SAFETY DATA SHEET

Revision date: 05-Sep-2023

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product identifier		
Product Name	RED THYME OIL (FTOIL00826)	
Product Code(s)	00000037538	
Other means of identification		
UN number	1760	
Pure substance/mixture	Mixture	
Recommended use of the chemical and restrictions on use		
Recommended use	Flavour.	
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		
relephone Number: +61 2 8/1/ 2929		

Emergency telephone number

Emergency telephone number

Facsimile: +61 2 9755 9611

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).

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

Flammable liquids	Category 4 - (H227)
Aspiration hazard	Category 1 - (H304)
Acute toxicity - Oral	Category 4 - (H302)





Skin corrosion/irritation	Category 1 Sub-category B - (H314)
Serious eye damage/eye irritation	Category 1 - (H318)
Skin sensitization	Category 1B - (H317)
Acute aquatic toxicity	Category 2 - (H401)
Chronic aquatic toxicity	Category 2 - (H411)

SIGNAL WORD Danger

Label elements





Hazard statements

H227 - Combustible liquid

H302 - Harmful if swallowed

H304 - May be fatal if swallowed and enters airways

H314 - Causes severe skin burns and eye damage

H317 - May cause an allergic skin reaction

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

Wash face, hands and any exposed skin thoroughly after handling Do not eat, drink or smoke when using this product Do not breathe fume, gas, mist, vapours, spray Wear protective gloves / protective clothing / eye protection / face protection Contaminated work clothing should not be allowed out of the workplace Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking Avoid release to the environment **Precautionary Statements - Response** Immediately call a POISON CENTER or doctor/physician 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 (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower Wash contaminated clothing before reuse If skin irritation or rash occurs: Get medical advice/attention IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Immediately call a POISON CENTER or doctor/physician Rinse mouth IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician Do NOT induce vomitina 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 locked up Store in a well-ventilated place. Keep cool **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) None allocated

3. COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Chemical name	CAS No.	Weight-%
Phenol, 5-methyl-2-(1-methylethyl)- (Thymol)	89-83-8	30-60
1,6-Octadien-3-ol, 3,7-dimethyl- (Linalool)	78-70-6	1-<10
Turpentine (Wood)	8006-64-2	1-<10
Oils, Eucalyptus Citriodora	8000-48-4	1-<10
d-Limonene	5989-27-5	1-<10
Non-hazardous ingredients	Proprietary	Balance

4. FIRST AID MEASURES

Description of first aid measures

General advice	Show this safety data sheet to the doctor in attendance. Immediate medical attention is required. 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 and keep at rest in a position comfortable for breathing. If breathing is irregular or stopped, administer artificial respiration. Do not use mouth-to-mouth method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Delayed pulmonary edema may occur. Get immediate medical advice/attention. Aspiration into lungs can produce severe lung damage. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation.	
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 immediate medical advice/attention.	
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Get immediate medical advice/attention. May cause an allergic skin reaction.	
Ingestion	Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Get immediate medical advice/attention. ASPIRATION HAZARD IF SWALLOWED - CAN ENTER LUNGS AND CAUSE DAMAGE. If vomiting occurs spontaneously, keep head below hips to prevent aspiration.	
Self-protection of the first aider	Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid contact with skin, eyes, and clothing. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation. Use personal protective equipment as required.	
Most important symptoms and effects, both acute and delayed		
Symptoms	Burning sensation. Itching. Rashes. Hives. Difficulty in breathing. Coughing and/ or wheezing. Dizziness.	
Indication of any immediate medical attention and special treatment needed		

Note to physicians	Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated. Do not give chemical antidotes. Asphyxia from glottal edema may occur. Marked decrease in blood pressure may occur with moist rales, frothy sputum, and high pulse pressure. Treat symptomatically. May cause sensitization by skin contact. Because of the danger of aspiration, emesis or gastric lavage should not be employed unless the risk is justified by the presence of additional toxic substances.	
5. FIRE FIGHTING MEASU	RES	
Suitable Extinguishing Media		
Suitable Extinguishing Media	Fine water spray. Foam. Carbon dioxide (CO2). Dry chemical.	
Unsuitable extinguishing media	No information available.	
Specific hazards arising from the c	hemical	
Specific hazards arising from the chemical	Combustible liquid. Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Corrosive. The product causes burns of eyes, skin and mucous membranes. Thermal decomposition can lead to release of irritating gases and vapors. Product is or contains a sensitizer. May cause sensitization by skin contact. 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	2X	
6. ACCIDENTAL RELEASE MEASURES		

