SAFETY DATA SHEET

Revision date: 06-Mar-2023

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product identifier **Product Name** Lemon Myrtle & Lemon Product Code(s) 00000026946 Other means of identification 3082 **UN number** FM79062 Synonyms Pure substance/mixture Mixture Recommended use of the chemical and restrictions on use **Recommended use** Fragrances. Uses advised against No information available Supplier Ixom Operations Pty Ltd (Bronson & Jacobs division) - incorporated in Australia ABN:51 600 546 512 70 Marple Avenue Villawood NSW 2163 Australia

Telephone Number: +61 2 8717 2929 Facsimile: +61 2 9755 9611

Emergency telephone number

Emergency telephone number 1 800 033 111 (ALL HOURS)

Please ensure you refer to the limitations of this Safety Data Sheet as set out in the "Other Information" section at the end of this Data Sheet.

2. HAZARDS IDENTIFICATION

GHS Classification

Classified as dangerous goods in accordance with the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG).

Environmentally Hazardous Substances meeting the descriptions of UN 3077 or UN 3082 are not subject to the provisions of the Australian Code for the Transport of Dangerous Goods by Road and Rail when transported by road or rail in: packagings that do not incorporate a receptacle exceeding 500 kg(L); or IBCs.

Classified as a hazardous chemical in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS).

BJ



Revision Number 1

Flammable liquids	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2
Skin sensitization	Category 1B
Acute aquatic toxicity	Category 2
Chronic aquatic toxicity	Category 2

SIGNAL WORD

Warning

Label elements

Environment Exclamation mark



Hazard statements

H227 - Combustible liquid

H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

H319 - Causes serious eye irritation

The following health/environmental hazard categories fall outside the scope of the Workplace Health and Safety Regulations: H411 - Toxic to aquatic life with long lasting effects

Precautionary Statements - Prevention

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking Avoid breathing dust / fume / gas / mist / vapours / spray Contaminated work clothing should not be allowed out of the workplace Wash hands thoroughly after handling Wear protective gloves/eye protection/face protection Avoid release to the environment **Precautionary Statements - Response** Specific treatment (see First aid on this SDS) IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eve irritation persists: Get medical advice/attention IF ON SKIN: Wash with plenty of soap and water If skin irritation or rash occurs: Get medical advice/attention Take off contaminated clothing and wash it before reuse In case of fire: Use extinguishing media as outlined in Section 5 of this Safety Data Sheet to extinguish. Collect spillage **Precautionary Statements - Storage** Store in a well-ventilated place **Precautionary Statements - Disposal** Dispose of contents/container to an approved waste disposal plant

Other hazards which do not result in classification

Toxic to aquatic life

Poisons Schedule (SUSMP) 5

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Chemical name	CAS No.	Weight-%
Aliphatic alcohol(s)	-	<20
d-Limonene	5989-27-5	<10
Bicyclo[3.1.1]heptane, 6,6-dimethyl-2-methylene- (.betaPinene)	127-91-3	<10
Isocyclocitral	1335-66-6	<10
5-isopropyl-2-methylbicyclo[3.1.0]hex-2-ene	2867-05-2	<10
.alphaPinene	80-56-8	<10
Citral	5392-40-5	<10
Citronellal	106-23-0	<10
Geranial	141-27-5	<10
Neral	106-26-3	<10

4. FIRST AID MEASURES

Description of first aid measures

General advice	For advice, contact a Poisons Information Centre (e.g. phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor.
Inhalation	Remove to fresh air. Call a physician if symptoms occur.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Do not rub affected area. Get medical attention if symptoms occur.
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation or rash occurs: Get medical advice/attention.
Ingestion	Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Consult a physician if necessary.

Most important symptoms and effects, both acute and delayed

Symptoms	Irritation. May cause redness and tearing of the eyes. May cause allergic skin reaction. Redness. Rashes. Hives.

