SECTION 1 – IDENTIFICATION: PRODUCT IDENTIFIER/CHEMICAL IDENTITY

1.1 PRODUCT IDENTIFIER: Classic Heavy

1.2 PRODUCT CODE: CLASH

1.3 RELEVANT IDENTIFIED USES OF	THE MIXTURE AND USES ADVISED AGAINST:
RELEVANT IDENTIFIED USES:	Light duty engine oil for Classic Cars.
RESTRICTIONS ON USE:	None known.
1.4 DETAILS OF THE SUPPLIER OF T	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 8710 6600 (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:	<u>tech@penriteoil.com</u> (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:	HSR002605.
HSNO GROUP TITLE:	Lubricants (Low Hazard) 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 not be classified as hazardous.

2.2 LABEL ELEMENTS INCLUDING PRECAUTIONARY STATEMENTS:

SIGNAL WORD:	Not Applicable.
PICTOGRAMS:	Not Applicable.
HAZARD STATEMENTS:	Not Applicable.

PRECAUTIONARY STATEMENTS:

PREVENTION:	Not Applicable.
RESPONSE:	Not Applicable.
STORAGE:	Not Applicable.
DISPOSAL:	Not Applicable.

2.3 OTHER HAZARDS: The mixture has a low order of toxicity associated with it. Excessive exposure may result in mild irritation to the skin or respiratory system as well as possible irritation to the eye. People with pre-existing skin conditions, such as eczema or dermatitis, should take precautions so as not to exacerbate the condition. 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*
Severely Treated Base Oils Phosphorodithioic acid, mixed O,O-bis(sec	- -Bu and isooctvl)	> 80%	Not Applic
esters, zinc salts	113706-15-3	< 1.3%	Skin Irrit 2 - H315 Eye Dam 1 - H318 Chron Aq Tox 2 - H411
Phosphorodithioic acid, mixed O,O-bis(isob	outyl and pentyl)		
esters, zinc salts	68457-79-4	< 0.6%	Skin Irrit 2 - H315 Eye Dam 1 - H318 Chron Aq Tox 2 - H411
Benzenamine, ar-nonyl-N-(nonylphenyl)- Distillates, petroleum, solvent refined	36878-20-3	< 0.4%	Chron Aq Tox 4 - H413
light paraffinic Distillates, petroleum, hydrotreated	64741-89-5	< 0.1%	Asp Haz 1 - H304
heavy paraffinic Distillates, petroleum, solvent dewaxed	64742-54-7	< 0.1%	Asp Haz 1 - H304
heavy paraffinic Other non-hazardous ingredients	64742-65-0 -	< 0.1% To 100%	Asp Haz 1 - H304 Not Applic

Not Applic = Not Applicable * Please see Section 15 of this SDS for full text description of the Label Elements

SECTION 4 – FIRST AID MEASURES

4.1 DESCRIPTION OF NECESSARY FIRST AID MEASURES:

INGESTION:	Rinse mouth out with water. Due to the blend of ingredients present, the manufacturer recommends that if swallowed, do NOT induce vomiting. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. If irritation develops or persists or vomiting has occurred after ingestion, seek 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. As the product is hydrocarbon based, if the person has ingested the product, caution should be exercised in using 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.

SECTION 4 – FIRST AID MEASURES Continued

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. 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.	
CHRONIC:	Skin contact may aggravate/exacerbate existing skin conditions, such as dermatitis.	
4.3 INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NECESSARY:		
ADVICE TO DOCTOR:	Treat symptomatically. As the product is hydrocarbon based, 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.	

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 residue. Product will float on water.
5.2 SPECIAL HAZARDS ARISI	NG FROM THE SUBSTANCE OR MIXTURE:
COMBUSTION HAZARDS:	Combustion may produce oxides of carbon, calcium, phosphorus, sulphur and zinc, as well as small amounts of nitrogen, smoke and irritating vapours.
5.3 ADVICE FOR FIREFIGHTE	RS:
FIRE:	This product is not flammable under conditions of use. It is a hydrocarbon- based liquid that will burn if preheated - Typical Flash Point 224°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 Nitrile 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 potential 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.

SECTION 6 – ACCIDENTAL RELEASE MEASURES Continued

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 MATERIA	ALS 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: This product is a hydrocarbon-based liquid that will burn if preheated. 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.

INCOMPATIBILITIES: Oxidizing substances including strong acids.

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 oil mists or aerosols are generated the following Exposure Standard should be observed: TWA: 5 mg/m³ STEL: 10 mg/m³ (ACGIH)
 8.2 BIOLOGICAL MONITORING: No data available.

