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SECTION 1. IDENTIFICATION

Product name	:	FormulaShell SAE 5W-30 Motor Oil
Product code Manufacturer or supplier's d	: leta	001D7229 ils
Manufacturer/Supplier	:	Shell Oil Products US P.O. Box 4427 Houston TX 77210-4427 USA
SDS Request Customer Service	:	(+1) 877-276-7285
Emergency telephone numb Spill Information Health Information	:	877-504-9351 877-242-7400

Recommended use of the chemical and restrictions on use Recommended use : Engine oil.

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Not a hazardous substance or mixture.

GHS Label element

Hazard pictograms	: No Hazard Symbol required
Signal word	: No signal word
Hazard statements	 PHYSICAL HAZARDS: Not classified as a physical hazard under GHS criteria. HEALTH HAZARDS: Not classified as a health hazard under GHS criteria. ENVIRONMENTAL HAZARDS: Not classified as an environmental hazard under GHS criteria.
Precautionary statements	 Prevention: No precautionary phrases. Response: No precautionary phrases. Storage: No precautionary phrases. Disposal: 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.

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Used oil may contain harmful impurities. Not classified as flammable but will burn.

The classification of this material is based on OSHA HCS 2012 criteria.

Under normal conditions of use or in a foreseeable emergency, this product does not meet the definition of a hazardous chemical when evaluated according to the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature

 Highly refined mineral oil. Synthetic base oil and additives. The highly refined mineral oil contains <3% (w/w) DMSOextract, according to IP346.

Hazardous components

Chemical Name	Synonyms	CAS-No.	Concentration (%)
Polyolefin Amide Al- keneamine Polyol		Not Assigned	1 - 3
Alkaryl amine		Not Assigned	1 - 3
Interchangeable low vis- cosity base oil (<20,5 cSt @40°C) *		Not Assigned	0 - 90

SECTION 4. FIRST-AID MEASURES

General advice	Not expected to be a health hazard when used under nor conditions.	mal
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 ter and follow by washing with soap if available. If persistent irritation occurs, obtain medical attention.	wa-
In case of eye contact	Flush eye with copious quantities of water. If persistent irritation occurs, obtain medical attention.	
If swallowed	In general no treatment is necessary unless large quantit are swallowed, however, get medical advice.	ies
Most important symptoms and effects, both acute and delayed	Oil acne/folliculitis signs and symptoms may include form 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 appropriate personal protective equipment according to the incident, injury and surroundings.	
Immediate medical attention,	Treat symptomatically.	

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special treatment

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	:	Foam, water spray or fog. Dry chemical powder, carbon diox- ide, sand or earth may be used for small fires only.
Unsuitable extinguishing media	:	Do not use water in a jet.
Specific hazards during fire- fighting	:	Hazardous combustion products may include: A complex mixture of airborne solid and liquid particulates and gases (smoke). Carbon monoxide may be evolved if incomplete combustion occurs. Unidentified organic and inorganic compounds.
Specific extinguishing meth- ods	:	Use extinguishing measures that are appropriate to local cir- cumstances and the surrounding environment.
Special protective equipment for firefighters	:	Proper protective equipment including chemical resistant gloves are to be worn; chemical resistant suit is indicated if large contact with spilled product is expected. Self-Contained Breathing Apparatus must be worn when approaching a fire in a confined space. Select fire fighter's clothing approved to relevant Standards (e.g. Europe: EN469).

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protec- tive equipment and emer- gency procedures	:	Avoid contact with skin and eyes.
Environmental precautions	:	Use appropriate containment to avoid environmental contami- nation. Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers.
		Local authorities should be advised if significant spillages cannot be contained.
Methods and materials for containment and cleaning up	:	Slippery when spilt. Avoid accidents, clean up immediately. Prevent from spreading by making a barrier with sand, earth or other containment material. Reclaim liquid directly or in an absorbent. Soak up residue with an absorbent such as clay, sand or other suitable material and dispose of properly.
Additional advice	:	For guidance on selection of personal protective equipment see Chapter 8 of this Safety Data Sheet. For guidance on disposal of spilled material see Chapter 13 of this Safety Data Sheet.
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SECTION 7. HANDLING AND STORAGE			
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.	
Precautions for 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 mate- rials in order to prevent fires.	
Avoidance of contact	:	Strong oxidising agents.	
Product Transfer	:	This material has the potential to be a static accumulator. Proper grounding and bonding procedures should be used during all bulk transfer operations.	
Storage			
Other data	:	Keep container tightly closed and in a cool, well-ventilated place. Use properly labeled and closable containers.	
		Store at ambient temperature.	
Packaging material	:	Suitable material: For containers or container linings, use mild steel or high density polyethylene. Unsuitable material: PVC.	
Container Advice	:	Polyethylene containers should not be exposed to high tem- peratures because of possible risk of distortion.	

