SAFETY DATA SHEET

Version 5 Revision Date 12/01/2022

HAZARDOUS SUBSTANCE - NON-DANGEROUS GOODS

SECTION 1: Identification of the substance / mixture and of the company / undertaking

Product identifier

Product name **LSA COOLANT ELC CONCENTRATE**

Product code 1700-05-0000

SDS no. 1700-05-0000

Product type Liquid.

Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture LUBRICANT

For specific application advice see appropriate Technical Data Sheet or consult our company representative.

Details of the supplier of the safety data sheet

Supplier

Bernadini Pty Ltd
Trading as LUBRICANT SPECIALISTS AUSTRALIA (LSA)
Unit 2, 1110 Abernethy Road
High Wycombe WA 6057
Telephone +61 8 6254 7777
Fax +61 8 9454 9158

E-mail address perth@lsaoils.com.au

Emergency telephone number +61 8 6254 7777

SECTION 2: Hazards identification

Classification of the substance or mixture

GHS classification Mixture

Acute Toxicity (Oral) Category 4, Skin Corrosion/Irritation Category 2, Eye Irritation Category 2A

CLASSIFIED AS HAZARDOUS SUBSTANCE, NON-DANGEROUS GOODS. ACCORDING TO AUSTRALIAN WHS REGULATIONS AND ADG CODE

Other hazards

Other hazards which do not result in classification See Toxicological Information, section 11 of this Safety Data Sheet.

Label elements

Hazard pictograms

Signal word Warning

Hazard statements

H302: Harmful if swallowed.

H315: Causes skin irritation.

H319: Causes serious eye irritation.

Precautionary statements

Prevention

P270: Do not eat, drink or smoke when using this product.

P280: Wear eye protection/face protection.

Response

P362: Take off contaminated clothing and wash before reuse.

P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+313: If eye irriatation persists: get medical advice/attention..

P331+312: IF SWALLOWED: Call a POISON CENTRE or doctor/physician if you feel unwell.

Storage Not applicable.

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

Supplemental label elements Safety data sheet available on request.

Special packaging requirements

Containers to be fitted with child-resistant fastenings	Yes
Tactile warning of danger	Not applicable.

SECTION 3: Composition/information on ingredients

Substance / mixture

Mixture

Product / ingredient name	%	CAS Number
Monoethylene Glycol (MEG)	> 93%	107-21-1
2-Ethylhexanoic acid (2-EH Acid)	< 2.6%	149-57-5
Sodium Hydroxide	< 1%	1310-73-2
Tolytriazole 99.5%	< 0.6%	29385-43-1
Bitrex 25% (25% Denatonium benzoate in MEG)	0.01%	3734-33-6

*The exact percentage of ingredients is confidential.

Occupational exposure limits, if available, are listed in Section 8

SECTION 4: First aid measures

Description of first aid measures

Eye contact

In case of contact with eyes, immediately flush eyes with plenty of water for at least 15 minutes. Keep eye wide open while rinsing.Remove any contact lenses. Seek medical advice.

Skin contact

Wash off with soap and plenty water or use recognised skin cleanser. Take off contaminated clothing and shoes immediately. Get medical attention if irritation develops. If product is injected into or under the skin due to any reason, the victim, regradless of size or appearance of wound, should seek immediate medical attention.

Inhalation

If inhaled, remove to fresh air. Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, big-valve mask device, or pocket mask as trained.Peform CPR if necessary.Transport to hospital, or doctor.

Ingestion

IF SWALLOWED, REFER FOR MEDICAL ATTENTION, WHERE POSSIBLE, WITHOUT DELAY.

For advice contact a Poisons Information Centre or a doctor. Urgent hospital treatment is likely to be needed. In the mean time qualified first-aid personnel should treat the patient following observation and employing supportive measures as indicated by the patients condition.

Where medical attention is not immediately available or where the patientg is more than 15 mionutes from a hospital, or unless instructed otherwise: INDUCE vomiting with fingers down the back of the throat, ONLY IF CONSCIOUS. Lean patient forward on the left side (head-down position, if possible) to maintain open airway and prevent aspiration.

