SAFETY DATA SHEET

SECTION 1 – IDENTIFICATION: PRODUCT IDENTIFIER/CHEMICAL IDENTITY

1.1 PRODUCT IDENTIFIER: **HD Long Life EC01 Coolant Heavy Duty 100% Concentrate**

1.2 PRODUCT CODE: AFABEC01

1.3 RELEVANT IDENTIFIED USES OF THE MIXTURE AND USES ADVISED AGAINST:
RELEVANT IDENTIFIED USES: Engine Cooling System Treatment.
RESTRICTIONS ON USE: None known.
1.4 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET:
SUPPLIER NAME: PENRITE OIL Company Pty Ltd (ABN: 25005 001 525),
ADDRESS: 88 Lewis Road, Wantirna South, Victoria, Australia, 3152
3 Kiwi Street, Otahuhu Auckland, New Zealand.
E-MAIL: tech@penriteoil.com (Aust and NZ)
TELEPHONE NUMBER: 03 9801 0877 (NZ: 0800 533 698)
1.5 EMERGENCY TEL. NUMBER: 1300 736 748 (NZ: 0800 533 698)
(Poisons Information Centre (Aust 131 126; NZ 0800 764 766))

SECTION 2 – HAZARD(S) IDENTIFICATION

2.1 CLASSIFICATION OF THE HAZARDOUS CHEMICAL:
GHS CLASSIFICATION HAZARD
CLASS & CATEGORY: Under the Model Work Health and Safety Regulations the product would be rated as hazardous:
Acute Toxicity - Oral Category 4.

2.2 LABEL ELEMENTS INCLUDING PRECAUTIONARY STATEMENTS:
SIGNAL WORD: Warning.
PICTOGRAMS:

HAZARD STATEMENTS: H302 - Harmful if swallowed.
PRECAUTIONARY STATEMENTS:
PREVENTION: P102 - Keep out of reach of children.
P103 - Read label before use.
P264 - Wash hands with soap and water thoroughly after handling.
P270 - Do not eat drink or smoke when using this product.
RESPONSE: P101 - If medical advice is needed, have product container or label at hand.
P301+P312 - IF SWALLOWED: Call a POISON CENTRE or doctor if you feel unwell.
P330 - Rinse mouth.
STORAGE: There are no Storage Statements.
DISPOSAL: P501 - Dispose of contents/container in accordance with local regulations.

2.3 OTHER HAZARDS: The product is rated as Harmful if swallowed. Ethylene glycol poisoning can be fatal after ingestion. Ingestion of large quantities can cause kidney damage. The product may be mildly irritating to the eyes. The presence of the ethylene glycol component suggests that the product may be irritating to the respiratory system. The Ethylene glycol constituent has the Skin Annotation assigned to it. This means absorption through the skin may be a significant source of exposure. As for all chemical products, persons should not expose open wounds, cuts, abrasions or irritated skin to this material.

SAFETY DATA SHEET

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

INGREDIENTS	CAS NUMBER	Concentration % W/W	GHS Classification*
Ethanediol [Ethylene glycol]	107-21-1	> 60%	Acut Tox 4 - H302
Nitrous acid, sodium salt [Sodium nitrite]**	7632-00-0	< 1%	Acute Tox 4 – H302
Denatonium Benzoate	3734-33-6	10mg/kg	Not Applic
Other non-hazardous ingredients	-	To 100%	Not Applic

Not Applic = Not Applicable * Please see Section 15 of this SDS for full text of the Label Elements
** In an aqueous solution, sodium nitrite becomes nitrous acid, a non-hazardous substance.

SECTION 4 – FIRST AID MEASURES

4.1 DESCRIPTION OF NECESSARY FIRST AID MEASURES:

INGESTION: Rinse mouth out and give a glass of water. Never give fluid to a person exhibiting decreased awareness. Do NOT induce vomiting. Seek medical advice immediately. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. For advice, contact a Poisons Information Centre (Phone Australia 131 126; New Zealand 0800 764 766) or a doctor at once.

EYE*:* If in eyes, hold eyelids apart and flush the eye immediately with large amounts of running water. Continue flushing for at least 15 minutes or until advised to stop by a doctor. Check for contact lenses. If there are contact lenses, these should be removed after several minutes of rinsing by the exposed person or medical personnel if it can be done easily. After flushing, if irritation develops or persists, seek medical assistance.