Personal precautions, protective equipment and emergency procedures

Personal precautions	Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Take precautionary measures against static discharges. Do not touch or walk through spilled material. Attention! Corrosive material. Avoid contact with skin, eyes, and clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak.	
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	Refer to protective measures listed in Sections 7 and 8. Prevent further leakage or spillage if safe to do so. Should not be released into the environment. 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 and material for containment and cleaning up

Stop leak if you can do it without risk. Do not touch or walk through spilled material. Dike far Methods for containment

ahead of liquid spill for later disposal.

Methods for cleaning up Tal

Take precautionary measures against static discharges. 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	Use personal protection equipment. Do not breathe vapor or mist. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharges. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes, and clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.
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. Remove and wash contaminated clothing and gloves, including the inside, before re-use.
Conditions for safe storage, including	ng any incompatibilities
Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Protect from direct sunlight. Keep in properly labelled containers. Store in accordance with the particular national regulations. Store in accordance with local regulations. Keep out of the reach of children. Protect from moisture. Store locked up. Store away from other materials.
	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.
Incompatible materials	Oxidizing agents.
Poisons Schedule (SUSMP)	None allocated

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits

No value assigned for this specific material by Safe Work Australia. However, Workplace Exposure Standard(s) for constituent(s):

Biological occupational exposure limits

Chemical name	Australia	ACGIH
Turpentine (Wood)	8hr TWA = 557 mg/m³ (100 ppm), Sen	
8006-64-2		

Turpentine (wood): 8hr TWA = 557 mg/m³ (100 ppm), Sen

As published by Safe Work Australia Workplace Exposure Standards for Airborne Contaminants.

TWA - The time-weighted average airborne concentration of a particular substance when calculated over an eight-hour working day, for a five-day working week.

`Sen' Notice - sensitiser. The substance can cause a specific immune response in some people. An affected individual may subsequently react to exposure to minute levels of that substance and should not be further exposed to the substance.

These Workplace Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These workplace exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

Appropriate engineering controls

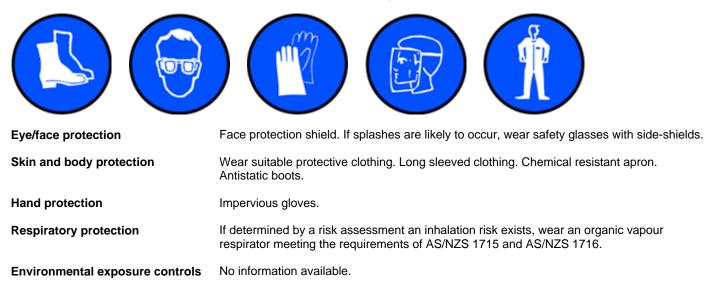
Engineering controls Apply technical measures to comply with the occupational exposure limits.

If in the handling and application of this material, safe exposure levels could be exceeded, the use of engineering controls such as local exhaust ventilation must be considered and the results documented. If achieving safe exposure levels does not require engineering controls, then a detailed and documented risk assessment using the relevant Personal Protective Equipment (PPE) (refer to PPE section below) as a basis must be carried out to determine the minimum PPE requirements.

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, CHEMICAL GOGGLES, FACE SHIELD, GLOVES (Long), APRON, RUBBER BOOTS.



9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties		
Physical state	Liquid	
Appearance	Clear	
Color	Red	
Odor	Thyme	
Odor threshold	No information available	
Property	Values	

pН

No data available

Remarks • Method None known

pH (as aqueous solution) Melting point / freezing point Boiling point / boiling range Flash point Evaporation rate Flammability (solid, gas) Flammability Limit in Air Upper flammability or explosive	No data available No data available No data available 71 °C No data available No data available No data available	None known None known CC (closed cup) None known None known None known
limits Lower flammability or explosive limits	No data available	
Vapor pressure Vapor density Relative density Water solubility Solubility(ies) Partition coefficient Autoignition temperature Decomposition temperature Kinematic viscosity Dynamic viscosity	No data available No data available 0.930 - 0.950 No data available No data available No data available No data available No data available No data available No data available	None known None known 20 °C None known None known None known None known None known None known

