SAFETY DATA SHEET

SHELL DIESEL

Infosafe No.: LQ4CF ISSUED Date : 22/09/2022 ISSUED by: VIVA ENERGY AUSTRALIA PTY LTD (FORMERLY: SHELL COMPANY OF AUSTRALIA LTD)

Section 1 - Identification

Product Identifier SHELL DIESEL

Company Name VIVA ENERGY AUSTRALIA PTY LTD (FORMERLY: SHELL COMPANY OF AUSTRALIA LTD) (ABN 46 004 610 459)

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Emergency Phone Number 1800 651 818 (Australia) / Poisons Information Centre:13 11 26 (Australia)

Recommended use of the chemical and restrictions on use

Fuel for on-road diesel-powered engines, in marine diesel engines, boilers, gas turbines and other combustion equipment. This product is intended for use in closed systems only.

Section 2 - Hazard(s) Identification

GHS classification of the substance/mixture

Classified as Hazardous according to the Globally Harmonised System of Classification and labelling of Chemicals (GHS) including Work, Health and Safety regulations, Australia.

Complies with the requirements of Special Provision AU01 and therefore exempted from being classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)

Classified as Dangerous Goods according to International Maritime Dangerous Goods Code (IMDG) and International Air Transport Association (IATA).

Flammable liquids: Category 4

Acute toxicity: Category 4 - Inhalation

Carcinogenicity: Category 2

Aspiration hazard: Category 1 Hazardous to the Aquatic Environment - Long-Term Hazard: Category 2

Signal Word (s) DANGER

Hazard Statement (s)

AUH066 Repeated exposure may cause skin dryness or cracking.
H227 Combustible liquid.
H332 Harmful if inhaled.
H351 Suspected of causing cancer.
H304 May be fatal if swallowed and enters airways.
H411 Toxic to aquatic life with long lasting effects.

Pictogram (s)

Exclamation mark, Health hazard, Environment

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Precautionary Statement – Prevention

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P271 Use only outdoors or in a well-ventilated area.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary Statement – Response

P312 Call a POISON CENTER/doctor if you feel unwell.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor

P331 Do NOT induce vomiting.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P370+P378 In case of fire: Use foam, water spray or fog to extinguish.

P391 Collect spillage.

Precautionary Statement – Storage

P403 Store in a well-ventilated place. P405 Store locked up.

Precautionary Statement – Disposal

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

Section 3 - Composition and Information on Ingredients

Ingredients

Name	CAS	Proportion
Fuels, diesel	68334- 30- 5	95- 100 %
Fatty acids, vegetable oil, methyl esters	68990- 52- 3	0- 5 %

Preparation Description

Complex mixture of hydrocarbons consisting of paraffins, cycloparaffins, aromatic and olefinic hydrocarbons with carbon numbers predominantly in the C9 to C25 range. May also contain several additives at <0.1% v/v each. May contain cetane improver (Ethyl Hexyl Nitrate) at <0.2% v/v. May contain catalytically cracked oils in which polycyclic aromatic compounds, mainly 3-ring but some 4-to 6-ring species are present.

Section 4 - First Aid Measures

Inhalation

If inhaled, remove affected person from contaminated area. Apply artificial respiration if not breathing. Seek medical attention.

Ingestion

Do NOT induce vomiting. Wash out mouth and lips with water. Where vomiting occurs naturally have affected person place head below hip level in order to reduce risk of aspiration. Seek immediate medical attention.

Skin

Remove all contaminated clothing immediately. Wash affected area thoroughly with soap and water. Wash contaminated clothing before reuse or discard. Seek medical attention.

Eye

If in eyes, hold eyelids apart and flush the eyes continuously with running water. Remove contact lenses. Continue flushing for several minutes until all contaminants are washed out completely. If symptoms develop and/or persist seek medical attention.

First Aid Facilities

Eyewash and normal washroom facilities.

Advice to Doctor

Treat symptomatically.

Other Information

For advice in an emergency, contact a Poisons Information Centre (Phone Australia 131 126) or a doctor at once.

Section 5 - Firefighting 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 jet.

Hazards from Combustion Products

Under fire conditions this product may emit toxic and/or irritating fumes, smoke and gases including carbon monoxide, oxides of sulphur, carbon dioxide and oxides of nitrogen.

Specific hazards arising from the chemical

Combustible. This product will burn if exposed to fire.

Decomposition Temperature

Not available

Precautions in connection with Fire

Fire fighters should wear Self-Contained Breathing Apparatus (SCBA) operated in positive pressure mode and full protective clothing to prevent exposure to vapours or fumes. Water spray may be used to cool down heat-exposed containers. Fight fire from safe location. This product should be prevented from entering drains and watercourses.

