SAFETY DATA SHEET

SHELL ONDINA OIL 15

Infosafe No.: LTT49
ISSUED Date : 13/09/2016
ISSUED by: VIVA ENERGY AUSTRALIA PTY LTD (FORMERLY: SHELL COMPANY OF AUSTRALIA LTD)

1. IDENTIFICATION

GHS Product Identifier
SHELL ONDINA OIL 15

Product Code
001A0781

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

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720 Bourke Street Docklands
Victoria 3008 Australia

Telephone/Fax Number
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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
Recommended use: Process oil.

2. HAZARD IDENTIFICATION

GHS classification of the substance/mixture
Aspiration Hazard: Category 1

Signal Word (s)
DANGER

Hazard Statement (s)
PHYSICAL HAZARDS:
Not classified as a physical hazard under GHS criteria.
HEALTH HAZARDS:
H304 May be fatal if swallowed and enters airways.
ENVIRONMENTAL HAZARDS:
Not classified as an environmental hazard under GHS criteria.

Pictogram (s)
Health hazard

Precautionary statement – Prevention
No precautionary phrases.

Precautionary statement – Response

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P331 Do NOT induce vomiting.

Precautionary statement – Storage
P405 Store locked up.

Precautionary statement – Disposal
P501 Dispose of contents/container to an approved waste disposal plant..

Other Information
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

Ingredients

Name	CAS	Proportion
White mineral oil	8042-47-5	<=100 %

Other Information
Substance / Mixture: Substance

Chemical nature:
Highly refined mineral oil.
The highly refined mineral oil contains <3% (w/w) DMSO-extract, according to IP346.

4. FIRST-AID MEASURES

Inhalation
No treatment necessary under normal conditions of use.
If symptoms persist, obtain medical advice.

Ingestion
If swallowed, do not induce vomiting: transport to nearest medical facility for additional treatment. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. If any of the following delayed signs and symptoms appear within the next 6 hours, transport to the nearest medical facility: fever greater than 101° F (38.3°C), shortness of breath, chest congestion or continued coughing or wheezing.

Skin
Remove contaminated clothing. Flush exposed area with water and follow by washing with soap if available.
If persistent irritation occurs, obtain medical attention.

Eye contact
Flush eye with copious quantities of water.
If persistent irritation occurs, obtain medical attention.

Advice to Doctor
Treat symptomatically.
Call a doctor or poison control center for guidance.

Protection for First Aiders
When administering first aid, ensure that you are wearing the appropriate personal protective equipment according to the incident, injury and surroundings.

Most important symptoms/effects, acute and delayed
If material enters lungs, signs and symptoms may include coughing, choking, wheezing, difficulty in breathing, chest congestion, shortness of breath, and/or fever.
The onset of respiratory symptoms may be delayed for several hours after exposure.
Defatting dermatitis signs and symptoms may include a burning sensation and/or a dried/cracked appearance.
Ingestion may result in nausea, vomiting and/or diarrhoea.

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 Methods
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Specific Hazards Arising From The Chemical
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.

Decomposition Temperature
Data not available

Other Information
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).

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures
Avoid contact with skin and eyes.

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.

Environmental Precautions
Use appropriate containment to avoid environmental contamination. 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.

Other Information
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.

7. HANDLING AND STORAGE

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.

Avoidance of contact: Strong oxidising agents.

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 materials in order to prevent fires.

Conditions for safe storage, including any incompatibilities
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 temperatures because of possible risk of distortion.

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.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limit values
Components with workplace control parameters:
Components: Oil mist, mineral
CAS-No.: Not Assigned
Value type (Form of exposure): TWA (Mist)
Control parameters / Permissible concentration: 5 mg/m3
Basis: AU OEL

Components: Oil mist, mineral
CAS-No.: Not Assigned
Value type (Form of exposure): TWA ((inhalable fraction))
Control parameters / Permissible concentration: 5 mg/m3
Basis: US. ACGIH Threshold Limit Values

Components: Oil mist, mineral
CAS-No.: Not Assigned
Value type (Form of exposure): TWA (Mist)
Control parameters / Permissible concentration: 5 mg/m3
Basis: Australia. Workplace Exposure Standards for Airborne Contaminants.

Components: Oil mist, mineral
CAS-No.: Not Assigned
Value type (Form of exposure): TWA ((inhalable fraction))
Control parameters / Permissible concentration: 5 mg/m3
Basis: ACGIH

Biological Limit Values
No biological limit allocated.

Appropriate Engineering Controls
The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Select controls based on a risk assessment of local circumstances.
Appropriate measures include:
Adequate ventilation to control airborne concentrations.

