

SAFETY DATA SHEET

SECTION 1 – IDENTIFICATION: PRODUCT IDENTIFIER/CHEMICAL IDENTITY

1.1 PRODUCT IDENTIFIER: Enviro+ DPF Cleaner

1.2 PRODUCT CODE: ADDPF

1.3 RELEVANT IDENTIFIED USES OF THE MIXTURE AND USES ADVISED AGAINST:

RELEVANT IDENTIFIED USES: Used to assist cleaning of DPFs.

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 (Australia): 110-116 Greens Road, Dandenong South VIC, Australia, 3175

TELEPHONE NUMBER (Australia): 1300 736 748; +61 3 9801 0877 (Int); Fax: 1800 736 748

ADDRESS (New Zealand): 75 Lady Ruby Drive, East Tamaki, Auckland, New Zealand, 2013

TELEPHONE NUMBER (New Zealand): 0800 533 698; Fax: 0800 533 698

E-MAIL: tech@penriteoil.com (Aust and NZ)

1.5 EMERGENCY TEL. NUMBER: Australia: 1300 736 748; New Zealand: 0800 533 698
(Poisons Information Centre (Aust 131 126; NZ 0800 764 766))

1.6 HSNO DETAILS:

HSNO APPROVAL NUMBER: HSR002581.

HSNO GROUP TITLE: Fuel Additives (Combustible) Group Standard 2006.

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:
Flammable Liquid - Category 4
Aspiration Hazard - Category 1

2.2 LABEL ELEMENTS INCLUDING PRECAUTIONARY STATEMENTS:

SIGNAL WORD: Danger

PICTOGRAMS:



HAZARD STATEMENTS: H227 - Combustible Liquid.
H304 - May be fatal if swallowed and enters airways.

PRECAUTIONARY STATEMENTS:

PREVENTION: P102 - Keep out of reach of children.
P103 - Read label before use.
P210 - Keep away from flames and hot surfaces – No smoking.
P280 - Wear protective gloves/eye protection/face protection.

RESPONSE: P101 - If medical advice is needed, have product container or label at hand.
P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P331 - Do NOT induce vomiting.
P370+P378 - In case of fire: Use carbon dioxide, foam, dry chemical or water spray for extinction.

STORAGE: P403+P235 - Store in a well-ventilated place. Keep cool.
P405 - Store locked up.

DISPOSAL: P501 - Dispose of contents/container in accordance with local regulations.

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SECTION 2 – HAZARD(S) IDENTIFICATION Continued

2.3 OTHER HAZARDS:

Due to the presence of solvents there is a possibility of organ system damage. The presence of the solvent component suggests that the product may be irritating to the skin and eyes. The vapours may also lead to drowsiness and dizziness. The product will potentially form flammable/explosive mixtures in air. There may be static discharge issues with the product in large scale operations that could lead to a fire. The product may contain Naphthalene as a liquid hydrocarbon impurity which is considered extremely hazardous to children. As for all chemical products, persons should not expose open wounds, cuts, abrasions or irritated skin to this material.

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

INGREDIENTS	CAS NUMBER	Concentration % W/W	GHS Classification*
Distillates, petroleum, hydrotreated light (Kerosine, unspecified)	64742-47-8	> 60%	Asp Haz 1 - H304
Toluene**	108-88-3	< 1%	Flam Liq 2 - H225 Skin Irrit 2 - H315 Asp Haz 1 - H304 STOT SE 3 - H336 STOT RE 2 - H373 Tox Repro 2 - H361
1,2,4-Trimethylbenzene**	95-63-6	< 1%	Flam Liq 3 - H226 Acute Tox 4 - H332 Eye Irrit 2A - H319 STOT SE 3 - H335 Skin Irrit 2 - H315 Chron Aq Tox 2 - H411
Cumene (Isopropylbenzene)**	98-82-8	< 1%	Flam Liq 3 - H226 STOT SE 3 - H335 Asp Haz 1 - H304 Chron Aq Tox 2 - H411
Naphthalene**	91-20-3	< 1%	Acute Tox 4 - H302 Carc Cat 2 - H351 Chron Aq Tox 1 - H410
Other non-hazardous ingredients	-	To 100%	Not Applicable

Not Applicable = Not Applicable

* Please see Section 15 of this SDS for full text of the Label Elements.

**These ingredients are potentially components of the Distillates, petroleum, hydrotreated light (Kerosine, unspecified) and not additional ingredients in the final mixture.