SECTION 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parame- ters / Permissible concentration	Basis
Oil mist, mineral	Not Assigned	TWA ((inhal- able frac- tion))	5 mg/m3	US. ACGIH Threshold Limit Values
		(Mist)	5 mg/m3	OSHA_TRA NS

Biological occupational exposure limits

No biological limit allocated. **Monitoring Methods**

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workplace may be required trols. For some substances Validated exposure measure ples analysed by an accredi Examples of sources of reco tact the supplier. Further nat National Institute of Occupa http://www.cdc.gov/niosh/ Occupational Safety and He http://www.osha.gov/ Health and Safety Executive http://www.hse.gov.uk/ Institut für Arbeitsschutz Den http://www.dguv.de/inhalt/ind	ommended exposure measurement me tional methods may be available. tional Safety and Health (NIOSH), US alth Administration (OSHA), USA: Sar e (HSE), UK: Methods for the Determir utschen Gesetzlichen Unfallversicheru	d adequacy of exposure con- ropriate. a competent person and sam- ethods are given below or con- A: Manual of Analytical Method mpling and Analytical Methods nation of Hazardous Substance ing (IFA) , Germany
Engineering measures	: The level of protection and type vary depending upon potential controls based on a risk assess Appropriate measures include: Adequate ventilation to control	exposure conditions. Select sment of local circumstances.
	Where material is heated, spray greater potential for airborne co	
	General Information: Define procedures for safe hand controls. Educate and train workers in the measures relevant to normal ad product. Ensure appropriate selection, the equipment used to control expor- equipment, local exhaust ventila Drain down system prior to equinance. Retain drain downs in sealed st subsequent recycle. Always observe good personal washing hands after handling the drinking, and/or smoking. Rout protective equipment to remove taminated clothing and footweat Practice good housekeeping.	e hazards and control ctivities associated with this esting and maintenance of osure, e.g. personal protective ation. ipment break-in or mainte- corage pending disposal or hygiene measures, such as ne material and before eating, inely wash work clothing and e contaminants. Discard con-
Personal protective equip		norily required under normal
Respiratory protection	 No respiratory protection is ordi conditions of use. 	narily required under normal

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.

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	Check with respiratory protect Where air-filtering respirators priate combination of mask ar Select a filter suitable for the o and vapours [Type A/Type P	are suitable, select an appro- nd filter. combination of organic gases
Hand protection Remarks	US: F739) made from the follo suitable chemical protection. F gloves Suitability and durabilit usage, e.g. frequency and dur sistance of glove material, dex glove suppliers. Contaminated Personal hygiene is a key eler Gloves must only be worn on gloves, hands should be wash cation of a non-perfumed mois For continuous contact we red through time of more than 240 480 minutes where suitable gl short-term/splash protection w recognize that suitable gloves may not be available and in th time maybe acceptable so lon	tandards (e.g. Europe: EN374, owing materials may provide PVC, neoprene or nitrile rubber ration of contact, chemical re- acterity. Always seek advice from d gloves should be replaced. ment of effective hand care. clean hands. After using ned and dried thoroughly. Appli- sturizer is recommended. commend gloves with break- 0 minutes with preference for > loves can be identified. For ve recommend the same, but offering this level of protection his case a lower breakthrough g as appropriate maintenance followed. Glove thickness is not stance to a chemical as it is position of the glove material. bically greater than 0.35 mm
Eye protection	: If material is handled such that protective eyewear is recomm	
Skin and body protection	: Skin protection is not ordinaril work clothes. It is good practice to wear che	
Protective measures	: Personal protective equipmen mended national standards. C	
Environmental exposure c	ontrols	
General advice	vant environmental protection of the environment by followin necessary, prevent undissolve charged to waste water. Wast municipal or industrial waste w discharge to surface water. Local guidelines on emission	e water should be treated in a water treatment plant before

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

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Appearance	: Liquid at room temperature.	
Colour	: amber	
Odour	: Slight hydrocarbon	
Odour Threshold	: Data not available	
рН	: Not applicable	
pour point	: -38 °C / -36 °FMethod: Unspecified	
Initial boiling point and boiling range	: > 280 °C / 536 °Festimated value(s)	
Flash point	: 225 °C / 437 °F Method: Unspecified	
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	: 0.880 (15 °C / 59 °F)	
Density	: 880 kg/m3 (15.0 °C / 59.0 °F) Method: Unspecified	
Solubility(ies) Water solubility	: negligible	
Solubility in other solvents	: Data not available	
Partition coefficient: n- octanol/water	: Pow: > 6(based on information on similar products)	
Auto-ignition temperature	: > 320 °C / 608 °F	
Viscosity Viscosity, dynamic	: Data not available	
Viscosity, kinematic	: 62.87 mm2/s (40.0 °C / 104.0 °F) Method: Unspecified	