Indication of any immediate medical attention and special treatment needed

Note to physicians	May cause sensitization by skin contact. Treat symptomatically.
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5. FIRE FIGHTING MEASURES	
Suitable Extinguishing Media	
Suitable Extinguishing Media	Alcohol resistant foam is the preferred firefighting medium but, if it is not available, normal protein foam can be used.

Unsuitable extinguishing media No information available.

Specific hazards arising from the chemical

Specific hazards arising from the Combustible liquid. On burning will emit toxic fumes, including those of oxides of carbon. In

chemical	the event of fire, cool tanks with water spray. Environmentally hazardous. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.	
Hazardous combustion products	Oxides of carbon.	
Special protective actions for fire-fighters		
Special protective equipment for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.	
Hazchem code	•3Z	

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions	Avoid contact with skin, eyes, and clothing. Avoid breathing vapors or mists. Ensure adequate ventilation. Do not touch or walk through spilled material. Keep people away from and upwind of spill/leak. Use personal protective equipment as required.	
Other information	Ventilate the area. Refer to protective measures listed in Sections 7 and 8.	
For emergency responders	Shut off ignition sources. Use personal protection recommended in Section 8.	
Environmental precautions		
Environmental precautions	Prevent further leakage or spillage if safe to do so. Do not allow to enter into soil/subsoil. Prevent product from entering drains. See Section 12 for additional Ecological Information.	
Methods and material for containment and cleaning up		
Methods for containment	Stop leak if you can do it without risk. Remove ignition sources. Provide adequate ventilation. Dike far ahead of spill to collect runoff water. Keep out of drains, sewers, ditches and waterways. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.	
Methods for cleaning up	Slippery when spilt. Avoid accidents, clean up immediately. Use non-sparking tools. Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labelled containers.	

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling
Avoid contact with skin, eyes, and clothing. Avoid breathing vapors or mists. Ensure adequate ventilation. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharges. Take off contaminated clothing and wash before reuse. Wash thoroughly after handling. Use personal protection equipment. Handle in accordance with good industrial hygiene and safety practice. Keep out of reach of children.
General hygiene considerations
Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from sunlight. Store away from incompatible materials described in Section 10. Keep container closed

Wear suitable gloves and eye/face protection.

	when not in use. Store away from foodstuffs and sources of heat or ignition.
	Classified as a C1 (COMBUSTIBLE LIQUID) for the purpose of storage and handling, in accordance with the requirements of AS 1940. Refer to State Regulations for storage and transport requirements.
	This material is a Scheduled Poison and must be stored, maintained and used in accordance with the relevant regulations.
Incompatible materials	Oxidizing agents. and. highly alkaline or acidic material.
Poisons Schedule (SUSMP)	5

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits

No value assigned for this specific material by Safe Work Australia.

Appropriate engineering controls

Engineering controls Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

OVERALLS, SAFETY SHOES, CHEMICAL GOGGLES, GLOVES.

Eye/face protection	Goggles.
Skin and body protection	Wear suitable protective clothing. Overalls. Boots.
Hand protection	Impervious gloves.
Respiratory protection	If determined by a risk assessment an inhalation risk exists, wear an organic vapour respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716.
Environmental exposure controls	No information available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties Physical state Liquid

Appearance Liquid

Color

Odor	Zest, lemon, lemon myrtle, incense, v	anilla
Odor threshold	No information available	
Property	Values	Remarks • Method
рН	No data available	None known
pH (as aqueous solution)	No data available	None known
Melting point / freezing point	No data available	None known
Boiling point / boiling range	No data available	None known
Flash point	73 °C	None known
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive	No data available	
limits		
Lower flammability or explosive	No data available	
limits		
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Relative density	0.97 - 1.0 @ 20°C	None known
Water solubility	No data available	None known
Solubility(ies)	Immiscible in water	None known
Partition coefficient	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known