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SECTION 4 – FIRST AID MEASURES

4.1 DESCRIPTION OF NECESSARY FIRST AID MEASURES:

INGESTION:

Rinse mouth out with water. If swallowed, do NOT induce vomiting. For advice, contact the Poisons Information Centre (phone Australia 131 126; New Zealand 0800 764 766) or a doctor at once. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Within 6 hours of ingestion, if delayed symptoms, such as a fever greater than 38.3°C, shortness of breath, chest congestion or continued coughing/wheezing occurs transport immediately to a medical facility. As the product is hydrocarbon based and of low viscosity (1.0-2.5cSt @ 40°C), if ingested seek urgent medical assistance.

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 flammable vapours before entering. Never enter an environment with a flammable atmosphere. Do not enter contaminated area without a respirator. As the product is hydrocarbon based and of low viscosity, 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:

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. If material is aspirated into the lungs it may exhibit as coughing, wheezing, congestion or fever. The product may contain Naphthalene as a liquid hydrocarbon impurity which is considered extremely hazardous to children. Inhalation of high vapour concentrations may cause central nervous system depression resulting in dizziness, headache, nausea and possible loss of coordination. Eye contact may lead to localised burning, redness and tearing. Skin contact may lead to redness or itching.

CHRONIC:

Skin contact may aggravate/exacerbate existing skin conditions, such as dermatitis.

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SECTION 4 – FIRST AID MEASURES Continued

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

ADVICE TO DOCTOR: Treat symptomatically. As the product is predominantly hydrocarbon based and of low viscosity, if vomiting has occurred after ingestion, the patient should be monitored for adverse effects to ensure that the product has not aspirated into the lungs. Small amounts of this product aspirated into the lungs during ingestion or from vomiting may cause chemical pneumonitis or pulmonary oedema. The product may contain Naphthalene as a liquid hydrocarbon impurity which is considered extremely hazardous to children. Inhalation of high vapour concentrations may cause central nervous system depression.

SECTION 5 – FIRE FIGHTING MEASURES

5.1 EXTINGUISHING MEDIA:

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

UNSUITABLE MEDIA: Avoid using full water jet directed at residual material that may be burning. Water may cause splattering on hot residues. Product will float on water.

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE:

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

5.3 ADVICE FOR FIREFIGHTERS:

FIRE: This product is combustible with a typical flash point of 74 - 76°C. The vapour is heavier than air and will spread along the ground and may accumulate in low points or depressions. Therefore, ignition may occur well away from the point of release of the material. 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; though the solvent component may form an explosive mixture with air. Note: Under the WHS legislation, this product is rated as Flammable Liquid - Category 4, with a typical Flash point of 74 - 76°C. 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 Nitrile gloves, glasses/goggles, boots and full-length clothing. During routine operation for a small spill in the open 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 and as a precaution whether the atmosphere is flammable. If in doubt about potential oxygen deficiency, wear self-contained breathing apparatus. Never enter an environment with a flammable atmosphere.

CONTROL MEASURES: Ventilate area and extinguish and/or remove all sources of ignition. CAUTION: Vapour may form an explosive mixture with air. Never enter a spill area unless you know the vapours have dissipated to make the area safe. Stop the leak if safe to do so. Caution: The spilled product will be slippery. Avoid contact with the spilled material.

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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. Take precautions against static discharge. Ensure all equipment is grounded and use non-sparking tools during clean up operations.

6.3 METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP:

CONTAINMENT: Contain the spill and absorb with a proprietary absorbent material, sand or earth. Caution: The spilled product will be slippery. Be careful of static discharges and/or sparking during clean up. 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. Be careful of static discharges and/or sparking during clean up. Use only non-sparking tools during cleaning operations. Caution: The spilled product will be slippery. Follow local regulations for the disposal of waste. For large spills that have been banded, the material can be pumped, using flammable liquid equipment, 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. Extinguish any potential sources of ignition before using as flammable vapours will be generated during application. Avoid breathing mists or vapours. Do not smoke when handling the material. 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. There is the potential for electrostatic accumulation in the product. As a precaution, containers should always be earthed before dispensing commences.

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:

SAFE STORAGE: Classified as a Class 1 Combustible Liquid (Flash Point=74 - 76°C). Store in a dry, well ventilated area away from direct sunlight, ignition sources, oxidising agents, foodstuffs 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. It is recommended that the product is stored above 0°C and below 40°C.

INCOMPATIBILITIES: Oxidizing substances including strong acids.

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SECTION 8 – EXPOSURE CONTROLS & PERSONAL PROTECTION

8.1 EXPOSURE CONTROL MEASURES:

EXPOSURE LIMIT VALUES: Exposure standards for the product have not been established. The following values are applicable for the individual components:

Toluene (Skin Annotation):

TWA: 50 ppm 191 mg/m³ STEL: 150 ppm 574 mg/m³

1,2,4-Trimethyl Benzene:

TWA: 25 ppm (ACGIH)

Naphthalene:

TWA: 10 ppm 52 mg/m³ STEL: 15 ppm 79 mg/m³

Cumene (Isopropyl benzene) (Skin Annotation):

TWA: 25 ppm 125 mg/m³ STEL: 75 ppm 375 mg/m³

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 when using this product in normal use scenarios. However, in the operation of certain equipment, at elevated temperatures, or in confined spaces mists or vapour may be generated and local exhaust ventilation should be provided to maintain airborne concentration levels below the nominated exposure standard and at an acceptable level that does not cause irritation. Please note: Due to the flammable nature of the product, if there is a necessity to use ventilation equipment it should not be a potential source of ignition for any vapours generated.