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	10.61 mm2/s (100 °C / 212 °F) Method: Unspecified	
Conductivity	: This material is not expected to I	be a static accumulator.
Decomposition temperature	: Data not available	

SECTION 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 reac- tions	: Reacts with strong oxidising agents.	
Conditions to avoid	: Extremes of temperature and direct sunlight.	
Incompatible materials	: Strong oxidising agents.	
Hazardous decomposition products	: Hazardous decomposition products are not expected to form during normal storage.	I

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.

Acute toxicity

Product:	
Acute oral toxicity	: LD50 (rat): > 5,000 mg/kg Remarks: Expected to be of low toxicity:
Acute inhalation toxicity	: Remarks: Not considered to be an inhalation hazard under normal conditions of use.
Acute dermal toxicity	: LD50 (Rabbit): > 5,000 mg/kg Remarks: Expected to be of low toxicity:

Skin corrosion/irritation

Product:

Remarks: Expected to be slightly irritating., Prolonged or repeated skin contact without proper

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cleaning can clog the pores of the skin resulting in disorders such as oil acne/folliculitis.

Serious eye damage/eye irritation

Product:

Remarks: Expected to be slightly irritating.

Respiratory or skin sensitisation

Product:

Remarks: Not expected to be a skin sensitiser.

Germ cell mutagenicity

Product:

: Remarks: Not considered a mutagenic hazard.

Carcinogenicity

Product:

Remarks: Not expected to be carcinogenic.

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).

IARC	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.	
ACGIH	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.	
OSHA	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.	
NTP	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.	
Reproductive toxicity		
Product:		
	: Remarks: Not expected to impair fertility., Not expected to be a developmental toxicant.	

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STOT - single exposure

Product:

Remarks: Not expected to be a hazard.

STOT - repeated exposure

Product:

Remarks: Not expected to be a hazard.

Aspiration toxicity

Product:

Not considered 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: Continuous contact with used engine oils has caused skin cancer in animal tests.

Remarks: Slightly irritating to respiratory system.

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 representa- tive of the product as a whole, rather than for individual com- ponent(s).(LL/EL/IL50 expressed as the nominal amount of product required to prepare aqueous test extract).
Ecotoxicity	
<u>Product:</u> Toxicity to fish (Acute toxici- ty)	: Remarks: Expected to be practically non toxic: LL/EL/IL50 > 100 mg/l
Toxicity to daphnia and other aquatic invertebrates (Acute toxicity)	: Remarks: Expected to be practically non toxic: LL/EL/IL50 > 100 mg/l
Toxicity to algae (Acute tox- icity)	: Remarks: Expected to be practically non toxic: LL/EL/IL50 > 100 mg/l
Toxicity to fish (Chronic tox-	: Remarks: Data not available
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icity)		
Toxicity to daphnia and other aquatic invertebrates (Chron- ic toxicity)	: Remarks: Data not available	
Toxicity to bacteria (Acute toxicity)	: Remarks: Data not available	
Persistence and degradabilit	У	
Product:		
Biodegradability		readily biodegradable. ted to be inherently biodegrada that may persist in the environ
Bioaccumulative potential		
Product:		
Bioaccumulation	: Remarks: Contains compone cumulate.	nts with the potential to bioac-
Mobility in soil		
Product:		
Mobility	: Remarks: Liquid under most If it enters soil, it will adsorb t mobile.	environmental conditions. o soil particles and will not be
	Remarks: Floats on water.	
Other adverse effects		
no data available		
Product:	. Droduct is a mixture of service	olatila componente, which are r
Additional ecological infor- mation	expected to be released to ai	olatile components, which are r r in any significant quantities. depletion potential, photochemi or global warming potential.
	Poorly soluble mixture. May cause physical fouling o	f aquatic organisms.
	Mineral oil is not expected to aquatic organisms at concen	

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods	
Waste from residues	: Waste product should not be allowed to contaminate soil or ground water, or be disposed of into the environment.

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	Waste, spills or used product is	dangerous waste.
	Disposal should be in accordance national, and local laws and regu Local regulations may be more s tional requirements and must be	ulations. stringent than regional or na-
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.	

