Version 6.1	Re	ision Date 2024.07.15	Print Date 2024.11.04					
1. PRODUCT AND COMPANY ID	1. PRODUCT AND COMPANY IDENTIFICATION							
Chemical product name	: Aer	Shell Turbine Oil 500						
Product code	: 001	40083						
Manufacturer or supplier's of Supplier's company name, address and phone number	: She Pac	II Lubricants Japan K.K. ific Century Place Marunouchi 12F -1, Marunouchi						
Telephone Telefax	Tok Japa : (+8	roda-ku yo 100-6212 an 1) 03-3218-1780 1) 03-3218-1781						
Emergency telephone number	fyo sen Lub Tel. E-m	oortant notice for customer support] u need support for product, please o ice centre. Customer Service Centre (Lub CS0 0120-064-315 / Fax. 0120-264-315 pail. Inquiries-Lubes-JP@shell.com ailable for Japanese office hours on	C) (JP Toll free)					
Contact for Safety Data Sheet		you have any enquiries about the co ase email lubricantSDS@shell.com						
Recommended use of the cl	emical	and restrictions on use						
Recommended use	-	thetic lubricating oil for aircraft turbir ils consult the AeroShell Book on w	-					
Restrictions on use	acc mar This reco This	product must be used, handled, an ordance with the requirements of the substance may not be used for any ommended without expert advice substance may not be used for any ommended without expert advice	e equipment other documentation. / purpose other than					

2. HAZARDS IDENTIFICATION

GHS classification of chemical product					
Short-term (acute) aquatic	: Category 3				
hazard					
Long-term (chronic) aquatic	: Category 3				
hazard					

AeroShell Turbine Oil 500

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GHS label elements		
Hazard pictograms	: No Hazard Symbol required	
Signal word	: No signal word	
Hazard statements	 PHYSICAL HAZARDS: Not classified as a physical hazard un HEALTH HAZARDS: Not classified as a health hazard unde ENVIRONMENTAL HAZARDS: H412 Harmful to aquatic life with long 	er GHS criteria.
Precautionary statements	: Prevention: P273 Avoid release to the environment	
	Response: No precautionary phrases.	
	Storage: No precautionary phrases.	
	Disposal: P501 Dispose of contents/ container to disposal plant.	o an approved waste

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 synthetic esters and additives.
-----------------	---	--

Hazardous components

Substance name	CAS-No.	Classification	Concentration (% w/w)
N-phenyl-1- naphthylamine	90-30-2	Acute Tox.4; H302 Skin Sens.1B; H317 STOT RE2; H373 Aquatic Acute1; H400	0.25 - < 1

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		Aquatic Chronic1; H410		
Triaryl phosphate	1330-78-5	Repr.2; H361 Aquatic Acute1; H400 Aquatic Chronic1; H410	0.25 - <= 1	

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.
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.
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.
3/18	800001001487

Version 6.1	Revision Date 2024.07.15 Unidentified organic and inorganic	Print Date 2024.11.04
	Unidentilied organic and morganic	compounds.
Specific extinguishing methods	: Use extinguishing measures that a circumstances and the surrounding	
Special protective equipment for firefighters	: Proper protective equipment includ gloves are to be worn; chemical re large contact with spilled product is Breathing Apparatus must be worn a confined space. Select fire fighte relevant Standards (e.g. Europe: I	sistant suit is indicated if s expected. Self-Contained when approaching a fire in r's clothing approved to

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.

7	ΗΔΝΟΙ	ING	STORAGE
			STONAGE

Handling	
Technical measures	 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.

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Facial protective equipment		erial is handled such that it tive eyewear is recommen	could be splashed into eyes, ded.
Describe contact avoidance, etc	: Strong	oxidising agents.	
Product Transfer			rocedures should be used s to avoid static accumulation.
Storage			
Other data	place.	container tightly closed and roperly labeled and closab	
	Store	at ambient temperature.	
Packaging material	steel o	le material: For containers or high density polyethylene able material: PVC.	or container linings, use mild e.
Container Advice	•	hylene containers should r ratures because of possibl	

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Threshold limit value and permissible exposure limits for each component in the work environment

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

労働者の健康障害を防止するため化学物質の濃度基準値とその適用方法などを定めました (mhlw.go.jp)

rsion 6.1	Revision Date 2024.07.15	Print Date 2024.11.04
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 greater potential for airborne conce	
	General Information: Define procedures for safe handling controls.	g and maintenance of
	Educate and train workers in the har measures relevant to normal activit product.	
	Ensure appropriate selection, testir equipment used to control exposure equipment, local exhaust ventilation	e, e.g. personal protective
	Drain down system prior to equipme maintenance.	
	Retain drain downs in sealed storage subsequent recycle.	ge pending disposal or
	Always observe good personal hyg washing hands after handling the n drinking, and/or smoking. Routinely protective equipment to remove co contaminated clothing and footwear Practice good housekeeping.	naterial and before eating, / wash work clothing and ntaminants. Discard
Personal protective equipme	ent	
Protective measures		
	(PPE) should meet recommended nati	onal standards. Chock with