Where material is heated, sprayed or mist formed, there is greater potential for airborne concentrations to be generated.

General Information:
Define procedures for safe handling and maintenance of controls.
Educate and train workers in the hazards and control measures relevant to normal activities associated with this product.
Ensure appropriate selection, testing and maintenance of equipment used to control exposure, e.g. personal protective equipment, local exhaust ventilation.
Drain down system prior to equipment break-in or maintenance.

Retain drain downs in sealed storage pending disposal or subsequent recycle.
Always observe good personal hygiene measures, such as washing hands after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned.
Practice good housekeeping.

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 [Type A/Type P boiling point >65°C (149°F)].

Eye Protection
If material is handled such that it could be splashed into eyes, protective eyewear is recommended.

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 usage, e.g. frequency and duration of contact, chemical resistance of glove material, dexterity. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturizer is recommended.

For continuous contact we recommend gloves with breakthrough time of more than 240 minutes with preference for > 480 minutes where suitable gloves can be identified. For short-term/splash protection we recommend the same, but recognize that suitable gloves offering this level of protection may not be available and in this case a lower breakthrough time maybe acceptable so long as appropriate maintenance and replacement regimes are followed. Glove thickness is not a good predictor of glove resistance to a chemical as it is dependent on the exact composition of the glove material. Glove thickness should be typically greater than 0.35 mm depending on the glove make and model.

Personal Protective Equipment
Personal protective equipment (PPE) should meet recommended national standards. Check with PPE suppliers.

Thermal Hazards
Not applicable

Body Protection
Skin protection is not ordinarily required beyond standard work clothes.
It is good practice to wear chemical resistant gloves.

Other Information
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

Environmental exposure controls:
General advice:
Take appropriate measures to fulfill the requirements of relevant environmental protection legislation. Avoid contamination of the environment by following advice given in Chapter 6. If necessary, prevent undissolved material from being discharged to waste water. Waste water should be treated in a municipal or industrial waste water treatment plant before discharge to surface water.

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Properties	Description	Properties	Description
Form	Liquid	**Appearance**	Liquid at room temperature.
Colour	Colourless	**Odour**	Slight hydrocarbon
Decomposition Temperature	Data not available	**Solubility in Water**	Negligible
pH	Not applicable	**Vapour Pressure**	< 0.5 Pa (20 °C / 68 °F) estimated value(s)
Vapour Density (Air=1)	> 1 estimated value(s)	**Evaporation Rate**	Data not available
Odour Threshold	Data not available	**Pour Point**	-12 °C / 10 °F Method: ISO 3016
Partition Coefficient: n-octanol/water	Pow: > 6 (based on information on similar products)	**Density**	850 kg/m3 (15.0 °C / 59.0 °F) Method: ISO 12185
Flash Point	180 °C / 356 °F Method: ISO 2592	**Flammability**	Data not available (solid, gas)
Auto-Ignition Temperature	> 320 °C / 608 °F	**Explosion Limit - Upper**	Typical 10 %(V)
Explosion Limit - Lower	Typical 1 %(V)	**Explosion Properties**	Not classified
Oxidising Properties	Data not available	**Initial boiling point and boiling range**	> 280 °C / 536 °F estimated value(s)
Kinematic Viscosity	15 mm2/s (40.0 °C / 104.0 °F) Method: ISO 3014 3.3 mm2/s (100 °C / 212 °F) Method: ISO 3014	**Dynamic Viscosity**	Data not available
Solubility in other solvents (kg/m3)	Data not available	**Relative density**	0.850 (15 °C / 59 °F)
Melting/Freezing Point	Data not available		

Other Information
Conductivity: This material is not expected to be a static accumulator.

10. STABILITY AND REACTIVITY

Reactivity
The product does not pose any further reactivity hazards in addition to those listed in the following sub-paragraph.

Chemical Stability
Stable.

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.

Possibility of hazardous reactions
Reacts with strong oxidising agents.

11. TOXICOLOGICAL INFORMATION

Toxicology Information
Basis for assessment: Information given is based on data on the components and the toxicology of similar products.

Acute Toxicity - Oral
Product:
LD50 rat: > 5,000 mg/kg
Remarks: Expected to be of low toxicity:

Remarks: Aspiration into the lungs may cause chemical pneumonitis which can be fatal.

Acute Toxicity - Inhalation
Product:
LC 50 Rat: > 5 mg/l
Exposure time: 4 h
Remarks: Low toxicity by inhalation.

Acute Toxicity - Dermal
Product:
LD50 Rabbit: > 5,000 mg/kg
Remarks: Low toxicity:

Skin corrosion/irritation
Product:
Remarks: Not irritating to skin., Prolonged/repeated contact may cause defatting of the skin which can lead to dermatitis.

