CHEMICAL PR	OPERTIES
Appearance	: liquid
Colour	: colourless
Odour	: Data not available
Odour Threshold	: Data not available
рН	: Not applicable
Melting / freezing point	: Data not available
pour point	-42 °C / -44 °F Method: ASTM D97
	-42 °C / -44 °F Method: ASTM D97
Initial boiling point and boiling range	: > 280 °C / 536 °Festimated value(s)
Flash point	: >= 240 °C / >= 464 °F Method: DIN ISO 2592
Evaporation rate	: Data not available
Flammability (solid, gas)	: Not applicable
Flammability (liquids)	: Not classified as flammable but will burn.
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	: >5
Relative density	: 0.866 (15 °C / 59 °F)
Density	: 866 kg/m3 (15.0 °C / 59.0 °F) Method: DIN EN ISO 12185
	866 kg/m3 (15.0 °C / 59.0 °F) Method: ASTM D4052

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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 prod	lucts)
Auto-ignition temperature	: > 320 °C / 608 °F	
Decomposition temperature	: Data not available	
Viscosity		
Viscosity, dynamic	: Data not available	
Viscosity, kinematic	: 37 mm2/s (100 °C / 212 °F) Method: ASTM D445	
	320 mm2/s (40.0 °C / 104.0 °F) Method: ASTM D445	
	37 mm2/s (100 °C / 212 °F) Method: ASTM D445	
	320 mm2/s (40.0 °C / 104.0 °F) Method: ASTM D445	
Explosive properties	: Classification Code: Not classified	
Oxidizing properties	: Data not available	
Conductivity Particle size	: This material is not expected to be a : Data not available	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.

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Hazardous decomposition products	:	: No decomposition if stored and applied as directed.	
11. TOXICOLOGICAL INFORMAT	101	N	
Basis for assessment	:	Information given is based on data on the toxicology of similar products.Unless the data presented is representative of whole, rather than for individual comport	s indicated otherwise, the product as a
Information on likely routes of exposure	:	Skin and eye contact are the primary ro although exposure may occur following	•
Acute toxicity			
Product:			
Acute oral toxicity	:	LD50 rat: > 5,000 mg/kg Remarks: Low toxicity Based on available data, the classificati	on 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	on 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

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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.

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: Slightly irritating to respiratory system.

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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). 	
Ecotoxicity		
Product:		
Toxicity to fish (Acute toxicity)	: Remarks: Based on available da are not met. Practically non toxic: LL/EL/IL50 > 100 mg/I	ita, the classification criteria
Toxicity to crustacean (Acute toxicity)	: Remarks: Based on available da are not met. Practically non toxic: LL/EL/IL50 > 100 mg/I	ita, the classification criteria
Toxicity to algae/aquatic plants (Acute toxicity)	: Remarks: Based on available da are not met. Practically non toxic: LL/EL/IL50 > 100 mg/l	ita, the classification criteria
Toxicity to fish (Chronic toxicity)	: Remarks: Based on available da are not met.	ta, the classification criteria
Toxicity to crustacean (Chronic toxicity)	: Remarks: Based on available da are not met.	ta, the classification criteria
Toxicity to microorganisms (Acute toxicity)	: Remarks: Based on available da are not met.	ita, the classification criteria
Persistence and degradability		
Product:		
Biodegradability	: Remarks: Not readily biodegrada inherently biodegradable, but co persist in the environment., Pers International Oil Pollution Compe definition: "A non-persistent oil is shipment, consists of hydrocarbo of which, by volume, distills at a and (b) at least 95% of which, by temperature of 370°C (700°F) wh Method D-86/78 or any subseque	ntains components that may sistent per IMO criteria., ensation (IOPC) Fund s oil, which, at the time of on fractions, (a) at least 50% temperature of 340°C (645°F) y volume, distils at a hen tested by the ASTM

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Bioaccumulative potential		
Product:		
Bioaccumulation	: Remarks: Contains components wit bioaccumulate.	h the potential to
Partition coefficient: n- octanol/water	: log Pow: > 6Remarks: (based on information on similar products)	
Mobility in soil		
Product:		
Mobility	 Remarks: Liquid under most environmental conditions., If it enters soil, it will adsorb to soil particles and will not be mobile. Remarks: Floats on water. 	
Other adverse effects		
no data available Product:		
Additional ecological information	 Does not have ozone depletion pote ozone creation potential or global w is a mixture of non-volatile compone released to air in any significant qua conditions of use. Poorly soluble mixture., Causes phy organisms. 	arming potential., Product ents, which will not be antities under normal

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 Pollution from Ships (MARPOL 73/78) which provides

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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 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

Maritime transport in bulk according to IMO instruments

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

Local Regulations

orkplace Safety and Health Act & Workplace This product is not subject to the requirement in the Act/Regulations.	ts
re Safety Act and Fire Safety (Petroleum & This product is not subject to the requirement ammable Materials) Regulations in the Act/Regulations.	its
aritime and Port Authority of Singapore This product is not subject to the requiremen angerous Goods, Petroleum and Explosives) in the Act/Regulations.	its
	the requiremen

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Regulations			
Environmental Protection	and Management Act	This product is no	ot subject to control under this
and Environmental Prote	ction and	Act/ Regulation.	
Management (Hazardous	Substances)		
Regulations	-		

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:TSCA: All components listed.

16. OTHER INFORMATION

Abbreviations and Acronyms

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; 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; TECI - Thailand Existing Chemicals Inventory; 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

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Further information		
Training advice	: Provide adequate information, instruction and training for operators.	
Other information	: A vertical bar () in the left margir from the previous version.	n indicates an amendment
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).	

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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