Colourless to Pale Yellow

Other information

10. STABILITY AND REACTIVITY

Reactivity		
Reactivity	No information available.	
Chemical stability		
Stability	Stable under normal conditions.	
Explosion data Sensitivity to mechanical impac	t None.	
Sensitivity to static discharge	Yes.	
Possibility of hazardous reactions		
Possibility of hazardous reactions	None under normal processing.	
Conditions to avoid		
Conditions to avoid	Heat, flames and sparks. Direct sunlight. Do not contaminate food or feed stuffs.	
Incompatible materials		
Incompatible materials	Oxidizing agents. and. highly alkaline or acidic material.	
Hazardous decomposition products		
Hazardous decomposition products Oxides of carbon.		

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Information on likely routes of exposure

Product Information	No adverse health effects expected if the chemical is handled in accordance with this Safety Data Sheet and the chemical label. Symptoms or effects that may arise if the chemical is mishandled and overexposure occurs are:
Inhalation	May cause irritation.
Eye contact	Causes serious eye irritation.
Skin contact	Causes skin irritation. May cause sensitization by skin contact.
Ingestion	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.
Symptoms	Irritation. May cause redness and tearing of the eyes. May cause allergic skin reaction. Redness. Rashes. Hives.

Numerical measures of toxicity - Product Information

No information available

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Bicyclo[3.1.1]heptane,	= 4700 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	-
6,6-dimethyl-2-methylene-	> 5000 mg/kg (Rat)		
(.betaPinene)			
.alphaPinene	= 3700 mg/kg (Rat)	> 5000 mg/kg (Rat)	-
Citronellal	2,420 mg/kg (1)	>2,500 mg/kg (1)	-

See section 16 for terms and abbreviations

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation	Causes skin irritation. Classification is based on mixture calculation methods based on component data.
Serious eye damage/eye irritation	Causes serious eye irritation. Classification is based on mixture calculation methods based on component data.
Respiratory or skin sensitization	May cause sensitization by skin contact. Classification is based on mixture calculation methods based on component data.
Germ cell mutagenicity	No information available.
Carcinogenicity	No information available.
Reproductive toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Aspiration hazard	No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity

Avoid contaminating waterways. Toxic to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
d-Limonene	-	LC50: 0.619 - 0.796mg/L (96h, Pimephales promelas) LC50: =35mg/L (96h, Oncorhynchus mykiss)	-	-
.alphaPinene	-	LC50: =0.28mg/L (96h, Pimephales promelas)	-	LC50: =41mg/L (48h, Daphnia magna)
Citral	EC50: =16mg/L (72h, Desmodesmus subspicatus) EC50: =19mg/L (96h, Desmodesmus subspicatus)	LC50: 4.6 - 10mg/L (96h, Leuciscus idus)	-	EC50: =7mg/L (48h, Daphnia magna)

Persistence and degradability

Persistence and degradability No information available.

Bioaccumulative potential

Bioaccumulation

No information available.

Component Information

Chemical name	Partition coefficient
d-Limonene	4.23
.alphaPinene	4.1
Citral	2.76

Mobility

Mobility in soil

No information available.

Other adverse effects

13. DISPOSAL CONSIDERATIONS

Waste treatment methods	
Waste from residues/unused products	Should not be released into the environment. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.
Contaminated packaging	Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers.

14. TRANSPORT INFORMATION

<u>ADG</u>

Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.

UN number Proper shipping name	3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS D-LIMONENE)
Hazard class	9
Packing group	
Environmental hazard	Yes
Special Provisions	274, 331, 335, 375, AU01
Hazchem code	•3Z

<u>IATA</u>

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; DANGEROUS GOODS.

UN number	3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS
	D-LIMONENE)
Transport hazard class(es)	9
Packing group	

IMDG

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; DANGEROUS GOODS.

UN number UN proper shipping name	3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS D-LIMONENE)
Transport hazard class(es)	9
Packing group	
IMDG EMS Fire	F-A
IMDG EMS Spill	S-F
Marine pollutant	Yes

15. REGULATORY INFORMATION

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

National regulations

Australia

Classified as dangerous goods in accordance with the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG).