SKIN CONTACT: If skin or hair contact has occurred remove any contaminated clothing and footwear, wash skin or hair thoroughly with soap and water. If irritation develops or persists, consult a Doctor.

INHALATION: If affected, remove the patient from further exposure into fresh air, if safe to do so. If providing assistance, avoid exposure to yourself - only enter contaminated environments with adequate respiratory equipment. Once removed, lay patient down in a well-ventilated area and reassure them whilst waiting for medical assistance. If not breathing, provide artificial respiration and seek immediate medical assistance. If unconscious, place in a recovery position and seek immediate medical assistance. If irritation develops or persists, consult a Doctor.

PROTECTION FOR FIRST AIDERS: No personnel shall place themselves in a situation that is potentially hazardous to themselves. Assess the scenario for PPE requirements before entering. Assess environment for vapours before entering. Do not enter contaminated area without a respirator. As the product contains Ethylene glycol, if the person has ingested the product, do not use direct mouth-to-mouth resuscitation techniques. Always ensure that you are wearing gloves when dealing with first aid procedures involving chemicals and/or blood.

FIRST AID FACILITIES: Eye wash fountain and safety showers are recommended in the area where the product is used.

4.2 MOST IMPORTANT SYMPTOMS & EFFECTS, BOTH ACUTE & DELAYED, CAUSED BY EXPOSURE:

ACUTE: The product is rated as harmful by ingestion. Ingestion of large amounts of the product could lead to acute Ethylene glycol poisoning. Ingestion or inhalation of vapours may lead to irritation of the mouth and respiratory tract. Symptoms may include a burning sensation in the nose and throat, coughing or difficulty breathing. Ingestion may lead to nausea and diarrhoea. Eye contact may lead to localised burning, redness and tearing. Skin contact may lead to redness or itching. If material is aspirated into the lungs it may exhibit as coughing, wheezing, congestion or fever.

SAFETY DATA SHEET

SECTION 4 – FIRST AID MEASURES Continued

CHRONIC: Skin contact may aggravate/exacerbate existing skin conditions, such as dermatitis. Ingestion of large quantities of Ethylene glycol may cause kidney damage.

4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NECESSARY:

ADVICE TO DOCTOR: Treat symptomatically. Ingestion of large amounts of Ethylene glycol can cause central nervous system depression and metabolic acidosis. Consider removal by gastric lavage after endotracheal intubation. Do not use mechanical or pharmacological means of emesis. Any material aspirated during vomiting may produce lung injury. If vomiting has occurred after ingestion, the patient should be monitored for difficulty in breathing, as adverse effects of aspiration into the lungs may be delayed for up to 48 hours. Monitor kidney function as large quantities may cause kidney damage. According to the IUCLID Report, in human Ethylene glycol poisoning cases ethanol/alkali/diuretic infusion antidotal treatment has been successful.

SECTION 5 – FIRE FIGHTING MEASURES

5.1 EXTINGUISHING MEDIA:

SUITABLE MEDIA: Use extinguishing media appropriate for surrounding fire. Use carbon dioxide, alcohol resistant foam, dry chemical or water fog. Spray down fumes resulting from fire.

UNSUITABLE MEDIA: Avoid using full water jet directed at residual material that may be burning.

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE:

COMBUSTION HAZARDS: Combustion may produce oxides of carbon, as well as small amounts of nitrogen and sodium, smoke and irritating vapours.

5.3 ADVICE FOR FIREFIGHTERS:

FIRE: This product is a combustible liquid under conditions of use with a Typical Flash Point of > 120°C. Keep storage tanks, pipelines, fire exposed surfaces, etc. cool with water spray.

HAZCHEM CODE: Not applicable.

EXPLOSION: No information to indicate that the product is an explosion hazard. Extinguish all sources of flame or spark. Closed containers may explode when exposed to extreme heat.