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. Nitrile rubber 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.

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SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

9.1 PHYSICAL AND CHEMICAL PROPERTIES:

APPEARANCE:	Light yellow liquid.
ODOUR:	Slight solvent odour.
ODOUR THRESHOLD:	No data available.
pH:	Not applicable.
MELTING/FREEZING POINT:	No data available.
INITIAL BOILING POINT:	Typically 192°C.
BOILING RANGE (°C):	Typically 192°C - 256°C.
FLASHPOINT (°C):	Typically 74 - 76°C (closed cup).
EVAPORATION RATE:	No data available.
FLAMMABILITY LIMITS (%):	Lower Explosive Limit is 0.6% and Upper Explosive Limit is 7.0%.
VAPOUR PRESSURE (Pa):	350Pa @ 20°C.
VAPOUR DENSITY:	No data available.
DENSITY @ 15.0°C:	Typically 0.81.
SOLUBILITY IN WATER(g/L):	Immiscible with water.
PARTITION COEFFICIENT:	No data available for the product.
AUTO-IGNITION TEMP (°C):	Typically 225°C.
DECOMPOSITION TEMP (°C):	No data available.
VISCOSITY (cSt @ 100°C):	No data available.
VISCOSITY (cSt @ 40°C):	Typically 1.0 - 2.5.

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:	The product has a relatively low flash point. Avoid ignition sources including heat and sparks. 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 strong acids.
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.

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.

Distillates, petroleum, hydrotreated light (IUCLID)

Oral – LD₅₀ (Rat): > 5000mg/kg

Dermal – LD₅₀ (Rabbit): > 2000mg/kg

1,2,4-Trimethylbenzene

Oral – LD₅₀ (Rat): 3400mg/kg – 6000mg/kg

Dermal – LD₅₀ (Rabbit): 3160mg/kg

Inhalation – LC₅₀ (Rat, vapour, 4 hours): 18000mg/m³

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SECTION 11 – TOXICOLOGICAL INFORMATION Continued

Naphthalene

Oral – LD₅₀ (Rat): 2600mg/kg

Dermal – LD₅₀ (Rat): > 2500mg/kg

Inhalation – LC₅₀ (Rat, gas, 8 hours): > 100ppm

11.2 SWALLOWED:

The hydrocarbon component means this is a Schedule 5 Poison. As the product is hydrocarbon based and the viscosity is low, caution should be taken in respect to aspiration into the lungs. Small amounts of this product aspirated into the lungs during ingestion or from vomiting may cause chemical pneumonitis or pulmonary oedema. Ingestion of large amounts may lead to nausea and vomiting. The hydrocarbon solvent may contain residual Naphthalene as an impurity which is considered especially hazardous to children. During normal usage ingestion should not be a means of exposure.

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. This product contains components that are rated as irritants, however these are present at amounts below the Concentration cut-off level that would indicate that there is a potential corrosion/irritation hazard. May be mildly irritating to the skin. Both Cumene and Toluene constituents, though present at < 1%, have the Skin Annotation assigned to them. 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 irritation. People with pre-existing skin conditions, such as dermatitis, should take extreme care so as not to exacerbate the condition.

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. This product contains a component that is rated as an irritant, however this is present at amounts below the Concentration cut-off level that would indicate that there is a potential eye damage/irritation hazard. 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.

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.

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. Though it may contain residual Naphthalene present as an impurity that is rated as H351 - Suspected of causing cancer at levels that are higher than is in this product.

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. Though it may contain residual Toluene present as an impurity that is rated as H361 - Suspected of damaging the unborn child at levels that are higher than is in this product.

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SECTION 11 – TOXICOLOGICAL INFORMATION Continued

11.9 SPECIFIC TARGET ORGAN TOXICITY (STOT) -

SINGLE EXPOSURE: There is no data available for the product as a whole. This product contains volatile hydrocarbon components, hence inhalation of vapours or mist (generated at elevated temperatures or by mechanical action) may cause irritation to the nose and throat. Inhalation of high concentrations may cause central nervous system depression resulting in headaches, dizziness and nausea. Exposure to high levels of hydrocarbon solvent vapours may impact on the liver and kidneys.