Section 6 - Accidental Release Measures

Emergency Procedures

Wear appropriate personal protective equipment and clothing to prevent exposure. Extinguish or remove all sources of ignition and stop leak if safe to do so. Increase ventilation. Evacuate all unprotected personnel. If possible contain the spill. Place inert absorbent, non-combustible material onto spillage. Use clean non-sparking tools to collect the material and place into suitable labelled containers for subsequent recycling or disposal. Dispose of waste according to the applicable local and national regulations. If contamination of sewers or waterways occurs inform the local water and waste management authorities in accordance with local regulations.

Section 7 - Handling and Storage

Precautions for Safe Handling

Avoid inhalation of vapours and mists, and skin or eye contact. Use only in a well ventilated area. Keep containers sealed when not in use. Prevent the build up of mists or vapours in the work atmosphere. Do not use near ignition sources. Do not pressurise, cut, heat or weld containers as they may contain hazardous residues. Maintain high standards of personal hygiene by washing hands prior to eating, drinking, smoking or using toilet facilities.

Avoid exposure. Do not handle until all safety precautions have been read and understood.

Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well-ventilated area away from sources of ignition, foodstuffs, clothing and incompatible materials such as oxidising agents. Keep containers closed when not in use, securely sealed and protected against physical damage. Inspect regularly for deficiencies such as damage or leaks. Have appropriate fire extinguishers available in and near the storage area. Take precautions against static electricity discharges. Use proper grounding procedures. Ensure that storage conditions comply with applicable local and national regulations.

For information on the design of the storeroom, reference should be made to Australian Standard AS1940 - The storage and handling of flammable and combustible liquids.

Storage Regulations

Classified as a Class C1 (COMBUSTIBLE LIQUID) for the purpose of storage and handling, in accordance with the requirements of AS1940 (2017).

Recommended Materials

For containers, or container linings use mild steel or stainless steel. Aluminium may also be used for applications where it does not present an unnecessary fire hazard. Examples of suitable materials are: high density polyethylene (HDPE) and Viton (FKM), which have been specifically tested for compatibility with this product. For container linings, use amine-adduct cured epoxy paint. For seals and gaskets use: graphite, PTFE, Viton A, Viton B.

Unsuitable Materials

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Some synthetic materials may be unsuitable for containers or container linings depending on the material specification and intended use. Examples of materials to avoid are: natural rubber (NR), nitrile rubber (NBR), ethylene propylene rubber (EPDM), polymethyl methacrylate (PMMA), polystyrene, polyvinyl chloride (PVC), polyisobutylene.; However, some may be suitable for glove materials.

Section 8 - Exposure Controls and Personal Protection

Occupational exposure limit values

No exposure standards have been established for the mixture. However, over-exposure to some chemicals may result in enhancement of pre-existing adverse medical conditions and/or allergic reactions and should be kept to the least possible levels.

Biological Monitoring

No biological limits allocated.

Control Banding Not available

Engineering Controls

This substance is hazardous and should be used with a local exhaust ventilation system, drawing vapours away from workers' breathing zone. A flame-proof exhaust ventilation system is required. If the engineering controls are not sufficient to maintain concentrations of vapours/mists below the exposure standards, suitable respiratory protection must be worn. Refer to relevant regulations for further information concerning ventilation requirements.

Refer to AS 1940 - The storage and handling of flammable and combustible liquids and AS/NZS 60079.10.1 Explosive atmospheres - Classification of areas - Explosive gas atmospheres, for further information concerning ventilation requirements.

Respiratory Protection

If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable vapor/mist filter should be used. Refer to relevant regulations for further information concerning respiratory protective requirements.

Reference should be made to Australian Standards AS/NZS 1715, Selection, Use and Maintenance of Respiratory Protective Devices; and AS/NZS 1716, Respiratory Protective Devices, in order to make any necessary changes for individual circumstances.

Eye and Face Protection

Safety glasses with side shields, chemical goggles or full-face shield as appropriate should be used. Final choice of appropriate eye/face protection will vary according to individual circumstances. Eye protection devices should conform to relevant regulations. Eye protection should conform with Australian/New Zealand Standard AS/NZS 1337 (series) - Eye Protectors for Industrial Applications.

Hand Protection

Wear gloves of impervious material such as nitrile gloves (Breakthrough time of > 240 minutes), neoprene, PVC gloves. Final choice of appropriate gloves will vary according to individual circumstances. i.e. methods of handling or according to risk assessments undertaken. Occupational protective gloves should conform to relevant regulations.