PROTECTIVE EQUIPMENT: In the event of a fire, wear full protective clothing and self-contained breathing equipment with full-face piece operated in the pressure demand or other positive pressure mode.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:

PERSONAL PROTECTION: For small spills, wear Natural rubber, Neoprene, Nitrile and PVC gloves, glasses/goggles, boots and full-length clothing. During routine operation a respirator is not required. However, if mists or vapours are generated, an approved organic vapour/particulate respirator is required. For large spills, or in confined spaces, a full chemically resistant body-suit is recommended and the atmosphere must be evaluated for oxygen deficiency. If in doubt wear self-contained breathing apparatus.

CONTROL MEASURES: Ventilate area and extinguish and/or remove all sources of ignition. Stop the leak if safe to do so. CAUTION: The spilled product will be slippery. Avoid contact with the spilled material.

SAFETY DATA SHEET

SECTION 6 – ACCIDENTAL RELEASE MEASURES Continued

EMERGENCY PROCEDURES: In the event of a spill or accidental release, notify the relevant authorities in accordance with all applicable regulations.

6.2 ENVIRONMENTAL PRECAUTIONS:

SPILL ADVICE: Do not allow product to enter drains, surface water, sewers or watercourses - inform local authorities if this occurs.

6.3 METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP:

CONTAINMENT: Contain the spill and absorb with a proprietary absorbent material, sand or earth. For large spills prepare a bund/barrier/dyke ahead of the spill to confine the spill and allow later recovery. If there is the possibility of spills to enter drains, surface water, sewers or watercourses ensure bunding, or that drains are covered, to minimise the potential for this to occur.

CLEANING PROCEDURES: Having contained the spill, as mentioned above, collect all material quickly and place used absorbent in suitable containers. Follow local regulations for the disposal of waste. For large spills that have been bunded, the material can be pumped into vessels and returned for reprocessing or destruction. Personnel must wear gloves, goggles or glasses, boots and full-length clothing during cleaning procedures. Wash contaminated area and objects with detergent and water after spill has been cleared. Rinse the cleaned area with water. Do not allow wash water or rinsings to enter drains, surface water, sewers or water courses.

SECTION 7 – HANDLING AND STORAGE, INCLUDING HOW THE CHEMICAL MAY BE SAFELY USED

7.1 PRECAUTIONS FOR SAFE HANDLING:

SAFE HANDLING: Avoid contact with the product by using appropriate protective equipment such as gloves, glasses or goggles and full-length clothing. Prevent small spills and leakage to avoid slip hazards. Properly dispose of any contaminated rags or cleaning materials in order to prevent fire hazards. Eating, drinking, and smoking should be prohibited in the area where this material is handled, stored and processed. Workers should follow good personal hygiene practices, such as washing hands before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Keep containers tightly closed when not in use. Prevent product from entering waterways, drains or sewers.

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATABILITIES:

SAFE STORAGE: Store in a dry, well ventilated area away from direct sunlight, ignition sources, oxidising agents, foodstuffs, animal feed and clothing. Keep containers closed when not in use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Store only in original containers. Keep out of reach of children.

INCOMPATIBILITIES: Oxidizing substances including strong acids, strong caustics, aliphatic amines, isocyanates and chlorosulfonic acid.

SAFETY DATA SHEET

SECTION 8 – EXPOSURE CONTROLS & PERSONAL PROTECTION

8.1 EXPOSURE CONTROL MEASURES:

EXPOSURE LIMIT VALUES: Exposure standards for the product have not been established. However, in the operation of certain equipment or at elevated temperatures, if ethylene glycol vapours or mists are generated, the following Exposure Standard must be observed:

Ethylene glycol as Vapour (Skin annotation)
Time Weighted Average (TWA): 20 ppm, 52 mg/m^3
Short Term Exposure Limit (STEL): 40 ppm, 104 mg/m^3
Ethylene glycol as Particulate (Skin annotation)
Time Weighted Average (TWA): 10 mg/m^3

8.2 BIOLOGICAL MONITORING: No data available.

8.3 CONTROL BANDING: No data available.

8.4 ENGINEERING CONTROLS:

ENGINEERING CONTROLS: Special ventilation is not normally required. However, in the enclosed spaces or at elevated temperatures mists or vapour may be generated and exhaust ventilation may be required to maintain airborne concentration levels below the exposure standards or below a level considered irritating by individuals.