NOTE: Wear a protetcive glove when inducing vomiting by mechanical means.

Protection of first-aiders

No action shall be taken involving any personal risk or without suitable training.

Most important symptoms and effects, both acute and delayed

See Section 11 for more detailed information on health effects and symptoms.

Indication of any immediate medical attention and special treatment needed notes to physician

Treatment should in general be symptomatic and directed to relieving any effects.

SECTION 5: Fire fighting measures

Extinguishing media

Suitable extinguishing media

In case of fire, use alcohol stable foam, dry chemical, BCF (where regulations permit) or carbon dioxide extinguisher to extinguish flames.

Unsuitable extinguishing media

Do not use water jet.

Special hazards arising from the substance or mixture

Hazards from the substance or mixture

Avoid contamination with oxidising agents. Ie. Nitrates, oxiding acids, chlorine bleaches, pool chlorine etc. as ignition may result.

Hazardous combustion products

Combustion products may include the following:

Airborne solid and liquid particles, gases (smoke), carbon oxides (CO, CO2) (carbon monoxide, carbon dioxide), unidentifies inorganic and organic compounds.

Other pyrolysis products typical of burning organic material may emit poisonous and corrosive fumes.

Advice for firefighters

Special precautions for fire-fighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Prevent by any means available, spillage from entering drains or water course. Use water delivered as a fine spray to control fire and cool adjacent area.

Special protective equipment for fire-fighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personal

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Floors may be slippery; use care to avoid falling. Put on appropriate personal protective equipment.

For emergency responders

If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non- emergency personnel".

Environmental precautions

Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small Spill

Slippery when wet. Stop leak if without risk and cleanup spill immediately. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Avoid breathing vapours and contact with skin and eyes. Control personal contact with the substance, by using protective equipment. Dispose of via a licensed waste disposal contractor.

Large Spill

Slippery when wet. Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Alert Fire Brigade. Wear breathing apparatus plus protective gloves. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and shovel/place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor.

Reference to other sections

See Section 1 for emergency contact information.

See Section 5 for firefighting measures.

See Section 8 for information on appropriate personal protective equipment.

See Section 12 for environmental precautions.

See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

Precautions for safe handling

Protective measures

DO NOT allow clothing wet with material to stay in contact with skin. Avoid all personal contact, including inhalation. Wear appropriate personal protective equipment. Use in a well-ventilated area. Prevent concentration in hollows and sumps.

Material is hydroscopic, ie. Absorbs moisture from the air. Keep containers well sealed in storage.

Advice on general occupational hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Wash thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Keep away from heat and direct sunlight. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Store and use only in equipment/ containers designed for use with this product. Do not store in unlabelled containers. Keep away from other oxidizing agents, strong acids bases and incompatible materials.

Not suitable

DO NOT use aluminium or galvanised containers. Prolonged exposure to elevated temperature.

Specific end use(s)

Recommendations

See section 1.2 and Exposure scenarios in annex, if applicable.

SECTION 8: Exposure controls / personal protection

Control parameters

Occupational exposure limits

Product / ingredient name

Ingredient name	TWA	STEL	Peak	Notes
Monoethylene Glycol (MEG)	10 mg/m³ / 52 mg/m³ / 20 ppm	104 mg/m³ / 40 ppm	Not Available	Sk
Sodium Hydroxide	Not Available	Not Available	2 mg/m³	Not Available

Recommended monitoring procedures

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necesity to use respiratory protective equipment. Reference should be made to apropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances wil also be required.

Recommended monitoring procedures

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Derived No Effect Level

No DNELs / DMELs available.

Predicted No Effect Concentration

No PNECs available

Exposure controls

Appropriate engineering controls

Provide exhaust ventilation or other engineering controls to keep the relevant airborne concentrations below their respective occupational exposure limits.

