Shell Spirax S3 G 80W

Revision Date 31.07.2024	Print Date 01.08.2024
FICATION	
Shell Spirax S3 G 80W	
001D8264	
ls	
Shell Singapore Pte. Ltd. (196000089G) The Metropolis Tower 1,	
Singapore	
(+65) 62632975	
(+65) 62632049	
+65 6263 2975	
If you have any enquiries about the co please email lubricantSDS@shell.com	
cal and restrictions on use	
Transmission oil.	
This product must not be used in applic listed in Section 1 without first seeking t supplier.	
	FICATION Shell Spirax S3 G 80W 201D8264 S Shell Singapore Pte. Ltd. (196000089G) The Metropolis Tower 1, 9 North Buona Vista Drive, #07-01 Singapore 138588 Singapore (+65) 62632975 (+65) 62632049 +65 6263 2975 If you have any enquiries about the co please email lubricantSDS@shell.com cal and restrictions on use Transmission oil. This product must not be used in applic isted in Section 1 without first seeking t

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	

Shell Spirax S3 G 80W

Version 2.0	Revision Date 31.07.2024	Print Date 01.08.2024
	Prevention:	
	No precautionary phrases.	
	Response:	
	No precautionary phrases.	
	Storage:	
	No precautionary phrases.	
	Disposal:	
	No precautionary phrases.	

Other hazards which do not result in classification

Prolonged or repeated skin contact without proper cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis.Used oil may contain harmful impurities.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, 64741-88-4, 64741-89-5.

Hazardous components					
Chemical name	CAS-No.	Classification	Concentration (% w/w)		
Interchangeable low viscosity base oil (<20,5 cSt @40°C) *	Not Assigned	Asp. Tox.1; H304	0 - 90		
Alkenyl amine	112-90-3	Acute Tox.4; H302 Asp. Tox.1; H304 Skin Corr.1; H314 STOT SE3; H335 STOT RE2; H373 Aquatic Acute1; H400 Aquatic Chronic1; H410	0.05 - 0.49		
Alkyl amine	111-86-4	Acute Tox.3; H301	0 - 0.24		

Shell Spirax S3 G 80W

Version 2.0	Revisior	n Date 31.07.2024	Print Date	01.08.2024
		Acute Tox.3; H311 Skin Corr.1; H314 Eye Dam.1; H318 Acute Tox.4; H332 STOT SE3; H335 Aquatic Acute1; H400 Flam. Liq.3; H226 Aquatic Chronic2; H411		
Alkyl amine	68955-53-3	Acute Tox.4; H302 Acute Tox.3; H311 Skin Corr.1B; H314 Skin Sens.1A; H317 Acute Tox.2; H330 Aquatic Acute1; H400 Aquatic Chronic1; H410 STOT SE3; H335	0.01 - 0.09	

For explanation of abbreviations see section 16.

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.

Shell Spirax S3 G 80W

Version 2.0	Revision Date 31.07.2024	Print Date 01.08.2024
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 n A complex mixture of airborne soli gases (smoke). Carbon monoxide may be evolved occurs. Unidentified organic and inorganic 	d and liquid particulates and if incomplete combustion
Specific extinguishing methods	: Use extinguishing measures that a circumstances and the surroundin	
Special protective equipment for firefighters	: Proper protective equipment inclue gloves are to be worn; chemical re large contact with spilled product i Breathing Apparatus must be worn a confined space. Select fire fighte relevant Standards (e.g. Europe:	esistant suit is indicated if s expected. Self-Contained n when approaching a fire in er's clothing approved to

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and		Avoid contact with skin and eyes.
emergency procedures Environmental precautions	:	Use appropriate containment to prevent uncontrolled release. 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.

Shell Spirax S3 G 80W

Version 2.0	Revision Date 31.07.2024	Print Date 01.08.2024	
7. HANDLING AND STORAGE			
General Precautions	vapours, mists or aerosols. Use the information in this data s assessment of local circumstanc	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	
Advice on safe handling	 Avoid prolonged or repeated cor Avoid inhaling vapour and/or mis When handling product in drums worn and proper handling equip Properly dispose of any contami materials in order to prevent fire 	sts. s, safety footwear should be ment should be used. inated rags or cleaning	
Avoidance of contact	: Strong oxidising agents.		
Product Transfer	: Proper grounding and bonding p during all bulk transfer operation		
Storage			
Other data	 Keep container tightly closed an place. Use properly labeled and closab Store at ambient temperature. 		
	Store at ambient temperature.		
Packaging material	: Suitable material: For containers steel or high density polyethylen Unsuitable material: PVC.		
Container Advice	: Polyethylene containers should temperatures because of possib		