8.5 INDIVIDUAL PROTECTION MEASURES:

EYE & FACE PROTECTION: Wear safety glasses/goggles to avoid eye contact when handling. If there is a risk of splashing during use, a full face shield is recommended. Use eye protection in accordance with AS 1336 and AS 1337.

SKIN (HAND) PROTECTION: If there is the chance of contact with the material wear gloves to provide hand protection. Natural rubber, Neoprene, Nitrile or PVC gloves are recommended.

SKIN (CLOTHING) PROTECTION: During normal operating procedures, long sleeved clothing is recommended to avoid skin contact. Soiled clothing should be washed with detergent prior to re-use.

RESPIRATORY PROTECTION: During routine operation a respirator is not required. However, if mists or vapours are generated, an approved half face organic vapour/particulate respirator is required. Use respirators in accordance with AS 1715 and AS 1716.

THERMAL PROTECTION: Not applicable.

SAFETY DATA SHEET

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

9.1 PHYSICAL AND CHEMICAL PROPERTIES:

APPEARANCE:	Deep Red liquid.
ODOUR:	No data available.
ODOUR THRESHOLD:	No data available.
pH:	8.3 - 8.5 (33% in water solution).
MELTING/FREEZING POINT:	No data available.
INITIAL BOILING POINT:	No data available.
BOILING RANGE (^oC):	Typically >100^oC.
FLASHPOINT (^oC):	Typically >120^oC for Ethylene glycol.
EVAPORATION RATE:	No data available.
FLAMMABILITY LIMITS (%):	Ethylene glycol LEL: 3.4%; UEL: 15.1.
VAPOUR PRESSURE:	Negligible (Air = 1.0).
VAPOUR DENSITY:	No data available.
DENSITY (g/mL @ 20^oC):	Typically 1.122.
SOLUBILITY IN WATER(g/L):	Completely miscible.
PARTITION COEFFICIENT:	No data available for n-octanol/water.
AUTO-IGNITION TEMP (^oC):	420^oC for Ethylene glycol.
DECOMPOSITION TEMP (^oC):	No data available.
VISCOSITY (cSt @ 100^oC):	No data available.
VISCOSITY (cSt @ 40^oC):	No data available.
VISCOSITY (cSt @ 20^oC):	No data available.

SECTION 10 – STABILITY AND REACTIVITY

10.1 REACTIVITY: The product does not pose any further reactivity hazards other than those listed in the following sub-sections.

10.2 CHEMICAL STABILITY: Stable under recommended storage and handling conditions (see section 7).

10.3 POSSIBILITY OF HAZARDOUS REACTIONS: Keep away from strong oxidising agents, such as strong acids, chlorates, nitrates and peroxides. Hazardous polymerisation does not occur.

10.4 CONDITIONS TO AVOID: Observe the usual precautionary measures for handling chemicals. Do not heat the container or leave the container open when not in use.

10.5 INCOMPATIBLE MATERIALS: Strong oxidising agents including concentrated acids as well as strong bases, acid chlorides, isocyanates and acid anhydrides. Do not store in aluminium or galvanised containers.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS: Hazardous decomposition products are not expected to form during normal storage requirements. See Section 5.2 for Hazardous Combustion products.

SAFETY DATA SHEET

SECTION 11 – TOXICOLOGICAL INFORMATION

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS:
The product is a mixture and test data is not available for the product as a whole.

11.2 SWALLOWED: The product is a Schedule 5 Poison and rated as harmful if swallowed. Acute poisoning with Ethylene glycol includes central nervous system effects, cardiopulmonary effects, usually attributed to metabolic acidosis, and finally renal failure. Neurological effects incorporating the facial nerves with visual impairment have occurred after Ethylene glycol ingestion by humans according to the IUCLID Report. The clinical effect of ingesting high doses of Ethylene glycol appears in 3 stages (IUCLID Report). The first twelve hours involves the central nervous system and is characterised by the appearance of drunkenness, nausea, vomiting, coma and then convulsions. There are also changes in blood cellular composition and urine profile, mild drops in blood pressure, rapid heartbeat, slight fever, depressed reflexes, eye effects and possibly seizures. The second stage involves the heart and lungs. The commonly observed effects include rapid breathing and heart beat, mild drops in blood pressure, blue colouration of the skin, possibly fluid in the lungs, pneumonia, enlarged or congested heart. Death in this stage starts 24 to 72 hours after ingestion. The final stage is kidney failure, with oxalic acid being found in the urine. The Ethylene glycol Estimated Lethal Dose (Human) is 100 mL with the Calculated Mean Lethal Dose being 1.2 - 1.5 g/kg, oral, adults. The Oral (human) LDLo is 398mg/kg. The Oral (child) TDLo: 5500 mg/kg.