All activities involving chemicals should be assessed for their risks to health, to ensure exposures are adequately controlled. Personal protective equipment should only be considered after other forms of control measures (e.g. engineering controls) have been suitably evaluated. Personal protective equipment should conform to appropriate standards, be suitable for use, be kept in good condition and properly maintained.

Your supplier of personal protective equipment should be consulted for advice on selection and appropriate standards. For further information contact your national organisation for standards. The final choice of protective equipment will depend upon a risk assessment. It is important to ensure that all items of personal protective equipment are compatible.

Environmental exposure controls

Emissions from ventilation or work proces equipment should be checked to ensure. they comply with the requirements of environmental protection legislation. In some cases, fume scrubers, filters or enginering modifcations to the process equipment wil be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment. The correct choice of respiratory protection depends upon the chemicals being handled, the conditions of work and use, and the condition of the respiratory equipment. Safety procedures should be developed for each intended application. Respiratory protection equipment should therefore be chosen in consultation with the supplier /manufacturer and with a ful assessment of the working conditions.

Respiratory protection

Respiratory protective equipment is not normally required where there is adequate natural or local exhaust ventilation to control exposure.

In case of insufficient ventilation, wear suitable respiratory equipment.

The correct choice of respiratory protection depends upon the chemicals being handled, the conditions of work and use, and the condition of the respiratory equipment. Safety procedures should be developed for each intended application. Respiratory protection equipment should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.

Eye / face protection

Safety glasses with side shields or chemical goggles. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritannts.

Skin protection

Hand protection

Wear protective gloves if prolonged or repeated contact is likely. Wear chemical resistant gloves. Recommended: Nitrile gloves. The correct choice of protective gloves depends upon the chemicals being handled, the conditions of work and use, and the condition of the gloves (even the best chemically resistant glove wil break down after repeated chemical exposures). Most gloves provide only a short ime of protection before they must be discarded and replaced. Because specifc work environments and material handling practices vary, safety procedures should be developed for each intended application. Gloves should therefore be chosen in consultation with the suplier/manufacturer and with a ful assessment of the working conditions.

Hand protection

General Information:

Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. The correct choice of protective gloves depends upon the chemicals being handled, and the conditions of work and use. Most gloves provide protection for only a limited time before they must be discarded and replaced (even the best chemically resistant gloves will break down after repeated chemical exposures).

Gloves should be chosen in consultation with the supplier / manufacturer and taking account of a full assessment of the working conditions.

Recommended: Nitrile gloves.

Breakthrough time:

Breakthrough time data are generated by glove manufacturers under laboratory test conditions and represent how long a glove can be expected to provide effective permeation resistance. It is important when following breakthrough time recommendations that actual workplace conditions are taken into account. Always consult with your glove supplier for up-to-date technical information on breakthrough times for the recommended glove type.
Our recommendations on the selection of gloves are as follows:

Continuous contact:

Gloves with a minimum breakthrough time of 240 minutes, or >480 minutes if suitable gloves can be obtained.
If suitable gloves are not available to offer that level of protection, gloves with shorter breakthrough times may be acceptable as long as appropriate glove maintenance and replacement regimes are determined and adhered to.

Short-term / splash protection:

Recommended breakthrough times as above.
It is recognised that for short-term, transient exposures, gloves with shorter breakthrough times may commonly be used. Therefore, appropriate maintenance and replacement regimes must be determined and rigorously followed.

Glove Thickness:

For general applications, we recommend gloves with a thickness typically greater than 0.35 mm.

It should be emphasised that glove thickness is not necessarily a good predictor of glove resistance to a specific chemical, as the permeation efficiency of the glove will be dependent on the exact composition of the glove material. Therefore, glove selection should also be based on consideration of the task requirements and knowledge of breakthrough times.
Glove thickness may also vary depending on the glove manufacturer, the glove type and the glove model. Therefore, the manufacturers' technical data should always be taken into account to ensure selection of the most appropriate glove for the task.

