SAFETY DATA SHEET

Revision date: 28-Apr-2022

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product identifierProduct NameVERVEINE MOC 00150AAProduct Code(s)00000025705Other means of identificationUN numberUN number3082Pure substance/mixtureMixtureRecommended use of the chemical and restrictions on useRecommended useFragrances.Uses advised againstNo 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

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.

1 800 033 111 (ALL HOURS)

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).

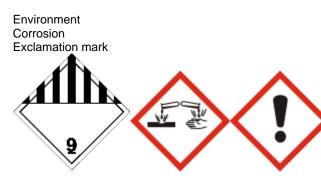


Flammable liquids	Category 4
Acute toxicity - Oral	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1
Acute aquatic toxicity	Category 2
Chronic aquatic toxicity	Category 2

SIGNAL WORD

Danger

Label elements



Hazard statements

H227 - Combustible liquid

H302 - Harmful if swallowed

H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

H318 - Causes serious eye damage

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 Do not eat, drink or smoke when using this product Wash hands thoroughly after handling Contaminated work clothing should not be allowed out of the workplace Wear protective gloves / protective clothing / 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 Immediately call a POISON CENTER or doctor/physician 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 before reuse IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell Rinse mouth 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 with long lasting effects May be harmful in contact with skin

Poisons Schedule (SUSMP) 5

3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Mixture</u>

Chemical name	CAS No.	Weight-%
Citral	5392-40-5	30-60
Poly(oxy-1,2-ethanediyl),	127087-87-0	10-<30
.alpha(4-nonylphenyl)omegahydroxy-branched		
Lemongrass oils	8007-02-1	1-<10
Geranyl acetate	105-87-3	1-<10
Cymbopogon winterianus, extract	91771-61-8	1-<10
1,6-Octadien-3-ol, 3,7-dimethyl- (Linalool)	78-70-6	1-<10
.alphaPinene	80-56-8	1-<10
Isoeugenol	97-54-1	0.1-<1
Ingredients determined not to be hazardous	-	to 100

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.	
Emergency telephone number		
Inhalation	Remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms occur.	
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately if symptoms occur.	
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician.	
Ingestion	Rinse mouth immediately and drink plenty of water. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.	
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. Can cause corneal burns. Treat symptomatically.	

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 chemical	Combustible liquid. On burning will emit toxic fumes, including those of oxides of carbon. In the event of fire, cool tanks with water spray. 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	Evacuate personnel to safe areas. Ensure adequate ventilation. Avoid contact with skin, eyes, and clothing. Avoid breathing vapors or mists. Do not eat, drink or smoke when using this product. Use personal protective equipment as required. Keep people away from and upwind of spill/leak. Do not touch or walk through spilled material.	
Other information	Ventilate the area. Refer to protective measures listed in Sections 7 and 8.	
For emergency responders	Shut off ignition sources. Clear area of all unprotected personnel. Use personal protection recommended in Section 8.	
Environmental precautions		
Environmental precautions	Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Refer to protective measures listed in Sections 7 and 8. 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. Do not touch or walk through spilled material. 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	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	Ensure adequate ventilation. Avoid breathing vapors or mists. Avoid contact with skin, eyes, and clothing. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use personal protection equipment. Handle in accordance with good industrial hygiene and safety practice. Use according to package label instructions. 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. Avoid contact with skin, eyes, and clothing. Wear suitable gloves and eye/face protection.

Conditions for safe storage, including any incompatibilities

Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place. Store away from foodstuffs and sources of heat or ignition. Protect from sunlight. Keep container closed when not in use. Store away from incompatible materials described in Section 10.	
	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.	
Poisons Schedule (SUSMP)	5	

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits

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

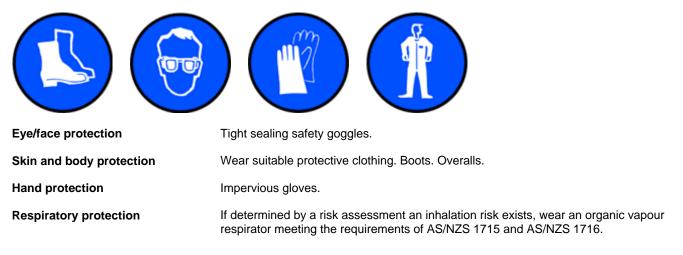
Appropriate engineering controls

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.



