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Shell Spirax S3 T

Version 2.6	Revision Date 21.08.2020	Print Date 22.10.2020
SECTION 1. PRODUCT AND C	OMPANY IDENTIFICATION	
Product name	: Shell Spirax S3 T	
Product code	: 001D8245	
Manufacturer or supplier	s details	
Supplier	: TransDiesel Limited NZBN 9429036551132 533 Halswell Junction Road Christchurch 8042 New Zealand	
Telephone Telefax	: 0800 848 267 (All Hours) :	
Emergency telephone number	: 0800 848 267 (All Hours)	
Recommended use of the	chemical and restrictions on use	
Recommended use	: Hydraulic oil, Transmission oil.	

SECTION 2. HAZARDS IDENTIFICATION

NON-HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS. Not classified as hazardous according to criteria in the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2017., Not classified as Dangerous Goods for transport, according to NZS 5433:2012 Transport of Dangerous Goods on Land.

Hazardous Substances Classification	: 9.1C
GHS Classification Long-term (chronic) aquatic hazard	: Aquatic Chronic3
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: H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

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Prevention:

P273 Avoid release to the environment.

Response:

No precautionary phrases.

Storage: No precautionary phrases.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

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

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.
	:	* contains one or more of the following CAS-numbers: 64742- 53-6, 64742-54-7, 64742-55-8, 64742-56-9, 64742-65-0, 68037-01-4, 72623-86-0, 72623-87-1, 8042-47-5, 848301-69- 9, 68649-12-7, 151006-60-9, 163149-28-8.

Hazardous components

Chemical name	CAS-No.	Classification	Concentration (% w/w)
Interchangeable low viscosity base oil (<20,5 cSt @40°C) *	Not Assigned	Asp. Tox.1; H304	0 - 90
Zinc dialkyldithiophosphate	4259-15-8	Eye Dam.1; H318 Aquatic Chronic2; H411	1 - 3
Borated ester	1471314-23-4	Skin Sens.1B; H317	0.1 - 0.9
Calcium sulphonate	Not Assigned	Skin Sens.1B; H317	< 0.9
Triphenyl phosphite	101-02-0	Acute Tox.4; H302 Skin Irrit.2; H315 Skin Sens.1A; H317 Eye Irrit.2A; H319 Aquatic Acute1; H400 Aquatic Chronic1; H410 STOT RE2; H373	0.01 - 0.099

For explanation of abbreviations see section 16.

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SECTION 4. FIRST-AID MEASUR	S	
If inhaled	: No treatment necessary under If symptoms persist, obtain me	
In case of skin contact	: Remove contaminated clothing water and follow by washing w If persistent irritation occurs, of	ith soap if available.
In case of eye contact	 Flush eye with copious quantiti Remove contact lenses, if pres rinsing. If persistent irritation occurs, ob 	sent and easy to do. Continue
If swallowed	: In general no treatment is nece are swallowed, however, get m	, ,
Most important symptoms and effects, both acute and delayed	: Oil acne/folliculitis signs and sy of black pustules and spots on Ingestion may result in nausea	the skin of exposed areas.
Protection of first-aiders	: When administering first aid, en appropriate personal protective incident, injury and surrounding	e equipment according to the
Notes to physician	: Treat symptomatically.	

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	Foam, water spray or fog. Dry chemical powder, carl dioxide, sand or earth may be used for small fires or	
Unsuitable extinguishing media	Do not use water in a jet.	
Specific hazards during firefighting	Hazardous combustion products may include: A complex mixture of airborne solid and liquid particl gases (smoke). Carbon monoxide may be evolved if incomplete com occurs. Unidentified organic and inorganic compounds.	
Specific extinguishing methods	Use extinguishing measures that are appropriate to circumstances and the surrounding environment.	local
Special protective equipment for firefighters	Proper protective equipment including chemical resis gloves are to be worn; chemical resistant suit is indic large contact with spilled product is expected. Self-C	cated if

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	Breathing Apparatus must be worn	when approaching a fire in
	a confined space. Select fire fighte	r's clothing approved to
	relevant Standards (e.g. Europe: E	EN469).