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

/ersion 6.1	Revision Date 2024.07.15	Print Date 2024.11.04
	gloves approved to relevant star US: F739) made from the followi suitable chemical protection. PV gloves Suitability and durability of usage, e.g. frequency and durati resistance of glove material, dex from glove suppliers. Contamina replaced. Personal hygiene is a care. Gloves must only be worn gloves, hands should be washed Application of a non-perfumed m	ng materials may provide C, neoprene or nitrile rubber of a glove is dependent on on of contact, chemical tterity. Always seek advice ted gloves should be key element of effective hand on clean hands. After using and dried thoroughly.
	For continuous contact we recombreakthrough time of more than 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 and replacement regimes are fol a good predictor of glove resistat dependent on the exact compos Glove thickness should be typicated depending on the glove make ar	240 minutes with preference e gloves can be identified. For recommend the same but fering this level of protection case a lower breakthrough as appropriate maintenance lowed. Glove thickness is not ince to a chemical as it is ition of the glove material. ally greater than 0.35 mm
Eye and face protection	: If material is handled such that in protective eyewear is recomment	
Skin and body protection	: Skin protection is not ordinarily r work clothes. It is good practice to wear chem	
Thermal hazards	: Not applicable	
Environmental exposure c	ontrols	
General advice	: Take appropriate measures to fur relevant environmental protection contamination of the environment Section 6. If necessary, prevent being discharged to waste water treated in a municipal or industria	n legislation. Avoid t by following advice given in undissolved material from . Waste water should be

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

Physical state	: Liquid at room temperature.
Colour	: Various colours
Odour	: Slight hydrocarbon

AeroShell Turbine Oil 500

Odour Threshold : Data not available pH : Not applicable Meting / freezing point : Data not available pour point : :=-54 °C / <=-65 °F Method: ASTM D97 Boiling point, initial boiling range : > 280 °C / 536 °F estimated value(s) point and boiling range : > 280 °C / 536 °F estimated value(s) Plant and boiling range : > 280 °C / 536 °F estimated value(s) point and boiling range : > 280 °C / 536 °F estimated value(s) Flash point : 264 °C / 507 °F Method: ASTM D92 (COC) Evaporation rate : Flash point : Data not available Flammability : Data not available Flammability (solid, gas) : Not classified as flammable but will burn. Lower explosion limit and upper explosion limit / flammability limit Upper explosion limit : Typical 1 %(V) Lower explosion limit : Typical 1 %(V) Vapour pressure : <0.5 Pa (20 °C / 68 °F) Relative vapour density : 1 005 (15 °C / 59 °F) Density : 1.005 (15 °C / 59 °F)	ersion 6.1	Revision Date 2024.07.15	Print Date 2024.11.04
Melting / freezing point:Data not availablepour point<=-54 °C / <=-65 °F Method: ASTM D97Boiling point, initial boiling point and boiling range:> 280 °C / 536 °F estimated value(s)Flash point:264 °C / 507 °F Method: ASTM D92 (COC)Evaporation rate:Data not availableFlammability Flammability (solid, gas):Not applicableFlammability (solid, gas):Not classified as flammable but will burn.Flammability (liquids):Not classified as flammable but will burn.Lower 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:> 1.005 (15 °C / 59 °F)Density and / or relative density:1.005 (15 °C / 59 °F)Density:nogligibleSolubility(ies):Not availableWater solubility:negligibleSolubility in other solvents:Data not availablePartition coefficient: n- octanol/water:log Pow: > 6 (based on information on similar products)			
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octanol/water (based on information on similar products)	Solubility in other solvents	: Data not available	
			r products)
			,,

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Decomposition temperature	: Data not available	
Viscosity		
Viscosity (Dynamic)	: Data not available	
Viscosity, kinematic	: 25.40 mm2/s (40.0 °C / 104.0 °F) Method: ASTM D445	
	5.11 mm2/s (100 °C / 212 °F) Method: ASTM D445	
	9215 mm2/s (-40 °C / -40 °F) Method: ASTM D2532	
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	a static accumulator.
). STABILITY AND REACTIVITY		
Reactivity	: The product does not pose any furth addition to those listed in the followir	
Chemical stability	: Stable.	
Possibility of hazardous	: Reacts with strong oxidising agents.	
reactions Conditions to avoid	: Extremes of temperature and direct	
Incompatible materials	: Strong oxidising agents.	-

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

Hazardous decomposition : No decomposition if stored and applied as directed.