Environmental exposure controls No information available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and c	hemical properties	
Physical state	Liquid	
Appearance	Clear	
Color	Yellow to Dark yellow	
Odor	Citrus, Green, Floral, Sweet	
Odor threshold	No information available.	
Property	<u>Values</u>	Remarks • Method
рН	No data available	None known
pH (as aqueous solution)	No data available	None known
Melting point / freezing point	No data available	
Boiling point / boiling range	No data available	
Flash point	74 °C	CC (closed cup)
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	
Vapor density	No data available	
Relative density	0.919 - 0.939 @20°C	
Water solubility	No data available	
Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Autoignition temperature	No data available	
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known
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Other information

10. STABILITY AND REACTIVITY

<u>Reactivity</u>	
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. Static discharge (electrostatic discharge). Direct sunlight. Do not contaminate food or feed stuffs.
Incompatible materials	

Incompatible materials Oxidizing agents.

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 damage. Corrosive to the eyes and may cause severe damage including blindness.
Skin contact	May be harmful in contact with skin. Irritating to skin. May cause sensitization by skin contact.
Ingestion	Harmful if swallowed. 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

The following values are calculated based on chapter 3.1 of the GHS documentATEmix (oral)>300 -2000 mg/kgATEmix (dermal)>2000 mg/kg

Numerical measures of toxicity - Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Citral	= 4960 mg/kg(Rat)	= 2250 mg/kg (Rabbit)	-
Lemongrass oils	> 5000 mg/kg (Rat)	> 5000 mg/kg (Rabbit)	-
Geranyl acetate	= 6330 mg/kg (Rat)	-	-
1,6-Octadien-3-ol, 3,7-dimethyl- (Linalool)	= 2790 mg/kg(Rat)	= 5610 mg/kg(Rat)	-
.alphaPinene	= 3700 mg/kg(Rat)	> 5000 mg/kg (Rat)	-
Isoeugenol	= 1560 mg/kg(Rat)	-	-

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 damage. 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	Not classified.	
The table below indicates whether ea	ch agency has listed any ingredient as a carcinogen.	

 Chemical name
 Australia

 Isoeugenol - 97-54-1
 Carc. 2

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
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)
1,6-Octadien-3-ol, 3,7-dimethyl- (Linalool)	EC50: =88.3mg/L (96h, Desmodesmus subspicatus)	LC50: =27.8mg/L (96h, Oncorhynchus mykiss) LC50: 22 - 46mg/L (96h, Leuciscus idus)	-	EC50: =20mg/L (48h, Daphnia magna)
.alphaPinene	-	LC50: =0.28mg/L (96h, Pimephales promelas)	-	LC50: =41mg/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
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Citral	2.76
1,6-Octadien-3-ol, 3,7-dimethyl- (Linalool)	2.84 - 3.1
.alphaPinene	4.1

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. Dispose of in accordance with federal, state and local regulations.

14. TRANSPORT INFORMATION

ADG

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

3082
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS NONYL
PHENOL ETHOXYLATE)
9
•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 UN proper shipping name	3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CONTAINS NONYL PHENOL ETHOXYLATE)
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 NONYL PHENOL ETHOXYLATE)
Transport hazard class(es)	9
Packing group	111
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

Poisons Schedule (SUSMP) 5

National pollutant inventory

Subject to reporting requirement

Chemical name	National pollutant inventory
.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

Reason(s) For Issue: 5 Yearly Revised Primary SDS

Issuing Date: 28-Apr-2022

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.

TWA	TWA (time-weighted average) Maximum limit value Carcinogen	STEL *	STEL (Short Term Exposure Limit) Skin designation
Ceiling C			
Key literature references and sources for data used to compile the SDS			
	mental Protection Agency Federal Insecticide	, Fungicide, and Ro	denticide Act
U.S. Environr	mental Protection Agency High Production Ve	olume Chemicals	
Food Resear	ch Journal		
	ubstance Database		
	Uniform Chemical Information Database (IUC	CLID)	
Japan GHS C			
	Justrial Chemicals Introduction Scheme (AIC	,	
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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