Other information

10. STABILITY AND REACTIVITY

Reactivity		
Reactivity	No information available.	
Chemical stability		
Stability	Stable under normal conditions.	
Explosion data Sensitivity to mechanical impact 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. Exposure to air or moisture over prolonged periods. Direct sunlight.	
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 of respiratory tract. Inhaled corrosive substances can lead to a toxic edema of the lungs. Pulmonary edema can be fatal. Aspiration into lungs can produce severe lung damage. May cause pulmonary edema.
Eye contact	Causes burns. Corrosive to the eyes and may cause severe damage including blindness. May cause irreversible damage to eyes.
Skin contact	Corrosive. Causes severe burns. May cause sensitization by skin contact. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.
Ingestion	Ingestion causes burns of the upper digestive and respiratory tracts. May cause severe burning pain in the mouth and stomach with vomiting and diarrhea of dark blood. Blood pressure may decrease. Brownish or yellowish stains may be seen around the mouth. Swelling of the throat may cause shortness of breath and choking. May cause lung damage if swallowed. May be fatal if swallowed and enters airways. Potential for aspiration if swallowed. Aspiration may cause pulmonary edema and pneumonitis.
Symptoms	Redness. Burning. May cause blindness. Coughing and/ or wheezing. Itching. Rashes. Hives. Difficulty in breathing. Dizziness.

Numerical measures of toxicity - Product Information

ATEmix (oral)	300 - 2,000 mg/kg
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Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Phenol,	= 980 mg/kg (Rat)	> 2000 mg/kg (Rat)	-
5-methyl-2-(1-methylethyl)-			
(Thymol)			
Turpentine (Wood)	= 1900 mg/kg (Rat)	-	-
Oils, Eucalyptus Citriodora	= 2480 mg/kg (Rat)	= 2480 mg/kg (Rabbit)	-

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 severe burns. Classification based on data available for ingredients.
Serious eye damage/eye irritation	Causes burns. Risk of serious damage to eyes. Classification based on data available for ingredients.
Respiratory or skin sensitization	May cause sensitization by skin contact. Classification based on data available for ingredients.
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

May be fatal if swallowed and enters airways.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity

Keep out of waterways. Toxic to aquatic life. Toxic to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Phenol,	-	LC50: =5mg/L (96h,	-	-
5-methyl-2-(1-methylethyl		Brachydanio rerio) LC50:		
)- (Thymol)		=3.2mg/L (96h,		
		Pimephales promelas)		
d-Limonene	-	LC50: 0.619 - 0.796mg/L	-	-
		(96h, Pimephales		
		promelas) LC50:		
		=35mg/L (96h,		
		Oncorhynchus mykiss)		

Persistence and degradability

Persistence and degradability No information available.

Bioaccumulative potential

Bioaccumulation

There is no data for this product.

Component Information

Chemical name	Partition coefficient
Phenol, 5-methyl-2-(1-methylethyl)- (Thymol)	3.3
1,6-Octadien-3-ol, 3,7-dimethyl- (Linalool)	3.1
d-Limonene	4.23

<u>Mobility</u>

Mobility in soil

No information available.

Other adverse effects

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues/unused	Dispose of in accordance with local regulations. Dispose of waste in accordance with
products	environmental legislation.

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	1760
Proper shipping name	CORROSIVE LIQUID, N.O.S. (CONTAINS_THYMOL)
Hazard class	8
Packing group	III
Environmental hazard	Yes
Hazchem code	2X

<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	1760
UN proper shipping name	CORROSIVE LIQUID, N.O.S. (CONTAINS THYMOL)
Transport hazard class(es)	8
Packing group	III

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	1760
UN proper shipping name	CORROSIVE LIQUID, N.O.S. (CONTAINS THYMOL)
Transport hazard class(es)	8
Packing group	III
IMDG EMS Fire	F-A
IMDG EMS Spill	S-B
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).

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) None allocated

National pollutant inventory

Subject to reporting requirement

Chemical name	National pollutant inventory
Turpentine (Wood) - 8006-64-2	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
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

International Inventories

All the constituents of this material are listed on the Australian Inventory of Industrial Chemicals or are regulated through the Food Standards Australia New Zealand (FSANZ).

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: 05-Sep-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	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
С	Carcinogen		

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 lxom 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