11.3 SKIN CORROSION/ IRRITATION: This product is not expected to exhibit Dermal Corrosivity/Irritation according to OECD Test 404, based on the available data and the known hazards of the components. May be mildly irritating to the skin. The Ethylene glycol constituent has the Skin Annotation assigned to it. This means absorption through the skin may be a significant source of exposure. Correct handling procedures incorporating appropriate protective clothing and gloves should minimise the risk of skin absorption and irritation. People with pre-existing skin conditions, such as dermatitis, should take extreme care so as not to exacerbate the condition. The following RTECS data was reported for Ethylene glycol: Skin (Rabbit): 555 mg (open) - mild.

11.4 SERIOUS EYE DAMAGE/ IRRITATION: This product is not expected to exhibit Eye Irritation or Serious Damage/ Corrosivity according to OECD Test 405, based on the available data and the known hazards of the components. May be mildly irritating to the eyes. Symptoms may include localised burning, redness and tearing. Correct handling procedures incorporating appropriate eye protection should minimise the risk of eye irritation. The following RTECS data was reported for Ethylene glycol:
Eye (Rabbit): 100 mg/1 hr - mild Eye (Rabbit): 500 mg/24 hr - mild
Eye (Rabbit): 1,440 mg/6 hr - moderate

11.5 RESPIRATORY OR SKIN SENSITISATION: This product is not expected to be a skin sensitiser according to OECD Test 406, based on the available data and the known hazards of the components. This product is not expected to be a respiratory tract sensitiser, based on the available data and the known hazards of the components.

11.6 GERM CELL MUTAGENICITY: This product is not expected to be mutagenic according to tests such as OECD Tests 471, 475, 476, 478 and 479, based on the available data and the known hazards of the components. However, studies have shown Ethylene glycol to be mutagenic to rat cells.

11.7 CARCINOGENICITY: This product is not expected to be a carcinogen according to OECD Test 451, based on the available data and the known hazards of the components.

SAFETY DATA SHEET

SECTION 11 – TOXICOLOGICAL INFORMATION Continued

11.8 REPRODUCTIVE TOXICITY: This product is not expected to be a reproductive hazard according to tests such as OECD Tests 414 and 421, based on the available data and the known hazards of the components. However, Ethylene glycol has been shown to cause birth defects in rat studies.

11.9 SPECIFIC TARGET ORGAN TOXICITY (STOT) - SINGLE EXPOSURE: There is no data available for the product as a whole. As mentioned, acute poisoning with Ethylene glycol includes central nervous system effects, cardiopulmonary effects, usually attributed to metabolic acidosis, and finally renal failure. Inhalation of vapours or mist (generated at elevated temperatures or by mechanical action) may cause irritation to the nose and throat. At mist concentrations of 80ppm Ethylene glycol, a 1991 ACGIH report nominates that coughing and tracheal burning became intolerable. Inhalation of vapours or mist may cause drowsiness or dizziness. This may be accompanied by sleepiness, reduced alertness, loss of reflexes, lack of coordination and vertigo. This is likely to occur at temperatures higher than normally expected when using the product.

11.10 SPECIFIC TARGET ORGAN TOXICITY (STOT) - REPEATED EXPOSURE: This product is not expected to cause organ damage from prolonged or repeated exposure according to tests such as OECD Tests 410 and 412, based on the available data and the known hazards of the components. Evidence from animal studies indicates that repeated or prolonged exposure to Ethylene glycol could lead to central nervous system, liver and kidney side effects.

11.11 ASPIRATION HAZARD: This product is not expected to be an aspiration hazard, based on the available data and the known hazards of the components. However, the manufacturer recommends that if swallowed, do NOT induce vomiting. If vomiting has occurred after ingestion the person should be observed to ensure that aspiration into the lungs has not occurred.