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	PEL (long term) (Mist)	5 mg/m3	SG OEL
Oil mist, mineral	Not Assigned	PEL (short term) (Mist)	10 mg/m3	SG OEL
Oil mist, mineral	Not Assigned	TWA (Mist)	5 mg/m3	OSHA Z-1
Oil mist, mineral	Not Assigned	TWA (Inhalable particulate matter)	5 mg/m3	ACGIH

Shell Spirax S3 G 80W

Version 2.0

Revision Date 31.07.2024

Print Date 01.08.2024

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

Shell Spirax S3 G 80W

Protective measures	Revision Date 31.07.2024	Print Date 01.08.20
Personal protective equipm PPE suppliers.	ent (PPE) should meet recommended r	national standards. Check wi
Respiratory protection	 No respiratory protection is ordin conditions of use. In accordance with good industri precautions should be taken to a lf engineering controls do not ma concentrations to a level which is health, select respiratory protection 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 com and vapours and particles [Type (149°F)]. 	al hygiene practices, void breathing of material. aintain airborne s adequate to protect worker on equipment suitable for th eeting relevant legislation. e equipment suppliers. e suitable, select an and filter. nbination of organic gases
Hand protection		
Remarks	: Where hand contact with the pro gloves approved to relevant stan 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 l care. Gloves must only be worn gloves, hands should be washed Application of a non-perfumed m	dards (e.g. Europe: EN374, ng materials may provide C, neoprene or nitrile rubber of a glove is dependent on on of contact, chemical terity. Always seek advice ted gloves should be key element of effective han on clean hands. After using I 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 resistand dependent on the exact composion Glove thickness should be typicated by the glove make an and the glove make an and the glove make and	240 minutes with preference 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	

Shell Spirax S3 G 80W

Version 2.0	Revision Date 31.07.2024	Print Date 01.08.2024
Thermal hazards	: Not applicable	

Environmental exposure controls

General advice : Take appropriate measures to fulfill the requirements of relevant environmental protection legislation. Avoid contamination of the environment by following advice given in 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 plant before discharge to surface water. Local guidelines on emission limits for volatile substances must be observed for the discharge of exhaust air containing vapour.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	:	Liquid at room temperature.
Colour	:	amber
Odour	:	Data not available
Odour Threshold	:	Data not available
рН	:	Not applicable
pour point	:	-33 °C / -27 °F Method: ISO 3016
Melting / freezing point		Data not available
Initial boiling point and boiling range	:	> 280 °C / 536 °Festimated value(s)
Flash point	:	210 °C / 410 °F Method: 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	:	0.885 (15 °C / 59 °F)

Shell Spirax S3 G 80W

Version 2.0	Revision Date 31.07.2024 Print Date 01.08.2024
Density	: 885 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
Decomposition temperature	: Data not available
Viscosity	
Viscosity, dynamic	: Data not available
Viscosity, kinematic	: 78 mm2/s (40.0 °C / 104.0 °F) Method: ASTM D445
	10 mm2/s (100 °C / 212 °F) Method: ASTM D445
Particle characteristics Particle size	: Data not available
Explosive properties	: Classification Code: 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	: No decomposition if stored and applied as directed.

Shell Spirax S3 G 80W

Version 2.0		Revision Date 31.07.2024	Print Date 01.08.2024
products			
11. TOXICOLOGICAL INFORMAT	101	١	
Basis for assessment	:	Information given is based on data o the toxicology of similar products.Un the data presented is representative whole, rather than for individual com	less indicated otherwise, of the product as a
Information on likely routes of exposure	:	Skin and eye contact are the primary 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 classifie	cation criteria are not met.
Acute inhalation toxicity	:	Remarks: Based on available data, t are not met.	he classification criteria
Acute dermal toxicity	:	LD50 Rabbit: > 5,000 mg/kg Remarks: Low toxicity Based on available data, the classific	cation 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:

Alkyl amine:

Remarks: Experimental data has shown that the concentration of potentially sensitising components present in this product does not induce skin sensitisation.

Shell Spirax S3 G 80W

Version 2.0

Revision Date 31.07.2024

Print Date 01.08.2024

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).

Material	GHS/CLP Carcinogenicity Classification
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

Shell Spirax S3 G 80W

|--|

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.