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures Environmental precautions	 Avoid contact with skin and eyes. 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.

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 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 materials in order to prevent fires.
Avoidance of contact	:	Strong oxidising agents.
Product Transfer	:	Proper grounding and bonding procedures should be used during all bulk transfer operations to avoid static accumulation.
Storage		
Other data	:	Keep container tightly closed and in a cool, well-ventilated place. Use properly labeled and closable containers.

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	Store at ambient temperature.	
Packaging material	: Suitable material: For containers of steel or high density polyethylene. Unsuitable material: PVC.	
Container Advice	: Polyethylene containers should no temperatures because of possible	

SECTION 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	WES-TWA (Mist)	5 mg/m3	NZ OEL
	Further information: Sampled by a method that does not collect vapour.			
Oil mist, mineral	Not Assigned	WES-STEL (Mist)	10 mg/m3	NZ 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

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

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	controls based on a risk assessm Appropriate measures include:	ent of local circumstances.
	Adequate ventilation to control air	borne concentrations.
	Where material is heated, sprayed greater potential for airborne conc	
	General Information:	
	Define procedures for safe handlin controls.	ng and maintenance of
	Educate and train workers in the hazards and control measures relevant to normal activities associated with product.	
	Ensure appropriate selection, test equipment used to control exposu equipment, local exhaust ventilation	ire, e.g. personal protective
	Drain down system prior to equipr	
	Retain drain downs in sealed stor subsequent recycle.	age pending disposal or
	Always observe good personal hy washing hands after handling the drinking, and/or smoking. Routine protective equipment to remove c contaminated clothing and footwe Practice good housekeeping.	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 and particles [Type A/Type P boiling point >65°C (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 rubber gloves Suitability and durability of a glove is dependent on

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	usage, e.g. frequency and duration resistance of glove material, dexte from glove suppliers. Contaminate replaced. Personal hygiene is a ke care. Gloves must only be worn or gloves, hands should be washed a Application of a non-perfumed moi	rity. Always seek advice d gloves should be ey element of effective hand n clean hands. After using and dried thoroughly.
	For continuous contact we recomm breakthrough time of more than 24 for > 480 minutes where suitable g short-term/splash protection we re recognize that suitable gloves offe may not be available and in this ca time maybe acceptable so long as and replacement regimes are follo a good predictor of glove resistance dependent on the exact composition Glove thickness should be typically depending on the glove make and	40 minutes with preference ploves can be identified. For commend the same but ring this level of protection ase a lower breakthrough appropriate maintenance wed. Glove thickness is not ce to a chemical as it is on of the glove material. y greater than 0.35 mm
Eye protection	: If material is handled such that it c protective eyewear is recommended	
Skin and body protection	 Skin protection is not ordinarily rec work clothes. It is good practice to wear chemica 	
Thermal hazards	: Not applicable	
Environmental exposure of	ontrols	
General advice	: Take appropriate measures to fulfi relevant environmental protection contamination of the environment	legislation. Avoid

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Liquid at room temperature.
Colour	: amber
Odour	: Slight hydrocarbon
Odour Threshold	: Data not available
рН	: Not applicable
pour point	: -27 °C / -17 °FMethod: ISO 3016

vapour.

before discharge to surface water.

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

Local guidelines on emission limits for volatile substances must be observed for the discharge of exhaust air containing

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Initial boiling point and boiling range	: > 280 °C / 536 °Festimated value	(s)
Flash point	: 226 °C / 439 °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	: 0.890 (15 °C / 59 °F)	
Density	: 890 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	n on similar products)
Auto-ignition temperature	: > 320 °C / 608 °F	
Decomposition temperature	: Data not available	
Viscosity		
Viscosity, dynamic	: Data not available	
Viscosity, kinematic	: 14.5 mm2/s (100 °C / 212 °F) Method: ISO 3104	
Explosive properties	: Not classified	
Oxidizing properties	: Data not available	
Conductivity	: This material is not expected to be	e a static accumulator

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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 su	nlight.
Incompatible materials	:	Strong oxidising agents.	
Hazardous decomposition products	:	No decomposition if stored and applied	l as directed.