11.12 OTHER INFORMATION: Ethylene glycol has been shown to produce teratogenic effects in mice when high doses were ingested. Though there is animal data that suggests that Ethylene glycol has some toxicological effects in regards to reproductive effects, mutagenicity and teratogenicity, the results were not considered relevant to normal industrial use of the product to require it to be rated. Though this highlights the fact that care should be taken when handling the product.

SECTION 12 – ECOLOGICAL INFORMATION

12.1 ECOTOXICITY: There is no data available for the product as a whole. The product should not be discharged to sewer or waterways. Data reported for Ethylene glycol has the Fish LC_{50}(96 hr) as 4,100 - 18,500 mg/L and Algae IC_{50}(72 hr) as 180,000 mg/L.

12.2 PERSISTENCE & DEGRADABILITY: Based on the available data and the known hazards of the components and similar products the product is expected to be readily biodegradable. Major constituents are expected to be inherently biodegradable. Ethylene glycol is expected to be readily biodegradable (OECD 301A > 70% DOC Reduction).

12.3 BIOACCUMULATIVE POTENTIAL: There is no data available for the product as a whole. Studies suggest Ethylene glycol does not bioaccumulate.

12.4 MOBILITY IN SOIL: There is no data available for the product as a whole. Ethylene glycol is not expected to evaporate from the soil surface. Ethylene glycol has little or no capacity to bind to soil and will be mobile. The log Pow of Ethylene glycol is nominated as between -1.93 and -1.36.

12.5 OTHER ADVERSE EFFECTS: There is no data available for the product as a whole. The product is miscible in water.

SAFETY DATA SHEET

SECTION 13 – DISPOSAL CONSIDERATIONS

13.1 DISPOSAL METHODS:

PRODUCT: The product should not be released to the environment, so any unused material should be recycled wherever possible or be disposed of as hazardous waste at an appropriate collection depot. Spilled product that cannot be recovered should be absorbed and then shovelled into a suitable waste container, such as a plastic drum and then be treated as a solid waste. Follow Government regulations for disposal of such waste. All unused, waste or spilled product must be taken for recycling or disposal by suitably licensed contractors in accordance with Government regulations.

CONTAINERS: Empty containers may contain residual product. They should be completely drained and then stored until reconditioned or disposed of. Empty containers should be taken for recycling or disposal through suitably licensed contractors in accordance with Government regulations. Where the containers are of metal construction they should not be pressurised, cut by a grinder, welded, brazed, soldered, drilled or exposed to heat, flames or other sources of ignition. Closed metal containers when exposed to such conditions/treatment may explode causing serious injury or death.

SECTION 14 – TRANSPORT INFORMATION

This product is not regulated for land, sea or air transportation. (HS Code: 3820.00.00)

14.1 LAND (ADG Code):

UN NUMBER:	Not applicable
UN PROPER SHIPPING NAME:	Not applicable
TRANSPORT HAZARD CLASS(ES):	Not applicable
PACKAGING GROUP:	Not applicable
ENVIRONMENTAL HAZARDS:	Not applicable
SPECIAL PRECAUTIONS FOR USER:	Not applicable
HAZCHEM CODE:	Not applicable

14.2 SEA (IMDG):

UN NUMBER:	Not applicable
UN PROPER SHIPPING NAME:	Not applicable
TRANSPORT HAZARD CLASS(ES):	Not applicable
PACKAGING GROUP:	Not applicable
ENVIRONMENTAL HAZARDS:	Not applicable
SPECIAL PRECAUTIONS FOR USER:	Not applicable

14.3 AIR (IATA):

UN NUMBER:	Not applicable
UN PROPER SHIPPING NAME:	Not applicable
TRANSPORT HAZARD CLASS(ES):	Not applicable
PACKAGING GROUP:	Not applicable
ENVIRONMENTAL HAZARDS:	Not applicable
SPECIAL PRECAUTIONS FOR USER:	Not applicable

SAFETY DATA SHEET

SECTION 15 – REGULATORY INFORMATION

15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS:
APPLICABLE REGULATIONS:
SUSMP: Schedule 5.
AICS: All ingredients are on the AICS List.
MONTREAL PROTOCOL: Not applicable to this product.
STOCKHOLM CONVENTION: Not applicable to this product.
ROTTERDAM CONVENTION: Not applicable to this product.
BASEL CONVENTION: Not applicable to this product.
INTERNATIONAL CONVENTION FOR THE PREVENTION OF POLLUTION FROM SHIPS (MARPOL): Not determined.