11.10 SPECIFIC TARGET ORGAN TOXICITY (STOT) -

REPEATED EXPOSURE: There is no data available for the product as a whole. 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. Though the product contains residual Toluene present as an impurity which is rated as a H373 - May cause damage to organs through prolonged or repeated exposure at levels that are higher than is in this product.

11.11 ASPIRATION HAZARD: This product is rated as an aspiration hazard - May be fatal if swallowed and enters airways. Small amounts of liquid aspirated into the lungs during ingestion or from vomiting may cause chemical pneumonitis or pulmonary oedema. This can be fatal. As the product is hydrocarbon based, if the product has been ingested or vomiting has occurred after ingestion, the patient must seek medical attention and should be monitored for adverse effects.

11.12 OTHER INFORMATION: This product may contain residual Naphthalene as an impurity in the hydrocarbon solvent. Naphthalene exposure may cause severe dermatitis in sensitised persons. Ingestion of Naphthalene has caused hemolysis in humans deficient in glucose-6-phosphate dehydrogenase.

SECTION 12 – ECOLOGICAL INFORMATION

12.1 ECOTOXICITY: There is no data available for the product as a whole. Some of the components present as impurities in the hydrocarbon solvent have been rated as Very toxic to aquatic organisms, Toxic to aquatic organisms and May cause long-term adverse effects in the aquatic environment. However, based upon calculated values, the overall product would not be expected to be rated.

12.2 PERSISTENCE & DEGRADABILITY: Based on the available data and the known hazards of the components and similar products the manufacturer states that the product is expected to be biodegradable.

12.3 BIOACCUMULATIVE POTENTIAL: There is no data available for the product as a whole.

12.4 MOBILITY IN SOIL: There is no data available for the product as a whole. The solvent component is relatively volatile and would be expected to evaporate to the air if released to the environment.

12.5 OTHER ADVERSE EFFECTS: There is no data available for the product as a whole. Based on the available data and the known hazards of the components and similar products the product is not expected to have ozone depletion potential. The product will float on water.

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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. If this is not possible, the product is suitable for burning in an enclosed burner where it can be used as a fuel source. The product is also suitable for incineration at very high temperatures to prevent formation of undesirable combustion products. 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. Caution: Residues are combustible and will ignite with a source of ignition. Containers should be completely drained in a well ventilated area where vapours cannot accumulate 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. As containers may contain combustible residues, they should not be pressurised, cut by a grinder, drilled or exposed to heat, flames or other sources of ignition. Closed containers when exposed to such conditions/treatment may explode causing serious injury.

SECTION 14 – TRANSPORT INFORMATION

This product is not regulated for land, sea or air transportation. (HS Code: 3811.90)

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

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SECTION 14 – TRANSPORT INFORMATION Continued

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

SECTION 15 – REGULATORY INFORMATION

15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS:

APPLICABLE REGULATIONS:

SUSMP: Schedule 5 (S5).

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: Flammable Liquids Category 2; H225 - Highly flammable liquid and vapour.
Flammable Liquids Category 3; H226 - Flammable liquid and vapour.
Flammable Liquids Category 4; H227 - Combustible liquid.
Acute Toxicity - Oral Category 4; H302 - Harmful if swallowed.
Aspiration Hazard Category 1; H304 - May be fatal if swallowed and enters airways.
Skin Corrosion/Irritation Category 2; H315 - Causes skin irritation.
Serious Eye Damage/Irritation Category 2A; H319 - Causes serious eye irritation.
Acute Toxicity - Inhalation Category 4; H332 - Harmful if inhaled.
Specific Target Organ Toxicity (Single Exposure) Category 3; H335 - May cause respiratory irritation.
Specific Target Organ Toxicity (Single Exposure) Category 3; H336 - May cause drowsiness or dizziness.
Carcinogenicity Category 2; H351 - Suspected of causing cancer.
Toxic to Reproduction Category 2; H361 - Suspected of damaging the unborn child.
Specific Target Organ Toxicity (Repeated Exposure) Category 2; H373 - May cause damage to organs through prolonged or repeated exposure.
Chronic Aquatic Toxicity Category 1; H410 - Very toxic to aquatic life with long lasting effects.
Chronic Aquatic Toxicity Category 2; H411 - Toxic to aquatic life with long lasting effects.

HSNO APPROVAL NUMBER: HSR002581.

HSNO GROUP TITLE: Fuel Additives (Combustible) Group Standard 2006.

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SECTION 16 – ANY OTHER RELEVANT INFORMATION

SDS INFORMATION:

Date of SDS Preparation: 3rd August 2016

Revision: 0.1

REVISION CHANGES: Changes to supplier information and addition of HSNO number in Section 1.

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
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
WHS	Work Health and Safety
PPE	Personal Protective Equipment.

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

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