

SAFETY DATA SHEET

SECTION 1 – IDENTIFICATION: PRODUCT IDENTIFIER/CHEMICAL IDENTITY

1.1 PRODUCT IDENTIFIER: DOT 5.1 Brake Fluid

1.2 PRODUCT CODE: DOT51

1.3 RELEVANT IDENTIFIED USES OF THE MIXTURE AND USES ADVISED AGAINST:
RELEVANT IDENTIFIED USES: Brake Fluid.
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:
NOHSC 1008: This product is a mixture and based upon the data supplied by the manufacturer is not classified as Hazardous according to the criteria of the National Occupational Health and Safety Commission (SafeWork Australia).

GHS CLASSIFICATION HAZARD
CLASS & CATEGORY: The product is a mixture and based upon the data supplied by the manufacturer is not classified as Hazardous according to the criteria of the Model Work Health and Safety Regulations.

2.2 LABEL ELEMENTS INCLUDING PRECAUTIONARY STATEMENTS:
SIGNAL WORD: Not applicable.
HAZARD STATEMENTS: Not applicable.
PRECAUTIONARY STATEMENTS: Not applicable.

2.3 OTHER HAZARDS: The mixture has a moderate order of toxicity associated with it. The product is mildly irritating to eyes. Excessive exposure may result in mild irritation to skin or the respiratory system. The product contains glycols; when ingested they may be adsorbed and cause renal damage at high doses. 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	Risk Phrases*	GHS Classification
Ethanol, 2-[2-(2-butoxyethoxy)ethoxy]-	143-22-6	0% - 20%	R41	Eye Dam Cat 1 - H318
Ethanol, 2-(2-methoxyethoxy)-	111-77-3	< 3%	R63	Tox Repro Cat 2 - H361
Ethanol, 2-(2-butoxyethoxy)-	112-34-5	< 3%	R36	Eye Dam Cat 2A - H319
Ethanol, 2,2'-oxybis-	111-46-6	< 1%	R22	Acute Tox Cat 4 - H302 STOT RE Cat 2 - H373
Complex mixture of additives	-	To 100%	Not Applic	Not assessed

Not Applic = Not Applicable

* Please see Section 16 of this SDS for full text of the Risk Phrases

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SECTION 4 – FIRST AID MEASURES

4.1 DESCRIPTION OF NECESSARY FIRST AID MEASURES:

INGESTION: Rinse mouth out and drink plenty of water. Due to the presence of glycols in the product, do NOT induce vomiting except under medical supervision. After ingesting the material a person should seek urgent medical assistance taking this SDS with you.

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 under supervision. 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.

PROTECTION FOR FIRST AIDERS:

No person shall place themselves in a situation that is potentially hazardous to themselves. 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: Eye contact may lead to localised burning, redness and tearing. Ingestion or inhalation of vapours generated during use may lead to irritation of the mouth and respiratory tract. The product contains glycols; when ingested they may be adsorbed and cause renal damage at high doses. Skin contact may lead to redness or itching

CHRONIC: Skin contact may aggravate/exacerbate existing skin conditions, such as dermatitis. One of the glycols, present below its Cut-off Value, is rated as R63 - Possible risk of harm to the unborn child.

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

ADVICE TO DOCTOR: This product contains ethanol, 2,2'-oxybis- (also known as diethylene glycol) as well as other glycols. Glycols, including diethylene glycol can be metabolised to toxic metabolites. The Poisons Information Centre should be contacted for information on how to deal with glycol ingestion.

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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. Water may cause splattering. Product is miscible with water.

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE:

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

5.3 ADVICE FOR FIREFIGHTERS:

FIRE: This product is not flammable under conditions of use. Is a combustible liquid that will burn if preheated. 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. Do not cut, weld, drill or pressurise empty metal containers.

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 Butyl Rubber, Natural Rubber, Nitrile or 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 about oxygen deficiency 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.

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 banded, 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/rinses to enter drains, surface water, sewers or water courses.

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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. Avoid breathing mists or vapours that may be generated in the operation of certain equipment or at elevated temperatures. 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 INCOMPATIBILITIES:

SAFE STORAGE:

This product is a glycol-based liquid that will burn if preheated. Store in a well ventilated area away from direct sunlight, ignition sources, strong 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. Glycols can absorb moisture from the atmosphere so ensure containers are tightly closed.