Environmentally Hazardous Substances meeting the descriptions of UN 3077 or UN 3082 are not subject to the provisions of the Australian Code for the Transport of Dangerous Goods by Road and Rail when transported by road or rail in: packagings that do not incorporate a receptacle exceeding 500 kg(L); or IBCs.

Classified as a hazardous chemical in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS).

See section 8 for national exposure control parameters

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)

Classified as a scheduled poison according to the Standard for Uniform Scheduling of Medicines and Poisons (SUSMP) **Poisons Schedule (SUSMP)** 5

National pollutant inventory

Subject to reporting requirement

Chemical name	National pollutant inventory	
d-Limonene - 5989-27-5	20 MW Threshold category 2b total	
	60000 MWH Threshold category 2b total	
	1 tonne/h Threshold category 2a total	
	25 tonne/yr Threshold category 1a total	
	400 tonne/yr Threshold category 2a total	
	2000 tonne/yr Threshold category 2b total	
Bicyclo[3.1.1]heptane, 6,6-dimethyl-2-methylene-	20 MW Threshold category 2b total	
(.betaPinene) - 127-91-3	60000 MWH Threshold category 2b total	
	1 tonne/h Threshold category 2a total	
	25 tonne/yr Threshold category 1a total	
	400 tonne/yr Threshold category 2a total	
	2000 tonne/yr Threshold category 2b total	
.alphaPinene - 80-56-8	20 MW Threshold category 2b total	
	60000 MWH Threshold category 2b total	
	1 tonne/h Threshold category 2a total	
	25 tonne/yr Threshold category 1a total	
	400 tonne/yr Threshold category 2a total	
	2000 tonne/yr Threshold category 2b total	

International Inventories AIIC

All the constituents of this material are listed on the Australian Inventory of Industrial Chemicals.

Legend: AllC- Australian Inventory of Industrial Chemicals

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

16. OTHER INFORMATION

Supplier Safety Data Sheet 03/2023

Reason(s) For Issue: First Issue Primary SDS

ssuing Date:	06-Mar-2023

This Safety Data Sheet has been prepared by Ixom Operations Pty Ltd (Toxicology and SDS Services).

Revision Note:

The symbol (*) in the margin of this SDS indicates that this line has been revised.

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend	Section 8: EXPOSURE CONTROLS/PERSONAL	PROTECTION
TWA	TWA (time-weighted average)	STEL
Ceiling	Maximum limit value	*
C	Carcinogen	

STEL (Short Term Exposure Limit) Skin designation

Key literature references and sources for data used to compile the SDS

EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AEGL(s)) U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act U.S. Environmental Protection Agency High Production Volume Chemicals Food Research Journal Hazardous Substance Database International Uniform Chemical Information Database (IUCLID) Japan GHS Classification Australian Industrial Chemicals Introduction Scheme (AICIS) NIOSH (National Institute for Occupational Safety and Health) National Library of Medicine's ChemID Plus (NLM CIP) National Library of Medicine's PubMed database (NLM PUBMED) National Toxicology Program (NTP) New Zealand's Chemical Classification and Information Database (CCID) Organization for Economic Co-operation and Development Environment, Health, and Safety Publications Organization for Economic Co-operation and Development High Production Volume Chemicals Program Organization for Economic Co-operation and Development Screening Information Data Set RTECS (Registry of Toxic Effects of Chemical Substances) World Health Organization

Disclaimer

This SDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since Ixom Operations Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.

If clarification or further information is needed, the user should contact their Bronson & Jacobs representative or Ixom Operations Pty Ltd at the contact details on page 1.

Ixom Operations Pty Ltd's responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.

Bronson and Jacobs incorporating the businesses of Woods and Woods and Keith Harris and Australian Botanical Products.

End of Safety Data Sheet