products

Version 6.1		Revision Date 2024.07.15 representative of the product as a whole, individual component(s).	Print Date 2024.11.04 , rather than for
Information on likely routes of exposure	:	Skin and eye contact are the primary rou although exposure may occur following a	
Acute toxicity			
Product:			
Acute oral toxicity	:	LD50 rat: > 5,000 mg/kg Remarks: Low toxicity Based on available data, the classification	on criteria are not met.
Acute inhalation toxicity	:	Remarks: Based on available data, the care not met.	assification criteria
Acute dermal toxicity	:	LD50 Rabbit: > 5,000 mg/kg Remarks: Low toxicity Based on available data, the classification	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: Based on available data, the classification criteria are not met. Not a skin sensitiser.

Components:

N-phenyl-1-naphthylamine:

Remarks: 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:

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Remarks: Not a carcinogen., Based on available data, the classification criteria are not met.

Material	GHS/CLP Carcinogenicity Classification
N-phenyl-1-naphthylamine	No carcinogenicity classification.
Triaryl phosphate	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

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.

Remarks: Unless indicated otherwise, the data presented is representative of the product as a whole, rather than for individual component(s).

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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 component and the ecotoxicology of similar products. Unless indicated otherwise, the data presented is representative of the product as a whole, rather than for individual component(s).(LL/EL/IL50 expressed as the nominal amount of product required to prepare aqueous test extract). 	
Ecotoxicity			
Product:			
Toxicity to fish (Acute toxicity)	:	Remarks: LL/EL/IL50 10-100 mg/I 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	:	Remarks: Data not available	
toxicity) Toxicity to crustacean (Chronic toxicity)	:	Remarks: Data not available	
Toxicity to microorganisms (Acute toxicity)	:	Remarks: Data not available	
<u>Components:</u> N-phenyl-1-naphthylamine:			
M-Factor (Short-term (acute)	:	1	
aquatic hazard) M-Factor (Long-term (chronic) aquatic hazard) Triaryl phosphate :	:	1	
M-Factor (Short-term (acute) aquatic hazard)	:	1	
M-Factor (Long-term (chronic) aquatic hazard)	:	1	
Persistence and degradability			
Product:			
Biodegradability	:	Remarks: Not readily biodegradable	e., Major constituents are

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	inherently biodegradable, but contains components that may persist in the environment., Persistent per IMO criteria., International Oil Pollution Compensation (IOPC) Fund definition: "A non-persistent oil is oil, which, at the time of shipment, consists of hydrocarbon fractions, (a) at least 50% of which, by volume, distills at a temperature of 340°C (645°F) and (b) at least 95% of which, by volume, distils at a temperature of 370°C (700°F) when tested by the ASTM Method D-86/78 or any subsequent revision thereof."
Bioaccumulation	
Product:	
Bioaccumulation :	Remarks: Contains components with the potential to bioaccumulate.
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.
Other adverse effects	
no data available Product:	
Additional ecological : information	 Does not have ozone depletion potential, photochemical ozone creation potential or global warming potential., Product is a mixture of non-volatile components, which will not be released to air in any significant quantities under normal conditions of use. Poorly soluble mixture., Causes physical fouling of aquatic organisms.
Hazardous to the ozone layer	

Not applicable

13. DISPOSAL CONSIDERATIONS

Chemicals (residual waste)	 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

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		ground water, or be disposed of into the Waste, spills or used product is dangere Waste arising from a spillage or tank cl disposed of in accordance with prevailin preferably to a recognised collector or of competence of the collector or contract established beforehand. Do not dispose of tank water bottoms b drain into the ground. This will result in contamination.	e environment. ous waste. eaning should be ng regulations, contractor. The or should be by allowing them to
		MARPOL - see International Convention Pollution from Ships (MARPOL 73/78) technical aspects at controlling pollution	which provides
Contaminated containers and packaging	:	Dispose in accordance with prevailing in to a recognized collector or contractor. the collector or contractor should be es Disposal should be in accordance with national, and local laws and regulations	The competence of tablished beforehand. applicable regional,
Local legislation Remarks	:	Disposal should be in accordance with national, and local laws and regulations	

14. TRANSPORT INFORMATION

Regulatory information when there are domestic regulations

Refer to section 15 for specific national regulation.

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.