INCOMPATIBILITIES:

Strong oxidising substances including strong acids and mineral oils.

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 mists, vapours or aerosols are generated the following Exposure Standard should be observed:

Ethanol, 2,2'-oxybis- (also known as diethylene glycol):

Time Weighted Average (TWA): 23ppm; 100 mg/m³

Ethanol, 2-(2-methoxyethoxy)-:

Time Weighted Average (TWA, HSE): 10ppm; 50.1 mg/m³

Ethanol, 2-(2-butoxyethoxy)-:

Time Weighted Average (TWA, HSE): 10ppm; 67.5 mg/m³

8.2 BIOLOGICAL

MONITORING:

Derived No Effect Levels (DNEL)

Ethanol, 2-[2-(2-butoxyethoxy)ethoxy]-:

Worker; Long term exposure - systemic effects, dermal 50mg/kg/day

Worker; Long term exposure - systemic effects, inhalation 195mg/ m³

Consumer Long term exposure - systemic effects, dermal 25mg/kg/day

Consumer Long term exposure - systemic effects, inhalation 117mg/ m³

Consumer Long term exposure - systemic effects, oral 2.5mg/kg/day

Ethanol, 2-(2-butoxyethoxy)-:

Worker; Short term exposure - local effects, inhalation 101.2mg/ m³

Worker; Long term exposure - systemic effects, dermal 20mg/kg/day

Worker; Long term exposure - systemic effects, inhalation 67mg/ m³

Consumer; Short term exposure - local effects, inhalation 50.6mg/ m³

Consumer Long term exposure - systemic effects, dermal 10mg/kg/day

Consumer Long term exposure - systemic effects, inhalation 34mg/ m³

Consumer Long term exposure - systemic effects, oral 1.25mg/kg/day

Ethanol, 2,2'-oxybis-:

Worker; Long term exposure - systemic effects, dermal 106mg/kg/day

Worker; Long term exposure - systemic effects, inhalation 60mg/ m³

Consumer Long term exposure - systemic effects, dermal 53mg/kg/day

Consumer Long term exposure - systemic effects, inhalation 12mg/ m³

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SECTION 8 – EXPOSURE CONTROLS & PERSONAL PROTECTION Cont'd

Derived No Effect Levels (DNEL)

Ethanol, 2-(2-Methoxyethoxy)-:

Worker; Long term exposure - systemic effects, dermal 0.53mg/kg/day

Worker; Long term exposure - systemic effects, inhalation 50.1mg/ m³

Consumer Long term exposure - systemic effects, dermal 0.27mg/kg/day

Consumer Long term exposure - systemic effects, inhalation 25mg/ m³

Consumer Long term exposure - systemic effects, oral 1.5mg/kg/day.

8.1.3 Predicted No Effect Concentrations (PNEC)

Ethanol, 2-[2-(2-butoxyethoxy)ethoxy]-:

Aqua (freshwater) 1.5 mg/L

Aqua (marine water) 0.25 mg/L

Aqua (intermittent releases) 5.0 mg/L

Sewage Treatment Plant (STP) 200 mg/ L

Sediment (freshwater) 5.77 mg/kg/sediment dw

Sediment (marine water) 0.13 mg/kg/sediment dw

Soil 0.45 mg/kg/soil dw

Oral 111 mg/kg/food

Ethanol, 2-(2-butoxyethoxy)-:

Aqua (freshwater) 1.0 mg/L

Aqua (marine water) 0.1 mg/L

Aqua (intermittent releases) 3.9 mg/L

Sewage Treatment Plant (STP) 200mg/ L

Sediment (freshwater) 4.0 mg/kg/sediment dw

Sediment (marine water) 0.4 mg/kg/sediment dw

Soil 0.4 mg/kg/soil dw

Oral 56 mg/kg/food.