Reference should be made to AS/NZS 2161.1: Occupational protective gloves - Selection, use and maintenance.

Thermal Hazards

No further relevant information available.

Body Protection

Suitable protective workwear, e.g. cotton overalls buttoned at neck and wrist is recommended. Chemical resistant apron is recommended where large quantities are handled.

Properties	Description	Properties	Description
Form	Liquid	Appearance	Colourless to straw liquid.
Colour	Colourless to straw	Odour	May contain a reodorant
Melting Point	Not available	Freezing Point	Not available
Boiling Point	170 - 390 °C	Decomposition Temperature	Not available
Solubility in Water	Not available	Specific Gravity	0.82 - 0.85 gm/cm at 15°C
рН	Not available	Vapour Pressure	< 1 hPa at 20 °C
Relative Vapour Density (Air=1)	Not available	Evaporation Rate	Not available
Odour Threshold	Not available	Volatile Component	Not available
Partition Coefficient: n- octanol/water (log value)	3 - 6	Density	Typical 0.84 g/cm ³ at 15 °C
Flash Point	Typical 63 °C (ASTM D-93 / PMCC)	Flammability	Combustible
Auto-Ignition Temperature	> 220 °C	Flammable Limits - Lower	1 %(V)

Section 9 - Physical and Chemical Properties

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	Flammable Limits - Upper	6 %(V)	Kinematic Viscosity	2 - 4.5 mm²/s at 40 °C	
	Particle Characteristics	Not available			

Section 10 - Stability and Reactivity

Reactivity

Reacts with incompatible materials.

Chemical Stability

Stable under normal conditions of storage and handling.

Possibility of hazardous reactions

Not available

Conditions to Avoid

Avoid heat, sparks, open flames and other ignition sources.

Incompatible Materials

Strong oxidising agents.

Hazardous Decomposition Products

Under fire conditions this product may emit toxic and/or irritating fumes, smoke and gases including carbon monoxide, oxides of sulphur, carbon dioxide and oxides of nitrogen.

Hazardous Polymerization

Not available

Section 11 - Toxicological Information

Toxicology Information

The available toxicity data for material given below.

Acute Toxicity - Oral LD50:(Rat): >2000 mg/kg

Acute Toxicity - Dermal LD50:(Rabbit): >2000 mg/kg

Ingestion

May be fatal if swallowed and enters airways. Small amounts of liquid aspirated into the respiratory system during ingestion or from vomiting may cause severe pulmonary injury that may lead to death. May cause irritation to the mouth, throat, esophagus and stomach with symptoms of nausea, abdominal discomfort, vomiting and diarrhoea.

Inhalation

Harmful if inhaled. Inhalation of product vapours can cause irritation of the nose, throat and respiratory system.

Skin

May be irritating to skin. The symptoms may include redness, itching and swelling. Repeated exposure may cause skin dryness and cracking and may lead to dermatitis.

Eye

May be irritating to eyes. The symptoms may include redness, itching and tearing.

Respiratory Sensitisation

Not expected to be a respiratory sensitiser.

Skin Sensitisation

Not expected to be a skin sensitiser.

Germ Cell Mutagenicity

Not considered to be a mutagenic hazard.

Carcinogenicity

Suspected of causing cancer. Classified as a suspected human carcinogen.

Reproductive Toxicity

Not considered to be toxic to reproduction.

STOT - Single Exposure

Not expected to cause toxicity to a specific target organ.

STOT - Repeated Exposure

Not expected to cause toxicity to a specific target organ.

Aspiration Hazard

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May be fatal if swallowed and enters airways.

Other Information

Repeated Dose Toxicity: Kidney: Caused kidney effects in male rats which are not considered relevant to humans.

Section 12 - Ecological Information

Ecotoxicity

Toxic to aquatic life with long lasting effects.

Persistence and degradability

Major constituents are expected to be inherently biodegradable. The volatile constituents will oxidize rapidly by photochemical reactions in air.

Mobility

Floats on water. Partly evaporates from water or soil surfaces, but a significant proportion will remain after one day. Large volumes may penetrate soil and could contaminate groundwater. Contains volatile constituents.

Bioaccumulative Potential

Contains constituents with the potential to bioaccumulate.

Other Adverse Effects

Films formed on water may affect oxygen transfer and damage organisms.

Environmental Protection

Do not discharge this material into waterways, drains and sewers.

Acute Toxicity - Other Organisms

LL/EL/IL50:(Aquatic organisms): 1-10 mg/l

Hazardous to the Ozone Layer

This product is not expected to deplete the ozone layer.