SECTION 14. TRANSPORT INFORMATION

National Regulations

US Department of Transportation Classification (49 CFR Parts 171-180)

Not regulated as a dangerous good

International Regulation

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

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

Pollution category Ship type Product name Special precautions	 Not applicable Not applicable Not applicable Not applicable Not applicable
Special precautions for user	
Remarks	: Special Precautions: Refer to Chapter 7, Handling & Storage, for special precautions which a user needs to be aware of or needs to comply with in connection with transport.
Additional Information	: MARPOL Annex 1 rules apply for bulk shipments by sea.

SECTION 15. REGULATORY INFORMATION

OSHA Hazards : No OSHA Hazards

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ., Shell classifies this material as an "oil" under the CERCLA Petroleum Exclusion, therefore releases to the environment are not reportable under CERCLA.

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•	zardous Substances Reportable Quan tain any components with a section 304	•	
SARA 311/312 Hazards	: No SARA Hazards		
SARA 302	: No chemicals in this material are requirements of SARA Title III, S		
SARA 313	 This material does not contain a known CAS numbers that excee reporting levels established by S 	d the threshold (De Minimis)	
Clean Water Act This product does not con Section 311, Table 117.3.	tain any Hazardous Chemicals listed und	ler the U.S. CleanWater Act,	
California Prop 65	This product does not contain a of California to cause cancer, bi productive harm.		
The components of this product are reported in the following inventories:		inventories:	
EINECS	: All components listed or polyme	r exempt.	
TSCA	: All components listed.		
DSL	: All components listed.		

SECTION 16. OTHER INFORMATION

Further information

NFPA Rating (Health, Fire, Reac- 0, 1, 0 tivity)

A vertical bar (|) in the left margin indicates an amendment from the previous version.

0	The standard abbreviations and acronyms used in this docu- ment can be looked up in reference literature (e.g. scientific dictionaries) and/or websites.
	ACGIH = American Conference of Governmental Industrial Hygienists ADR = European Agreement concerning the International Carriage of Dangerous Goods by Road AICS = Australian Inventory of Chemical Substances ASTM = American Society for Testing and Materials BEL = Biological exposure limits BTEX = Benzene, Toluene, Ethylbenzene, Xylenes CAS = Chemical Abstracts Service CEFIC = European Chemical Industry Council CLP = Classification Packaging and Labelling COC = Cleveland Open-Cup DIN = Deutsches Institut fur Normung DMEL = Derived Minimal Effect Level

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	DNEL = Derived No Effect Level	l
	DSL = Canada Domestic Substa	ance List
	EC = European Commission	
	EC50 = Effective Concentration	fifty
	ECETOC = European Center on	Ecotoxicology and Toxicolo-
	gy Of Chemicals	
	ECHA = European Chemicals A	gency
	EINECS = The European Invent	ory of Existing Commercial
	Chemical Substances	
	EL50 = Effective Loading fifty	
	ENCS = Japanese Existing and	New Chemical Substances
	Inventory	
	EWC = European Waste Code	
	GHS = Globally Harmonised Sys	stem of Classification and
	Labelling of Chemicals	
	IARC = International Agency for	Research on Cancer
	IATA = International Air Transpo	ort Association
	IC50 = Inhibitory Concentration f	
	IL50 = Inhibitory Level fifty	
	IMDG = International Maritime D	angerous Goods
	INV = Chinese Chemicals Invent	
	IP346 = Institute of Petroleum t	test method N° 346 for the
	determination of polycyclic arom	atics DMSO-extractables
	KECI = Korea Existing Chemica	
	LC50 = Lethal Concentration fifty	y
	LD50 = Lethal Dose fifty per cen	it.
	LL/EL/IL = Lethal Loading/Effect	ive Loading/Inhibitory loading
	LL50 = Lethal Loading fifty	
	MARPOL = International Conver	ntion for the Prevention of
	Pollution From Ships	
	NOEC/NOEL = No Observed Ef	fect Concentration / No Ob-
	served Effect Level	
	OE_HPV = Occupational Expose	ure - High Production Volume
	PBT = Persistent, Bioaccumulati	ive and Toxic
	PICCS = Philippine Inventory of	Chemicals and Chemical
	Substances	
	PNEC = Predicted No Effect Co	ncentration
	REACH = Registration Evaluation	on And Authorisation Of
	Chemicals	
	RID = Regulations Relating to In	ternational Carriage of Dan-
	gerous Goods by Rail	
	SKIN_DES = Skin Designation	
	STEL = Short term exposure lim	
	TRA = Targeted Risk Assessme	
	TSCA = US Toxic Substances C	Control Act
	TWA = Time-Weighted Average	
	vPvB = very Persistent and very	Bioaccumulative
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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.