Note: Depending on the activity being conducted, gloves of varying thickness may be required for specific tasks. For example:

● Thinner gloves (down to 0.1 mm or less) may be required where a high degree of manual dexterity is needed. However, these gloves are only likely to give short duration protection and would normally be just for single use applications, then disposed of.

● Thicker gloves (up to 3 mm or more) may be required where there is a mechanical (as well as a chemical) risk i.e. where there is abrasion or puncture potential.

Skin and body

Use of protective clothing is good industrial practice.
Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Cotton or polyester/cotton overalls will only provide protection against light superficial contamination that will not soak through to the skin. Overalls should be laundered on a regular basis. When the risk of skin exposure is high (e.g. when cleaning up spillages or if there is a risk of splashing) then chemical resistant aprons and/or impervious chemical suits and boots will be required. Use Barrier cream as required.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance	
Physical state	Liquid
Colour (ASTM D1500)	Red
Odour	Not available.
Odour threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Max 170°C
Pour point (ASTM D97), (°C)	Not available.
Flash point (ASTM D92), (°C)	120
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	Not available.
Vapour pressure	Not available.
Vapour density (air = 1)	Not available.
Relative density	Not available.
Density (ASTM D4052) @15°C, (g/cm3)	1.113
Solubility(ies)	Soluble in water.
Partition coefficient: n-octanol/water	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Kinematic Viscosity (ASTM D445) @40°C, (cSt)	Not available.
Kinematic Viscosity (ASTM D445) @100°C, (cSt)	Not available.
Explosive properties	Not available.
Oxidising properties	Not available.

Other information

No additional information.

SECTION 10: Stability and reactivity

Reactivity

No specific test data available for this product. Refer to Conditions to avoid and Incompatible materials for additional information.

Chemical stability

The product is stable.

Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.
Under normal conditions of storage and use, hazardous polymerisation will not occur.

Conditions to avoid

Avoid all possible sources of ignition (spark or flame).

Incompatible materials

Reactive or incompatible with the following materials: oxidising materials.

Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

Information on toxicological effects

Mixture

Acute toxicity estimates

19.44% of the mixture consists of ingredients of unknown toxicity. The values are calculated based on section 3.1 of GHS document.

Ingredient	Oral Toxicity (LD50)	Dermal Toxicity (LD50)	Inhalation Toxicity (LC50)
Coolant Concentrate Long Life	-	-	-
Monoethylene Glycol (MEG)	4700 mg/kg (rat)	9530 mg/kg (rabbit)	50.1 mg/L/8 hr (rat)
2-Ethylhexanoic acid (2-EH Acid)	2043 mg/kg (rat)	> 2000 mg/kg (rat)	-
Sodium Hydroxide	325 mg/kg (rabbit)	-	-
Tolytriazole 99.5%	675 mg/kg (rat)	> 2000 mg/kg (rabbit)	-
Bitrex 25% (25% Denatonium benzoate in MEG)	584 mg/kg (rat)	-	-

Information on the likely routes of exposure

Routes of entry anticipated: Dermal, Inhalation.

Potential acute health effects

Inhalation

Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by narcosis, reduced alertness, loss of reflexes, lack of coordination and
vertigo.
Inhalation of vapours or aerosols (mists, fumes), generated by the material during the course of normal handling, may be damaging to the health of the
individual.

Ingestion

Accidental ingestion of the material may be harmful; animal experiments indicate that ingestion of less than 150 gram may be fatal or may produce serious damage to the health of the individual.

Skin contact

The material may accentuate any pre-existing dermatitis condition
Open cuts, abraded or irritated skin should not be exposed to this material
Entry into the blood-stream through, for example, cuts, abrasions, puncture wounds or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.
The material may either produce inflammation of the skin in a substantial number of individuals following direct contact, and/or produces significant inflammation when applied to the healthy intact skin of animals, for up to four hours, such inflammation being present twenty-four hours or more after the end of the exposure period. Skin irritation may also be present after prolonged or repeated exposure; this may result in a form of contact dermatitis (nonallergic). The dermatitis is often characterised by skin redness (erythema) and swelling (oedema) which may progress to blistering (vesiculation), scaling and thickening of the epidermis. At the microscopic level there may be intercellular oedema of the spongy layer of the skin (spongiosis) and intracellular oedema of the epidermis.

