

SAFETY DATA SHEET



Version 4

Revision Date 09-01-17

NON-HAZARDOUS SUBSTANCE - NON-DANGEROUS GOODS

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

Product identifier

Product name LSA BIO DEGREASER
Product code 1800-10-0000
SDS no. 1800-10-0000 4-GB
Product type Liquid.

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

Use of the substance/mixture BIODEGRADABLE DEGREASER
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

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

Label elements

Hazard pictograms No pictogram required
Signal word No signal word has been allocated
Hazard statements No hazard statement has been allocated
Precautionary statements No precautionary statement has been allocated

Supplemental label elements Safety data sheet available on request.

Special packaging requirements

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

SECTION 3: Composition/information on ingredients

Substance / mixture Mixture

Product / ingredient name	%	CAS Number	EC Number	Risk Phrase/Hazard Statements
Water	40% - 100%	7732-18-15	231-791-2	Not applicable
Non-hazardous ingredients	< 30%	Not available	Not available	Not applicable
Dodecylbenzene Sulphonic Acid	< 15%	27176-87-0	248-289-4	Not applicable
Sodium Hydroxide	< 2%	1310-73-2	215-185-5	Not applicable

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

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.
Inhalation	If inhaled, remove to fresh air. Get medical attention if symptoms appear.
Ingestion	Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur or contact a Poison Information Centre on 13 11 26 (Australia Wide).
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	Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	Do not use water jet.

Special hazards arising from the substance or mixture

Hazards from the substance or mixture	No Flammable
Hazardous combustion products	Combustion products may include the following: May evolve carbon oxides (CO, CO ₂) (carbon monoxide, carbon dioxide) and hydrocarbons when heated to decomposition.

Advice for firefighters

Special precautions for fire-fighters	Treat as per requirements for surrounding fires. Evacuate area and contact emergency services. Remain upwind and notify those downwind of hazard.
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	Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor. CAUTION: Spill site may be slippery.
Large Spill	Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and 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

Put on appropriate personal protective equipment.

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.

Not suitable

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	Reference	TWA		STEL	
		ppm	mg/m ³	ppm	mg/m ³
Sodium Hydroxide (peak limitation)	SWA (AUS)	-	2 (Peak)	-	-

Biological Limits

No biological limit values have been entered for this product.

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 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.

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 full 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

Skin protection

Hand protection

Safety glasses with side shields.

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 will break down after repeated chemical exposures). Most gloves provide only a short time of protection before they must be discarded and replaced. Because specific 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 supplier/manufacturer and with a full 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.

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	Amber coloured liquid.
Colour (ASTM D1500)	>1.0
Odour	Citris odour
Odour threshold	Not available.
pH	8
Melting point/freezing point	Not available.
Initial boiling point and boiling range	100°C (approximately)
Pour point (ASTM D97), (°C)	Not available
Flash point (ASTM D92), (°C)	Not relevant
Evaporation rate	Not available.
Flammability (solid, gas)	Non flammable

Upper/lower flammability or explosive limits Not relevant

Vapour pressure	Not available.
Vapour density	Not available.
Relative density	Not available.
Density (ASTM D4052) @15°C, (g/cm ³)	1.06
Solubility(ies)	Soluble in water.
Partition coefficient: n-octanol/water	Not available.
Auto-ignition temperature	> 280
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 (% Volatiles) 68%

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 under recommended conditions of storage.
Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, polymerisation is not expected to occur.
Conditions to avoid	Avoid all possible sources of ignition (spark or flame).
Incompatible materials	Reactive or incompatible with the following materials: oxidising agents (eg. hypochlorites) and acids (eg. nitric acid).
Hazardous decomposition products	May evolve carbon oxides and hydrocarbons when heated to decomposition.

SECTION 11: Toxicological information

Information on toxicological effects This product is expected to have low acute toxicity. Under normal conditions of use, adverse health effects are not anticipated.

Acute toxicity estimates

Ingredient	Oral Toxicity (LD50)	Dermal Toxicity (LD50)	Inhalation Toxicity (LC50)
DODECYLBENZENE SULPHONIC ACID	530 - 1470 mg/kg (rats)	-	-

Information on the likely routes of exposure Routes of entry anticipated: Dermal, Inhalation.

Potential acute health effects

Inhalation

Vapour inhalation under ambient conditions is not normally a problem due to low vapour pressure.

Ingestion

No known significant effects or critical hazards.

Skin contact

Not classified as a skin irritant. Contact may cause temporary mild skin irritation. Prolonged and repeated contact may result in drying and defatting of the skin.

Eye contact

Not classified as an eye irritant. Contact may cause discomfort, lacrimation and redness.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation

No specific data.

Ingestion

No specific data.

Skin contact

Adverse symptoms may include the following:
irritation
dryness
cracking

Eye contact

No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Inhalation

Overexposure to the inhalation of airborne droplets or aerosols may cause irritation of the respiratory tract.

Ingestion Skin contact Eye contact

Ingestion of large quantities may cause nausea and diarrhoea.

Skin contact

Prolonged or repeated contact can defat the skin and lead to irritation and/or dermatitis.

Eye contact

Potential risk of transient stinging or redness if accidental eye contact occurs.

Potential chronic health effects

Sensitisation

Not classified as causing skin or respiratory sensitisation.

Carcinogenicity

Not classified as a carcinogen.

Mutagenicity

Not classified as a mutagen.

Reproductive

Not classified as a reproductive toxin.

STOT - single exposure

Not classified as causing organ damage from single exposure.

STOT - repeated exposure

Not classified as causing organ damage from repeated exposure.

Aspiration

This product does not present an aspiration hazard.

SECTION 12: Ecological information

Toxicity

Environmental hazards

Not classified as dangerous
Based on data available for this or related materials.

Environmental hazards

No known significant effects or critical hazards.

Persistence and degradability	This product is biodegradable.
Bioaccumulative potential	No information available
Mobility in soil	
Soil / water partition coefficient (KOC)	No information available
Mobility	No information available
Results of PBT and vPvB assessment	
PBT	Not applicable.
vPvB	Not applicable.
Other adverse effects	
Other ecological information	Aquatic life may be threatened and environmental damage may result if large quantities are allowed to enter waterways.

SECTION 13: Disposal considerations

Disposal methods The generation of waste should be avoided or minimised wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment 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 all 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 landfill should only be considered when recycling is not feasible. 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 allocated	Not allocated	Not allocated
UN proper shipping name	Not allocated	Not allocated	Not allocated
Transport hazard class(es)	Not allocated	Not allocated	Not allocated
Packing group	Not allocated	Not allocated	Not allocated
Environmental hazards	No information available	No information available	No information available
Special precautions for user - hazchem code	Not allocated	Not allocated	Not allocated

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**Poison schedule**

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

Non allocated

Risk phrases

None allocated

Safety phrases

Non allocated

Inventory listing(s)

All components are listed on ACIS, or are exempt.

Regulation according to other foreign laws**REACH Status**

For the REACH status of this product please consult your company contact, as identified 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 Hygienists

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 of 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

Date of issue / Date of revision	9-Jan-2017	
Date of previous issue	3-Jun-2016	MSDS
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.