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15. REGULATORY INFORMATION

Related Regulations

Fire Service Law

Not dangerous good Designated Flam. Subs, Flammable liquid, (2 cubic metre)

Chemical Substance Control Law

Priority Assessment Chemical Substance

Chemical name	Number
Tritolyl phosphate	219

Industrial Safety and Health Law

Harmful Substances Prohibited from Manufacture

Not applicable

Harmful Substances Required Permission for Manufacture

Not applicable

Substances Prevented From Impairment of Health

Not applicable

Circular concerning Information on Chemicals having Mutagenicity - Annex 2: Information on Existing Chemicals having Mutagenicity

Not applicable

Circular concerning Information on Chemicals having Mutagenicity - Annex 1: Information on Notified Substances having Mutagenicity

Not applicable

Substances Subject to be Notified Names

Article 57-2 (Enforcement Order Table 9)

Chemical name	Number	Concentration (%)
N-1-naphthylaniline	R04-082	>=0.1 - <1
Tritolyl phosphate	626 <i>O</i> 3	>=0.1 - <1

Substances Subject to be Indicated Names

Article 57 (Enforcement Order Article 18)

Chemical name	Number
Tritolyl phosphate	626 <i>O</i> 3

Ordinance on Prevention of Hazards Due to Specified Chemical Substances

Not applicable

Ordinance on Prevention of Organic Solvent Poisoning

Not applicable

Enforcement Order of the Industrial Safety and Health Law - Attached table 1 (Dangerous Substances)

Not applicable

Poisonous and Deleterious Substances Control Law

Not applicable

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Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof Not applicable		
Vessel Safety Law Not applicable		
Aviation Law Not applicable		
Marine Pollution and Not classified as mari	d Sea Disaster Prevention etc Law ine pollutant	
Water Pollution Con Oil emissions regulati	ntrol Law ions (Law Art. 2-5, Enforcement Order Art. 3-4)	
Waste Disposal and Industrial waste	I Public Cleansing Law	
The components of TSCA	this product are reported in the following in : All components listed.	ventories:
ENCS	: All components listed.	
Marine Pollution and Not classified as mari Water Pollution Com Oil emissions regulati Waste Disposal and Industrial waste The components of TSCA	ine pollutant htrol Law ions (Law Art. 2-5, Enforcement Order Art. 3-4) I Public Cleansing Law this product are reported in the following in : All components listed.	

16. OTHER INFORMATION

Full text of H-Statements

H302	Harmful if swallowed.			
H317	May cause an allergic skin reaction.			
H361	Suspected of damaging fertility or the unborn child.			
H373	May cause damage to organs through prolonged or repeated exposure if swallowed.			
H400	Very toxic to aquatic life.			
H410	Very 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			
Repr.	Reproductive toxicity			
Skin Sens.	Skin sensitisation			

Abbreviations and Acronyms

STOT RE

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

Specific target organ toxicity - repeated exposure

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concentration; ICAO - Intern Chemical Substances in Cl International Maritime Organ International Organisation for Lethal Concentration to 50 % (Median Lethal Dose); MARF Ships; n.o.s Not Otherwise Effect Concentration; NO(A)E Effect Loading Rate; NOM - C New Zealand Inventory of C Development; OPPTS - Office Bioaccumulative and Toxic su Substances; (Q)SAR - (Quar No 1907/2006 of the Europ Evaluation, Authorisation and Temperature; SDS - Safety I Transportation of Dangerous C Substances Control Act (Ur Recommendations on the T	g Dangerous Chemicals in Bulk; ational Civil Aviation Organization; hina; IMDG - International Maritin hization; ISHL - Industrial Safety a Standardization; KECI - Korea Exist of a test population; LD50 - Lethal I POL - International Convention for the Specified; Nch - Chilean Norm; NO EL - No Observed (Adverse) Effect Official Mexican Norm; NTP - Nation Chemicals; OECD - Organization for ce of Chemical Safety and Pollution ubstance; PICCS - Philippines Inven- intitative) Structure Activity Relations bean Parliament and of the Counce Restriction of Chemicals; SADT - S Data Sheet; TCSI - Taiwan Chemic Goods; TECI - Thailand Existing Ch- nited States); UN - United Nation fransport of Dangerous Goods; vP forkplace Hazardous Materials Inform	IECSC - Inventory of Existing me Dangerous Goods; IMO - nd Health Law (Japan); ISO - ting Chemicals Inventory; LC50 - Dose to 50% of a test population the Prevention of Pollution from (A)EC - No Observed (Adverse) Level; NOELR - No Observable al Toxicology Program; NZIoC - or Economic Co-operation and n Prevention; PBT - Persistent, tory of Chemicals and Chemical ship; REACH - Regulation (EC) til concerning the Registration, Self-Accelerating Decomposition cal Substance Inventory; TDG - emicals Inventory; TSCA - Toxic s; UNRTDG - United Nations WB - Very Persistent and Very
Further information		
Training advice	: Provide adequate information, operators.	instruction and training for
Other information	: A vertical bar () in the left marg from the previous version.	in indicates an amendment
Other information	There has been a significant che information in section 2 & 3.	nange in compositional
Sources of key data used to compile the Safety Data	: The quoted data are from, but a sources of information (e.g. tox	

compile the Safety Data 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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