Eye contact

The material may cause eye irritation in a substantial number of individuals and/or may produce significant ocular lesions which are present twenty-four hours or more after instillation into the eye(s) of experimental animals.
Repeated or prolonged eye contact may cause inflammation characterised by temporary redness (similar to windburn) of the conjunctiva (conjunctivitis);
temporary impairment of vision and/or other transient eye damage/ulceration may occur.

Chronic

Repeated or long-term occupational exposure may produce cumulative health effects involving organs or biochemical systems.

Potential chronic health effects

General	USED COOLANTS Used coolants may contain hazardous components which have the potential to cause skin cancer. Frequent or prolonged contact with all types and makes of used coolants must therefore be avoided and a high standard of personal hygiene maintained.
Sensitization	Data not available to make classification
Carcinogenicity	Data not available to make classification
Mutagenicity	Data not available to make classification
Developmental effects	Data not available to make classification
Fertility effects	Data not available to make classification
STOT - single exposure	Data not available to make classification
STOT - repeated exposure	Data not available to make classification
Aspiration Hazard	Data not available to make classification

SECTION 12: Ecological information

Toxicity

Environmental hazards	Do not allow material to enter drains or waterways. Based on data available for this or related materials.
Environmental hazards	The environmental impact of this product has not been fully investigated.
Persistence and degradability	No ecotoxicity studies have been done on this product. Ethylene glycol is classified as “readily biodegradable” according to guidelines of the OECD.
Bioaccumulative potential	Ethylene glycol does not bioaccumulate
96hr LC50 (for fish), mg/l	2284
48hr EC50 (for crustacean), mg/l	5046

Mobility in soil

Soil / water partition coefficient (KOC)	Not available.
Mobility	Spillages may penetrate the soil causing ground water contamination.

Results of PBT and vPvB assessment

PBT	Not applicable.
vPvB	Not applicable.

Other adverse effects

Other ecological information	No information available

SECTION 13: Disposal considerations

Disposal methods	The generation of waste should be avoided or minimised wherever posible. Signifcant quanties of waste product residues should not be disposed of via the foul sewer but procesed in a suitable efluent reatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at al times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste packaging should be recycled. Incineration or landfil should only be considered when recycling is not feasible, in an authorised landfill. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and run off and contact with soil, waterways, drains and sewers.

13.1 Waste treatment methods

Product

Methods of disposal	Where possible, arrange for product to be recycled. Dispose of via an authorised person / licensed waste disposal contractor in accordance with local regulations.
Hazardous waste	No

Packaging

Methods of disposal	Where possible, arrange for product to be recycled. Dispose of via an authorised person/ licensed waste disposal contractor in accordance with local regulations.

Special precautions This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

Land (as per ADG classification) Not regulated

This material is not classified as dangerous under ADG Code.

IMDG

This material is not classified as dangerous under IMDG regulations.

IATA (Country variations may apply)

This material is not classified as dangerous under IATA regulations.

	LAND TRANSPORT (ADG)	SEA TRANSPORT (IMDG / IMO)	AIR TRANSPORT (IATA / ICAO)
UN number	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	Not regulated.	Not regulated.	Not regulated.
Transport hazard class(es)	Not regulated.	Not regulated.	Not regulated.
Packing group	Not applicable	Not applicable	Not applicable
Environmental hazards	No.	No.	No.
Special precautions for user	-	-	-

Special precautions for user Not available.

SECTION 15: Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

Substances of very high concern

None of the components are listed.

Safety, health and environmental regulations specific for the product

No known specifc national and/or regional regulations aplicable to this product (including its ingredients).

Poison schedule A poison schedule number has not been allocated to this product using the criteria in the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP).