Section 13 - Disposal Considerations

Disposal Considerations

Dispose of waste according to applicable local and national regulations. Do not allow into drains or watercourses or dispose of where ground or surface waters may be affected. Wastes including emptied containers are controlled wastes and should be disposed of in accordance with all applicable local and national regulations.

To minimise personal exposure, refer to Section 8 - Exposure Controls and Personal Protection.

Section 14 - Transport Information

Transport Information

Road and Rail Transport (ADG Code):

Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)

This product meets the requirements of special provision AU01.

Note: Special Provision AU01:

Environmentally Hazardous Substances meeting the descriptions of UN 3077 or UN 3082 are not subject to this Code when transported by road or rail in:

packagings that do not incorporate a receptacle exceeding 500 kg(L); or

IBCs

This product is not classified as Dangerous Goods UN number 1202.

Note: Special Provision AU02:

GAS OIL or DIESEL OIL or HEATING OIL, LIGHT or PETROLEUM DISTILLATE is not subject to this Code if it does not meet the criteria of Chapter 2.3 for assignment to Class 3; i.e. if the flash point is more than 60 °C and the substance is not offered for transport at a temperature above its flash point. Such substances will normally be C1 combustible liquids which are not classified as dangerous goods for transport purposes. However, the presence of a C1 combustible liquid in one or more compartments of a tank vehicle or portable tank transporting other refined petroleum products must be considered when determining the application of UN Number 1270 in accordance with 3.2.5.4 and 5.3.1.3.3.

Marine Transport (IMO/IMDG):

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

Class/Division: 9 UN No: 3082

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Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS: FUEL, DIESEL)(MARINE POLLUTANT) Packing Group: III EMS: F-A, S-F Special Provisions: 274, 335, 969 Air Transport (ICAO/IATA): Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air. Class/Division: 9 UN No: 3082 Proper Shipping Name: Environmentally hazardous substance, liquid, n.o.s. (Contains: Fuel, diesel) Packing Group: III Packaging Instructions (passenger & cargo): 964 Packaging Instructions (cargo only): 964 Hazard Label: Miscellaneous Special Provisions: A97, A158, A197, A215 ADG U.N. Number None Allocated **ADG Proper Shipping Name** None Allocated **ADG Transport Hazard Class** None Allocated **Special Precautions for User** Not available **IMDG Marine pollutant** Yes **Transport in Bulk** Not available **Additional Information** This product is classified as Oils under MARPOL Annex I. MARPOL Annex I rules apply for bulk shipments by sea.

Section 15 - Regulatory Information

Regulatory Information

Classified as Hazardous according to the Globally Harmonised System of classification and labelling of chemicals (GHS) including Work, Health and Safety regulations, Australia.

Classified as a Scheduled Poison according to the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

 Poisons Schedule

 S5

 Montreal Protocol

 Not listed

 Stockholm Convention

 Not listed

 Rotterdam Convention

 Not listed

 International Convention for the Prevention of Pollution from Ships (MARPOL)

 This product is classified as Oils under MARPOL Annex I. MARPOL Annex I rules apply for bulk shipments by sea.

 Agricultural and Veterinary Chemicals Act 1994

Agricultural and Veterinary Chemicals Act 199 Not available Basel Convention Not available

Section 16 - Any Other Relevant Information

Date of Preparation SDS Reviewed: September 2022

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Supersedes: June 2021

Version Number

3.0

Literature References

Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice.

Standard for the Uniform Scheduling of Medicines and Poisons.

Australian Code for the Transport of Dangerous Goods by Road & Rail.

Work Health and Safety Regulations, Schedule 10: Prohibited carcinogens, restricted carcinogens and restricted hazardous chemicals.

Code of Practice for Supply Diversion into Illicit Drug Manufacture.

National Code of Practice for Chemicals of Security Concern.

Agricultural Compounds and Veterinary Chemicals Act.

International Agency for Research on Cancer (IARC) Monographs.

Montreal Protocol on Substances that Deplete the Ozone Layer.

Stockholm Convention on Persistent Organic Pollutants (POPs).

Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade.

Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal.

International Air Transport Association (IATA) Dangerous Goods Regulations.

International Maritime Dangerous Goods (IMDG) Code.

Workplace exposure standards for airborne contaminants.

Adopted biological exposure determinants, American Conference of Industrial Hygienists (ACGIH).

Globally Harmonised System of Classification and Labelling of Chemicals (7th revised edition).

Code of Practice: Managing Noise and Preventing Hearing Loss at Work.

END OF SDS

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