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 data, the classification criteria are not met. Practically non toxic: LL/EL/IL50 > 100 mg/l
Toxicity to crustacean (Acute toxicity)	: Remarks: Based on available data, the classification criteria are not met. Practically non toxic: LL/EL/IL50 > 100 mg/l
Toxicity to algae/aquatic plants (Acute toxicity)	: Remarks: Based on available data, the classification criteria are not met. Practically non toxic: LL/EL/IL50 > 100 mg/I
Toxicity to fish (Chronic toxicity)	: Remarks: Based on available data, the classification criteria are not met.
Toxicity to crustacean (Chronic toxicity)	: Remarks: Based on available data, the classification criteria are not met.
Toxicity to microorganisms (Acute toxicity)	: Remarks: Based on available data, the classification criteria are not met.
Components:	

Alkenyl amine :

Shell Spirax S3 G 80W

Version 2.0	Revision Date 31.07.2024	Print Date 01.08.2024
M-Factor (Short-term (acute) aquatic hazard)	: 10	
M-Factor (Long-term	: 10	
(chronic) aquatic hazard) Alkyl amine :		
M-Factor (Short-term (acute) aquatic hazard) Alkyl amine :	: 1	
M-Factor (Short-term (acute) aquatic hazard)	: 1	
Persistence and degradability		
Product:		
Biodegradability	: Remarks: Not readily biodegrada inherently biodegradable, but cor persist in the environment., Persi International Oil Pollution Compe definition: "A non-persistent oil is shipment, consists of hydrocarbo of which, by volume, distills at a t and (b) at least 95% of which, by temperature of 370°C (700°F) wh Method D-86/78 or any subseque	htains components that may istent per IMO criteria., ensation (IOPC) Fund oil, which, at the time of on fractions, (a) at least 50% temperature of 340°C (645°F) volume, distils at a hen tested by the ASTM
Bioaccumulative potential		
<u>Product:</u>		
Bioaccumulation	: Remarks: Contains components bioaccumulate.	with the potential to
Partition coefficient: n- octanol/water	: log Pow: > 6Remarks: (based on products)	information on similar
Mobility in soil		
Product:		
Mobility	 Remarks: Liquid under most envi enters soil, it will adsorb to soil pa mobile. Remarks: Floats on water. 	
Other adverse effects		
no data available <u>Product:</u>		
Additional ecological information	 Does not have ozone depletion p ozone creation potential or globa is a mixture of non-volatile comporeleased to air in any significant of conditions of use. Poorly soluble mixture., Causes p organisms. Mineral oil does not cause chronit organisms at concentrations less 	I warming potential., Product onents, which will not be quantities under normal physical fouling of aquatic ic toxicity to aquatic

Shell Spirax S3 G 80W

Version 2.0

Revision Date 31.07.2024

Print Date 01.08.2024

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 technical aspects at controlling pollutions from ships.
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	:	All relevant environmental regulations in Singapore must be complied with.

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

Shell Spirax S3 G 80W

Version 2.0	Revision Date 31.07.2024	Print Date 01.08.2024	
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

Workplace Safety and Health Act & Workplace	This product is not subject to the requirements
Safety and Health (General Provision)	in the Act/Regulations.
Regulations	

Fire Safety Act and Fire Safety (Petroleum & Flammable Materials) Regulations	This product is not subject to the requirements in the Act/Regulations.
---	---

Maritime and Port Authority of Singapore (Dangerous Goods, Petroleum and Explosives)	This product is not subject to the requirements in the Act/Regulations.
Regulations	

Environmental Protection and Management Act and Environmental Protection and Management (Hazardous Substances) Regulations	This product is not subject to control under this Act/ Regulation.	
The regulatory information is not intended to be comprehensive. Other regulations may apply to		

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

Full text of H-Statements

H226	Flammable liquid and vapour.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.

Shell Spirax S3 G 80W

Version 2.0	Revision Date 31.07.2024	Print Date 01.08.2024
H317	May cause an allergic skin reaction.	
H318	Causes serious eye damage.	
H330	Fatal if inhaled.	
H332	Harmful if inhaled.	
H335	May cause respiratory irritation.	
H373	May cause damage to organs through prolonged	or repeated exposure.
H400	Very toxic to aquatic life.	
H410	Very toxic to aquatic life with long lasting effects.	
H411	Toxic to aquatic life with long lasting effects.	
Full text of other abbreviations		
Acute Tox.	Acute toxicity	
Aquatic Acute	Short-term (acute) aquatic hazard	
Aquatic Chronic	Long-term (chronic) aquatic hazard	
Asp. Tox.	Aspiration hazard	
Eye Dam.	Serious eye damage	
Flam. Liq.	Flammable liquids	
Skin Corr.	Skin corrosion	
Skin Sens.	Skin sensitisation	
STOT RE	Specific target organ toxicity - repeated exposure	9
STOT SE	Specific target organ toxicity - single exposure	

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

Shell Spirax S3 G 80W

Version 2.0	Revision Date 31.07.2024	Print Date 01.08.2024
Further information		
Training advice	: Provide adequate information, instruction and training for operators.	
Other information	: A vertical bar () in the left margin 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.

SG / EN