Ethanol, 2,2'-oxybis-:

Aqua (freshwater) 10 mg/L

Aqua (marine water) 1 mg/L

Aqua (intermittent releases) 10 mg/L

Sewage Treatment Plant (STP) 199.5 mg/ L

Sediment (freshwater) 20.9 mg/kg/sediment dw

Soil 1.53 mg/kg/soil dw

Ethanol, 2-(2-Methoxyethoxy)-:

Aqua (freshwater) 12 mg/L

Aqua (marine water) 1.2 mg/L

Aqua (intermittent releases) 12 mg/L

Sewage Treatment Plant (STP) 10,000 mg/ L

Sediment (freshwater) 44.4 mg/kg/sediment dw

Sediment (marine water) 0.44 mg/kg/sediment dw

Soil 2.44 mg/kg/soil dw

Oral 0.9 mg/kg/food

8.3 CONTROL BANDING: No data available.

8.4 ENGINEERING CONTROLS:

ENGINEERING CONTROLS: Special ventilation is not normally required. However, in the operation of certain equipment or at elevated temperatures mists or vapour may be generated and local exhaust ventilation should be provided to maintain airborne concentration levels below the nominated exposure standard.

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SECTION 8 – EXPOSURE CONTROLS & PERSONAL PROTECTION Cont'd

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. Please note that acrylic or PVC materials are preferred as polycarbonate may be attacked by brake fluid.

SKIN (HAND) PROTECTION: If there is the chance of contact with the material wear gloves to provide hand protection. Natural, Butyl and Nitrile rubber as well as 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.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

9.1 PHYSICAL AND CHEMICAL PROPERTIES:

APPEARANCE: Clear liquid.
ODOUR: Bland, characteristic mild glycol odour.
ODOUR THRESHOLD: No data available.
pH: 7.0 to 11.5.
MELTING/FREEZING POINT: < -50°C.
INITIAL BOILING POINT: > 260°C.
BOILING RANGE (°C): No data available.
FLASHPOINT (°C): > 120°C.
EVAPORATION RATE: Negligible.
FLAMMABILITY LIMITS (%): No data available.
VAPOUR PRESSURE: < 2 millibars at 20°C.
VAPOUR DENSITY: No data available.
DENSITY (g/mL @ 20°C): Typically 1.03 to 1.09.
SOLUBILITY IN WATER(g/L): Fully soluble in water.
PARTITION COEFFICIENT: < 2.0 (all main ingredients) n-octanol/water.
AUTO-IGNITION TEMP (°C): > 300°C.
DECOMPOSITION TEMP (°C): > 300°C.
VISCOSITY (cSt @ 100°C): No data available.
VISCOSITY (cSt @ 20°C): Typically 5 to 10.

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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 as well as isocyanates and mineral oils. Glycol ethers can react with light metals with the evolution of hydrogen. 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. Due to the possible formation of peroxides upon standing, do not distil to dryness without testing for peroxide formation. Avoid sources of ignition.
- 10.5 INCOMPATIBLE MATERIALS:** Strong oxidising agents including concentrated acids.
- 10.6 HAZARDOUS DECOMPOSITION PRODUCTS:** Glycol ethers can form peroxides on storage - do not distil the product to dryness. 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. Comments are based upon analogy with similar products.
- 11.2 SWALLOWED:** This product is expected to have a low order of toxicity associated with it when small amounts are accidentally ingested. The product contains a glycol component that is rated as Harmful if swallowed, however this is present at amounts below the Concentration cut-off level. Caution: due to the presence of glycols, if a significant amount is ingested there is a risk of renal damage which in extreme cases could lead to kidney failure, coma and death. Other symptoms of overexposure include central Nervous System effects, abdominal discomfort, metabolic acidosis, headache and nausea. Based upon assessment of similar products, the Acute Oral Toxicity is expected to be LD₅₀ (rat) >5000 mg/kg. The manufacturer states that the lethal dose in man could be considerably less. 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. May be irritating to the skin. Repeated skin contact may defat the skin and cause dermatitis. 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. May be irritating to the eyes. Symptoms may include localised burning, redness and tearing. This product contains components that are rated as corrosive and as an irritant; however these are present at amounts below the Concentration cut-off level that would indicate that there is a potential eye hazard based upon data supplied by the additive package manufacturer. Correct handling procedures incorporating appropriate eye protection should minimise the risk of eye irritation.

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SECTION 11 – TOXICOLOGICAL INFORMATION Continued

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.

11.8 REPRODUCTIVE TOXICITY:

This product is not expected to be a reproductive hazard, based on the available data and the known hazards of the components. One of the components, Ethanol, 2-(2-methoxyethoxy)- (also known as methyl diglycol or diethylene glycol monomethyl ether) has been shown to affect foetus development in some studies and has been rated as Toxic to Reproduction, Suspected of damaging the unborn child. However, this is present at levels below the nominated cut-off levels.