Classifications Safework Australia criteria is based on the Globally Harmonised System (GHS) of Classification and Labelling Chemicals.

The classifications and phrases listed below are based on the Approved Criteria for Classifying Hazardous Substances [NOHSC: 1008(2004)].

Hazard codes Accute and Chronic Health Hazard.

Risk phrases None allocated

Safety phrases Non allocated

Inventory listing(s) All components are listed on ACIS, or are exempt.

Regulation acording to other foreign laws

REACH Status For the REACH status of this product please consult your company contact, as identifed in Section 1.

United States inventory (TSCA 8b) All components are listed or exempted.

Australia inventory (AICS) All components are listed or exempted.

Canada inventory All components are listed or exempted.

China inventory (IECSC) At least one component is not listed.

Japan inventory (ENCS) All components are listed or exempted.

Korea inventory (KECI) All components are listed or exempted.

Philippines inventory (PICCS) All components are listed or exempted.

Chemical Safety Assessment This product contains substances for which Chemical Safety Assessments are still required.

SECTION 16: Other information

Abbreviations and acronyms ACGIH = American Conference of Government Industrial Hygenists

ADG = Australian Dangerous Goods Code

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road

AICS = Australian Inventory of Chemical Substances

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

CAS = Chemical Abstracts Service

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008] CSA = Chemical Safety Assessment

CSR = Chemical Safety Report

DMEL = Derived Minimal Effect Level

DNEL = Derived No Effect Level

DPD = Dangerous Preparations Directive [1999/45/EC]

DSD = Dangerous Substances Directive [67/548/EEC]

EINECS = European Inventory of Existing Commercial chemical Substances ES = Exposure Scenario

EMS = Emergency Schedules (Emergency Procedure for Ships Carrying Dangerous Goods)

ENCS = Existing and New Chemical Substances

EUH statement = CLP-specific Hazard statement

EWC = European Waste Catalogue

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IARC = International Agency for Research on Cancer

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LC50 = Lethal Concentration, 50% / Medium Lethal Concentration

LD50 = Lethal Dose, 50% / Medium Lethal Dose

Log Pow = logarithm of the octanol/water partition coefficient

MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

NOHSC = National Occupational Health & Safety Commission

OECD = Organisation for Economic Co-operation and Development

OEL = Occupational Exposure Limits

PBT = Persistent, Bioaccumulative and Toxic

PNEC = Predicted No Effect Concentration

RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail RRN = REACH Registration Number

SAA/SNZ HB76 = Dangerous Goods Initial Emergency Response Guide

SADT = Self-Accelerating Decomposition Temperature

STEL = Short-Term Exposure Limit

STOT-RE = Specific Target Organ Toxicity - Repeated Exposure

STOT-SE = Specific Target Organ Toxicity - Single Exposure

SUSMP = Standard for the Uniform Scheduling opf Medicines and Poisons

SVHC = Substances of Very High Concern

SWA = Safe Work Australia

TLV = Threshold Limit Value

TSCA = Toxic Substance Control Act

TWA = Time weighted average

UN = United Nations

UVCB = Complex hydrocarbon substance

VOC = Volatile Organic Compound

vPvB = Very Persistent and Very Bioaccumulative

WHS = Work Health and Safety Regulations

History

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Date of previous issue	11-Jan-2017	SDS
Prepared by	Bernadini Pty Ltd trading as Lubricant Specialists Australia (LSA)	

Indicates information that has changed from previously issued version.

Notice to reader

All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.

The data and advice given apply when the product is sold for the stated application or applications. You should not use the product other than for the stated application or applications without seeking advice from LSA.

It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. LSA shall not be responsible for any damage or injury resulting from use, other than the stated product use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material. Purchasers of the product for supply to a third party for use at work, have a duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet. Employers have a duty to tell employees and others who may be affected of any hazards described in this sheet and of any precautions that should be taken. You can contact LSA to ensure that this document is the most current available. Alteration of this document is strictly prohibited.