OTHER REGULATORY INFORMATION:
GHS CLASSIFICATION HAZARD CLASS & CATEGORY AND HAZARD STATEMENT: Acute Toxicity - Oral Category 4; H302 - Harmful if swallowed.

HSNO APPROVAL NUMBER: HSR002606

HSNO GROUP TITLE: Lubricants, Lubricant Additives, Coolants and Anti-Freeze Agents (Subsidiary Hazard) Group Standard 2006.

SECTION 16 – ANY OTHER RELEVANT INFORMATION

SDS INFORMATION:
Date of SDS Preparation: 15th May 2015 **Revision:** 0.02

REVISION CHANGES: Change to Product Name. Changes to Sections 1 and 16.
ACRONYMS:

SUSMP	Standard for the Uniform Scheduling of Medicines and Poisons
CAS Number	Chemical Abstracts Service Registry Number
EINECS	European Inventory of Existing Commercial Chemical Substances
UN Number	United Nations Number
OSHA	Occupational Safety and Health Administration
ACGIH	American Conference of Governmental Industrial Hygienists
IMDG	International Maritime Dangerous Goods
IATA	International Air Transport Association
IUCLID	International Uniform Chemical Information Database
RTECS	Registry of Toxic Effects of Chemical Substances
%W/W	Percent weight for weight
OECD	Organisation for Economic Co-Operation and Development
ADG Code	Australian Code for the Transport of Dangerous Goods by Road and Rail
HAZCHEM Code	Emergency action code of numbers and letters which gives information to emergency services
NOHSC	National Occupational Health and Safety Commission
NICNAS	National Industrial Chemicals Notification & Assessment Scheme
IMAP	Inventory Multi-Tiered Assessment and Prioritisation
AICS	Australian Inventory of Chemical Substances
TWA	Time-Weighted Average
STEL	Short term Exposure Limit
HSNO	Hazardous Substances and New Organisms Act 1996
GHS	Globally Harmonised System of Classification and Labelling of Chemicals
PPE	Personal Protective Equipment.

SAFETY DATA SHEET

SECTION 16 – ANY OTHER RELEVANT INFORMATION Continued

LITERATURE REFERENCES AND SOURCES OF DATA:

OECD Guidelines for Testing of Chemicals
Annex I: OECD Test Guidelines for Studies Included in SIDS
Manual for the Assessment of Chemicals Chapter 2 Data Gathering
International Toxicity Testing Guidelines
Hazardous Substance Information System - Guidance Material for Hazard Classifications
Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice.
Model Work Health and Safety Regulations.
Model Work Health and Safety Regulations - Transitional Principles
Workplace Exposure Standards for Airborne Contaminants
Australian Dangerous Goods Code 7th Edition
Approved Criteria for Classifying Hazardous Substances [NOHSC:1008 (2004)]
Guidance on the Classification of Hazardous Chemicals under the WHS Regulations
Assigning a Hazardous Substance to a Group Standard
User Guide to the HSNO Thresholds and Classifications
Summary User Guide to the HSNO Thresholds and Classifications of Hazardous Substances
Correlation between GHS and New Zealand HSNO Hazard Classes and Categories
HSNO Control Regulations
Record of Group Standard Assignment
Labelling of Hazardous Substances Hazard and Precautionary Information
Thresholds and Classifications Under the Hazardous Substances and New Organisms Act 1996
Workplace Exposure Standards and Biological Exposure Indices
NICNAS IMAP Human Health Tier II Assessment for 1,2-Ethanediol CAS Number: 107-21-1

All information contained in this Safety Data Sheet and the health, safety and environmental information are considered to be accurate to the best of our knowledge as of the issue date specified above. However, no warranty or representation, expressed or implied, is made as to the accuracy or completeness of the data and information contained in this data sheet.

Health and safety precautions and environmental advice noted in this data sheet may not be accurate for all individuals and/or situations. It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. The Company accepts no responsibility for any injury, loss or damage, resulting from abnormal use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material.