8.3 CONTROL BANDING: No data available.

SECTION 8 – EXPOSURE CONTROLS & PERSONAL PROTECTION Cont'd

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.
8.5 INDIVIDUAL PROTECTION	N 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.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

9.1 PHYSICAL AND CHEMICAL PROPERTIES:

APPEARANCE:	Viscous amber liquid.
ODOUR:	Characteristic lubricating oil odour.
ODOUR THRESHOLD:	No data available.
pH:	Not applicable.
MELTING/FREEZING POINT:	Not applicable.
INITIAL BOILING POINT:	No data available.
BOILING RANGE (°C):	No data available.
FLASHPOINT (°C):	Typically 224°C.
EVAPORATION RATE:	No data available.
FLAMMABILITY LIMITS (%):	No data available.
VAPOUR PRESSURE (mmHg)	:No data available.
VAPOUR DENSITY:	No data available.
DENSITY (g/mL @ 15°C):	Typically 0.891.
SOLUBILITY IN WATER(g/L):	Insoluble in water.
PARTITION COEFFICIENT:	No data available for n-octanol/water.
AUTO-IGNITION TEMP (°C):	No data available.
DECOMPOSITION TEMP (°C)	No data available.
VISCOSITY (cSt @ 100°C):	Typically 31.0.
VISCOSITY (cSt @ 40°C):	Typically 344.

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: 10.3 POSSIBILITY OF	Stable under recommended storage and handling conditions (see section 7).	
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. Avoid sources of ignition.	
10.5 INCOMPATIBLE		
MATERIALS:	Strong oxidising including concentrated acids.	
10.6 HAZARDOUS DECOMPOSITION		
PRODUCTS:	Hazardous decomposition products are not expected to form during normal storage requirements. The product contains dithiophosphate compounds that if heated in the presence of water may decompose to release hydrogen sulphide gas. 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.

Phosphorodithioic acid, mixed O,O-bis(sec-Bu and isooctyl) esters, zinc salts Oral - LD₅₀ (Rat): 2600 mg/kg Dermal - LD₅₀ (Rat): >3160 mg/kg

Phosphorodithioic acid, mixed O,O-bis(isobutyl and pentyl) esters, zinc salts

Oral - LD₅₀ (Rat): 3600 mg/kg Dermal - LD₅₀ (Rat): 20000 mg/kg

11.2 SWALLOWED: This product is expected to have a low order of toxicity associated with it when ingested. It may cause slight irritation to the mouth, throat and digestive tract. 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, based on the available data and the known hazards of the components. May be mildly irritating to the skin. This product contains components that are rated as Causes skin irritation, however these are present at amounts well below the Concentration cut-off levels. 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, based on the available data and the known hazards of the components according to the additive package manufacturer. May be mildly irritating to the eyes. Symptoms may include localised burning, redness and tearing. The product contains dithiophosphate compounds that are rated as Causes serious eye damage. Tests conducted using dithiophosphate in base oils, indicates that this is present in the product at amounts well below the Concentration cut-off levels where the product would expect to be irritating to the eyes. Correct handling procedures incorporating appropriate eye protection should minimise the risk of eye irritation.

SECTION 11 – TOXICOLOGICAL INFORMATION Continued

11.5 RESPIRATORY OR

11.6 GERM CELL

- **SKIN SENSITISATION:** This product is not expected to be a skin sensitiser, 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.
- **MUTAGENICITY:** This product is not expected to be mutagenic, based on the available data and the known hazards of the components.
- **11.7 CARCINOGENICITY:** This product is not expected to be a carcinogen, based on the available data and the known hazards of the components. Long term animal experiments have shown that any health risks are associated with the level of aromatic and polycyclic constituents in the product. These constituents are removed during the manufacturing process to a level at which no health risks are expected as a result of normal handling. Representative testing of the Base Oils used to manufacture lubricants shows that they pass IP-346.
- **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.

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, however inhalation of vapours or mist (generated at elevated temperatures or by mechanical action) may cause irritation to the nose, throat and respiratory system.

11.10 SPECIFIC TARGET ORGAN TOXICITY (STOT) -

- **REPEATED EXPOSURE:** This product is not expected to cause organ damage from prolonged or repeated exposure, based on the available data and the known hazards of the components.
- **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, as the product is hydrocarbon based, if vomiting has occurred after ingestion, the patient should be monitored for adverse effects.
- **11.12 OTHER INFORMATION:** If this material is overheated, especially in the presence of water, hydrogen sulphide may be released. Used oils may contain harmful impurities that can accumulate during usage. Due to the use of oils in different types of equipment the types of impurities that accumulate during its usage are unknown. Therefore, all used oils should be handled with caution and skin contact should be avoided by wearing suitable gloves, such as those made of nitrile rubber.