11.9 SPECIFIC TARGET ORGAN TOXICITY (STOT) - SINGLE EXPOSURE:

This product is not expected to cause organ damage from a single exposure, based on the available data and the known hazards of the components. This product is not expected to pose an irritation hazard at ambient temperature or under normal handling conditions. Not classified as a respiratory irritant due to its low vapour pressure, however inhalation of vapours or mist (generated at elevated temperatures or by mechanical action) may cause irritation to the nose, throat and respiratory system and may cause systemic effects similar to ingestion if large quantities are inhaled.

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. However, it does contain low levels of Diethylene glycol that is rated as may cause damage to organs through prolonged or repeated exposure.

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. It is suggested that if vomiting has occurred after ingestion, the patient should be monitored for adverse effects.

11.12 OTHER INFORMATION: The product contains ethanol, 2,2'-oxybis- (also known as diethylene glycol) as well as other glycols. Glycols, including diethylene glycol can be metabolised to toxic metabolites. The Poisons Information Centre should be contacted for information on how to deal with glycol ingestion.

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SECTION 12 – ECOLOGICAL INFORMATION

- 12.1 ECOTOXICITY:** The product is expected to have low acute ecotoxicity.
LC₅₀ (Fish - *Oncorhynchus mykiss*, 96hr): > 100mg/L;
EC₅₀ (Daphnia, 48hr): Not determined; however, based upon the known hazards of the components and similar products it is expected to be virtually non-toxic;
EC₅₀ (Algae, 72hr): Not determined; however, based upon the known hazards of the components and similar products it is expected to be virtually non-toxic.
- 12.2 PERSISTENCE & DEGRADABILITY:** The product is inherently biodegradable and is expected to be readily biodegradable based upon the ingredients. The OECD 302B (Zahn Wellans/EMPA) = 100% elimination at 21 days.
- 12.3 BIOACCUMULATIVE POTENTIAL:** The product is not expected to bioaccumulate. The Log Pow for all main ingredients is < 2.0.
- 12.4 MOBILITY IN SOIL:** The product is soluble in water and will partition into the aqueous phase. Volatilisation from water to air is not expected. The product is expected to be mobile in soil until degraded.
- 12.5 OTHER ADVERSE EFFECTS:** 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, photochemical ozone creation potential or global warming potential. The product is a mixture of non-volatile components, which are not expected to be released to the air in any significant amounts. The product is miscible with water. Based upon Annex XIII of Regulation EC 1907/2006, the product is not expected to be "Persistent, Bioaccumulative and Toxic" nor "very Persistent and very Bioaccumulating".

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. 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. Do not mix new or used brake fluid with solvents, lubricating oils or coolants when disposing. 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 drums 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.

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SECTION 14 – TRANSPORT INFORMATION

This product is not regulated for land, sea or air transportation.

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

SECTION 15 – REGULATORY INFORMATION

15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS: APPLICABLE REGULATIONS:

SUSMP:	Not scheduled.
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.

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SECTION 15 – REGULATORY INFORMATION Continued

OTHER REGULATORY INFORMATION:

RISK PHRASES [NOHSC:1008]: R22 - Harmful if swallowed.

R36 - Irritating to eyes.

R41 - Risk of serious damage to eyes.

R63(Reproductive Toxin Category 3) - Possible risk of harm to the unborn child.

SAFETY PHRASES

[NOHSC:1008]: Not applicable

GHS CLASSIFICATION HAZARD CLASS & CATEGORY

AND HAZARD STATEMENT: Acute Toxicity - Oral Category 4; H302 - Harmful if swallowed.

Eye Damage Category 1; H318 - Causes serious eye damage.

Serious Eye Damage/Irritation Category 2A; H319 - Causes serious eye irritation.

Toxic to Reproduction Category 2; H361 - Suspected of damaging fertility or the unborn child.

Specific target Organ Toxicity (Repeated Exposure) Category 3; H373 - May cause damage to organs through prolonged or repeated exposure.

HSNO APPROVAL NUMBER: Not applicable.

HSNO GROUP TITLE: Not applicable.

SECTION 16 – ANY OTHER RELEVANT INFORMATION

SDS INFORMATION:

Date of SDS Preparation: 18th July 2014

Revision: 0.0

REVISION CHANGES: Initial preparation of SDS.

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
R-Phrase	Risk Phrases
S-Phrase	Safety Phrases
%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 & 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

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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

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