SECTION 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 Remarks: Low toxicity: Based on available data, the classification criteria are not met.
	Acute inhalation toxicity	:	Remarks: Based on available data, the classification criteria are not met.
	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 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

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Components:

Zinc dialkyldithiophosphate:

Remarks: 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:

Borated ester:

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

Calcium sulphonate:

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

Triphenyl phosphite:

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

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.

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:

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	:	
	Remarks: Not a developmental to	xicant., Does not impair

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.

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SECTION 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).
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Ecotoxicity

Product:

Toxicity to fish (Acute

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toxicity)		Remarks: LL/EL/IL50 10-100 mg/l Harmful	
Toxicity to crustacean (Acute toxicity)	:	Remarks: LL/EL/IL50 10-100 mg/l Harmful	
Toxicity to algae/aquatic plants (Acute toxicity)	:	Remarks: LL/EL/IL50 10-100 mg/l Harmful	
Toxicity to fish (Chronic toxicity)	:	Remarks: NOEC/NOEL > 10 - <=10	0 mg/l
Toxicity to crustacean	:	Remarks: NOEC/NOEL > 10 - <=10	0 mg/l
(Chronic toxicity) Toxicity to microorganisms (Acute toxicity)	:	Remarks: NOEC/NOEL > 10 - <=10	0 mg/l
<u>Components:</u> Triphenyl phosphite :			
M-Factor (Short-term (acute) aquatic hazard)	:	1	
Persistence and degradability			
Product:			
Biodegradability	:	Remarks: Not readily biodegradable inherently biodegradable, but contai persist in the environment.	
Bioaccumulative potential			
Product:			
Bioaccumulation	:	Remarks: Contains components with bioaccumulate.	h the potential to
Partition coefficient: n- octanol/water	:	log Pow: > 6Remarks: (based on inf products)	ormation on similar
Mobility in soil			
Product:			
Mobility	:	Remarks: Liquid under most enviror Adsorbs to soil and has low mobility Remarks: Floats on water.	
Other adverse effects			
no data available <u>Product:</u>			
Additional ecological information	:	Does not have ozone depletion pote ozone creation potential or global wa is a mixture of non-volatile compone released to air in any significant qua conditions of use. Poorly soluble mixture., Causes phy	arming potential., Product ents, which will not be intities under normal
10/16			90000100750

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	organisms.		
	Mineral oil does not cause chronic toxicity to aquatic		
	organisms at concentrations less than 1 mg/l.		

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.
	Disposal methods, including disposal of packaging, should be in accordance with the Hazardous Substances (Disposal) Notice 2017 and the Act.
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 the New Zealand Hazardous Substances Disposal Regulations 2001. Treat the substance using a method that changes the characteristics or composition of the substance so that the substance is no longer a hazardous substance.

SECTION 14. TRANSPORT INFORMATION

National Regulations

Land Transport Rule: Dangerous Goods 2012 -NZS 5433 Not regulated as a dangerous good

International Regulations

IATA-DGR

Not regulated as a dangerous good

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IMDG-Code Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

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

Special precautions for user

Remarks

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

SECTION 15. REGULATORY INFORMATION

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

R-phrase(s)	: R52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
S-phrase(s)	: S61	Avoid release to the environment. Refer to special instructions/ Safety data sheets.

HSNO Approval Number

HSR002606

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

New Zealand Workplace Exposure Limits 2002 (WES). New Zealand Standard 5433:2012 Transport of Dangerous Goods on Land.

Other international regulations

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

EINECS	: All components listed or polymer exe	
TSCA	:	All components listed.

SECTION 16. OTHER INFORMATION

Full text of H-Statements

H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H373	May cause damage to organs through prolonged or repeated exposure.

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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	
Eye Irrit.	Eye irritation	
Skin Irrit.	Skin irritation	
Skin Sens.	Skin sensitisation	
STOT RE	Specific target organ toxicity - repeated exposure	Э

Abbreviations and Acronyms

AICS - Australian Inventory of Chemical Substances; 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; 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

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 sources of information (e.g. toxico Health Services, material supplier IUCLID date base, EC 1272 regul	ological data from Shell s' data, CONCAWE, EU

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.

NZ / EN