SECTION 12 – ECOLOGICAL INFORMATION

- 12.1 ECOTOXICITY: There is no data available for the product as a whole. Some of the components have been rated as Toxic to aquatic life with long lasting effects and May cause long lasting harmful effects to aquatic life. Based upon the calculated values the product is not expected to be rated.
 12.2 PERSISTENCE & Based on the available data and the known hazards of the components and
 - **DABILITY:** Based on the available data and the known hazards of the components and similar products the product is not expected to be readily biodegradable. Major constituents are expected to be inherently biodegradable, however the product contains components that may persist in the environment.

SECTION 12 – ECOLOGICAL INFORMATION Continued

12.3 BIOACCUMULATIVE POTENTIAL:

EFFECTS:

No information is available.

12.4 MOBILITY IN SOIL: If the product enters soil, based upon similar products it is expected that it will adsorb onto soil particles and will not be mobile.
 12.5 OTHER ADVERSE

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 will float on water.

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. Do not mix new or used lubricating oils with solvents, brake fluids 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 oil. 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

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.

SECTION 14 – TRANSPORT INFORMATION

This product is not regulated for land, sea or air transportation. (HS Code: 2710.19.91)

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

SECTION 14 – TRANSPORT INFORMATION Continued

14.2 SEA (IMDG): UN NUMBER:	Not applicable
UN PROPER SHIPPING NAME: TRANSPORT HAZARD	Not applicable
CLASS(ES):	Not applicable
PACKAGING GROUP: ENVIRONMENTAL	Not applicable
HAZARDS: SPECIAL PRECAUTIONS	Not applicable
FOR USER:	Not applicable
14.3 AIR (IATA):	
UN NUMBER:	Not applicable
UN PROPER SHIPPING NAME: TRANSPORT HAZARD	Not applicable
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:	
ROTTERDAM CONVENTION:	Not applicable to this product.
BASEL CONVENTION:	Not applicable to this product.
INTERNATIONAL CONVENTION	ON FOR THE PREVENTION OF POLLUTION FROM
SHIPS (MARPOL):	Not determined.
OTHER REGULATORY INFOR GHS CLASSIFICATION HAZA AND HAZARD STATEMENT	
HSNO APPROVAL NUMBER:	HSR002605.
HSNO GROUP TITLE:	Lubricants (Low Hazard) Group Standard 2006.

SECTION 16 – ANY OTHER RELEVANT INFORMATION

SDS INFORMATION: Date of SDS Preparation:

7th December 2016

Revision: 9.0

REVISION CHANGES:	Changes to supplier information and product formulation. Changes to Sections
	1, 3, 5, 9, 11, 12, 15 and 16.

ACRONYMS:

CAS NumberChemical Abstracts Service Registry NumberEINECSEuropean Inventory of Existing Commercial Chemical SubstancesUN NumberUnited Nations NumberOSHAOccupational Safety and Health AdministrationACGIHAmerican Conference of Governmental Industrial HygienistsIMDGInternational Maritime Dangerous GoodsIATAInternational Air Transport AssociationIUCLIDInternational Uniform Chemical Information DatabaseRTECSRegistry of Toxic Effects of Chemical Substances%W/WPercent weight for weightOECDOrganisation for Economic Co-Operation and DevelopmentADG CodeAustralian Code for the Transport of Dangerous Goods by Road and RailHAZCHEM CodeEmergency action code of numbers and letters which gives information to emergency servicesNOHSCNational Occupational Health and Safety CommissionAICSAustralian Inventory of Chemical SubstancesTWATime-Weighted AverageSTELShort term Exposure LimitHSNOHazardous Substances and New Organisms Act 1996	SUSMP	Standard for the Uniform Scheduling of Medicines and Poisons
UN NumberUnited Nations NumberOSHAOccupational Safety and Health AdministrationACGIHAmerican Conference of Governmental Industrial HygienistsIMDGInternational Maritime Dangerous GoodsIATAInternational Air Transport AssociationIUCLIDInternational Uniform Chemical Information DatabaseRTECSRegistry of Toxic Effects of Chemical Substances%W/WPercent weight for weightOECDOrganisation for Economic Co-Operation and DevelopmentADG CodeAustralian Code for the Transport of Dangerous Goods by Road and RailHAZCHEM CodeEmergency action code of numbers and letters which gives information to emergency servicesNOHSCNational Occupational Health and Safety CommissionAICSAustralian Inventory of Chemical SubstancesTWATime-Weighted AverageSTELShort term Exposure LimitHSNOHazardous Substances and New Organisms Act 1996	CAS Number	Chemical Abstracts Service Registry Number
OSHAOccupational Safety and Health AdministrationACGIHAmerican Conference of Governmental Industrial HygienistsIMDGInternational Maritime Dangerous GoodsIATAInternational Air Transport AssociationIUCLIDInternational Uniform Chemical Information DatabaseRTECSRegistry of Toxic Effects of Chemical Substances%W/WPercent weight for weightOECDOrganisation for Economic Co-Operation and DevelopmentADG CodeAustralian Code for the Transport of Dangerous Goods by Road and RailHAZCHEM CodeEmergency action code of numbers and letters which gives information to emergency servicesNOHSCNational Occupational Health and Safety CommissionAICSAustralian Inventory of Chemical SubstancesTWATime-Weighted AverageSTELShort term Exposure LimitHSNOHazardous Substances and New Organisms Act 1996	EINECS	European Inventory of Existing Commercial Chemical Substances
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IATAInternational Air Transport AssociationIUCLIDInternational Uniform Chemical Information DatabaseRTECSRegistry of Toxic Effects of Chemical Substances%W/WPercent weight for weightOECDOrganisation for Economic Co-Operation and DevelopmentADG CodeAustralian Code for the Transport of Dangerous Goods by Road and RailHAZCHEM CodeEmergency action code of numbers and letters which gives information to emergency servicesNOHSCNational Occupational Health and Safety CommissionAICSAustralian Inventory of Chemical SubstancesTWATime-Weighted AverageSTELShort term Exposure LimitHSNOHazardous Substances and New Organisms Act 1996	ACGIH	American Conference of Governmental Industrial Hygienists
IUCLIDInternational Uniform Chemical Information DatabaseRTECSRegistry of Toxic Effects of Chemical Substances%W/WPercent weight for weightOECDOrganisation for Economic Co-Operation and DevelopmentADG CodeAustralian Code for the Transport of Dangerous Goods by Road and RailHAZCHEM CodeEmergency action code of numbers and letters which gives information to emergency servicesNOHSCNational Occupational Health and Safety CommissionAICSAustralian Inventory of Chemical SubstancesTWATime-Weighted AverageSTELShort term Exposure LimitHSNOHazardous Substances and New Organisms Act 1996	IMDG	International Maritime Dangerous Goods
RTECSRegistry of Toxic Effects of Chemical Substances%W/WPercent weight for weightOECDOrganisation for Economic Co-Operation and DevelopmentADG CodeAustralian Code for the Transport of Dangerous Goods by Road and RailHAZCHEM CodeEmergency action code of numbers and letters which gives information to emergency servicesNOHSCNational Occupational Health and Safety CommissionAICSAustralian Inventory of Chemical SubstancesTWATime-Weighted AverageSTELShort term Exposure LimitHSNOHazardous Substances and New Organisms Act 1996	IATA	International Air Transport Association
%W/WPercent weight for weightOECDOrganisation for Economic Co-Operation and DevelopmentADG CodeAustralian Code for the Transport of Dangerous Goods by Road and RailHAZCHEM CodeEmergency action code of numbers and letters which gives information to emergency servicesNOHSCNational Occupational Health and Safety CommissionAICSAustralian Inventory of Chemical SubstancesTWATime-Weighted AverageSTELShort term Exposure LimitHSNOHazardous Substances and New Organisms Act 1996	IUCLID	International Uniform Chemical Information Database
OECDOrganisation for Economic Co-Operation and DevelopmentADG CodeAustralian Code for the Transport of Dangerous Goods by Road and RailHAZCHEM CodeEmergency action code of numbers and letters which gives information to emergency servicesNOHSCNational Occupational Health and Safety CommissionAICSAustralian Inventory of Chemical SubstancesTWATime-Weighted AverageSTELShort term Exposure LimitHSNOHazardous Substances and New Organisms Act 1996	RTECS	Registry of Toxic Effects of Chemical Substances
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STELShort term Exposure LimitHSNOHazardous Substances and New Organisms Act 1996	AICS	Australian Inventory of Chemical Substances
HSNO Hazardous Substances and New Organisms Act 1996	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	GHS	Globally Harmonised System of Classification and Labelling of Chemicals
WHS Work Health and Safety	WHS	Work Health and Safety
PPE Personal Protective Equipment.	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

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.

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