Serious eye damage/irritation
Product:
Remarks: Expected to be slightly irritating.

Skin Sensitisation
Product:
Remarks: Not expected to be a skin sensitiser.

Germ cell mutagenicity
Product:
Remarks: Not expected to be mutagenic.

Carcinogenicity
Product:
Remarks: Not expected to be carcinogenic.

Remarks: Product contains mineral oils of types shown to be non-carcinogenic in animal skin-painting studies., Highly refined mineral oils are not classified as carcinogenic by the International Agency for Research on Cancer (IARC).

Material: Highly refined mineral oil
GHS/CLP Carcinogenicity Classification: No carcinogenicity classification.

Reproductive Toxicity
Product:
Remarks: Not expected to impair fertility., Not expected to be a developmental toxicant.

STOT-single exposure
Product:
Remarks: Not expected to be a hazard.

STOT-repeated exposure
Product:
Remarks: Not expected to be a hazard.

Aspiration Hazard
Product:
Aspiration into the lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal.

Other 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.

12. ECOLOGICAL INFORMATION

Ecotoxicity
Product:
Toxicity to fish (Acute toxicity): Remarks: Expected to be practically non toxic: LL/EL/IL50 > 100 mg/l

Toxicity to crustacean (Acute toxicity): Remarks: Expected to be practically non toxic: LL/EL/IL50 > 100 mg/l

Toxicity to algae/aquatic plants (Acute toxicity): Remarks: Expected to be practically non toxic: LL/EL/IL50 > 100 mg/l

Toxicity to fish (Chronic toxicity): Remarks: NOEC/NOEL expected to be > 10 - <= 100 mg/l

Toxicity to crustacean (Chronic toxicity): Remarks: NOEC/NOEL expected to be > 10 - <= 100 mg/l

Toxicity to microorganisms (Acute toxicity): Remarks: Expected to be practically non toxic: LL/EL/IL50 > 100 mg/l

Persistence and degradability
Product:
Biodegradability: Remarks: Expected to be inherently biodegradable.

Mobility
Product:
Mobility:
Remarks: Liquid under most environmental conditions., If it enters soil, it will adsorb to soil particles and will not be mobile.
Remarks: Floats on water.

Bioaccumulative Potential
Product:
Bioaccumulation: Remarks: Has the potential to bioaccumulate.

Partition coefficient: n-octanol/water: Pow: > 6 Remarks: (based on information on similar products)

Other Adverse Effects
No data available

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.(LL/EL/IL50 expressed as the nominal amount of product required to prepare aqueous test extract).

Other Information
Product:
Additional ecological information:
Product is a mixture of non-volatile components, which are not expected to be released to air in any significant quantities., Not expected to have ozone depletion potential, photochemical ozone creation potential or global warming potential.
Films formed on water may affect oxygen transfer and damage organisms., May cause physical fouling of aquatic organisms.
Mineral oil is not expected to cause any chronic effects to aquatic organisms at concentrations less than 1 mg/l.

13. DISPOSAL CONSIDERATIONS

Waste Disposal
Waste from residues:
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 should be in accordance with applicable regional, national, and local laws and regulations.
Local regulations may be more stringent than regional or national requirements and must be complied with.

Container Disposal
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.

14. TRANSPORT INFORMATION

U.N. Number
None Allocated

UN proper shipping name
None Allocated

Transport hazard class(es)
None Allocated

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.

Other Information
National Regulations
ADG
Not regulated as a dangerous good

International Regulations:
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: Not applicable
Ship type: Not applicable
Product name: Not applicable
Special precautions: Not applicable

Additional Information: MARPOL Annex 1 rules apply for bulk shipments by sea.

15. REGULATORY INFORMATION

Regulatory information
Product classified as per Work Health Safety Regulations – Implementation of the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) 2012 and SDS prepared as per national model code of practice for preparation of safety data sheet for Hazardous chemicals 2011 based on Globally Harmonized Classification version 3.
National Model Code of Practice for the Labelling of Workplace Hazardous Chemicals (2011).
Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG code).

Poisons Schedule
N/A

EINECS/ELINCS (EC)
All components listed or polymer exempt.

Australia (AICS)
All components listed.

USA (TSCA)
All components listed.

16. OTHER INFORMATION

User Codes

User Title Label	User Codes
Wis Numbers	00273615
Wis Numbers	07330322

Other Information
Version 2.2

Abbreviations and Acronyms: The standard abbreviations and acronyms used in this document can be looked up in reference literature (e.g. scientific dictionaries) and/or websites.

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

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