Product Name: **LEMON OIL** Page: **1 of 4**

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

PRODUCT NAME: LEMON OIL

OTHER NAMES: ORANGE OIL

RECOMMENDED USE: HARD SURFACE CLEANER, NATURAL SOLVENT.

SUPPLIER NAME: JAMAC SAFE & CLEAN PTY LTD (ABN 31065 516 529)

ADDRESS: 66 LOFTUS ST, RIVERSTONE NSW 2765

TELEPHONE: 02 9838 1220 OR 0438 569 315

2. HAZARDS IDENTIFICATION

Classified as Dangerous Goods according to the Australian Code for the transport of Dangerous Goods by Road or rail. Classified as hazardous according to the criteria of NOHSC.

Hazard Category: Xi Irritant

Risk phrases: R10 Flammable, R38 irritating to skin, R43 may cause sensitization by skin contact. **Safety phrases:** S2 Keep out of reach of children. S24/25 Avoid contact with skin & eyes. S26 In case of contact with eyes, rinse immediately with plenty of water and contact a doctor or Poisons Information Centre. S27 Take off immediately all contaminated clothing. S28 After contact with skin, wash immediately with plenty of water]. S36/37/39 wear suitable protective clothing, gloves, and eye/face protection. S50 Do not mix with acids, peroxides, metal salts and reducing agents.

ADG Classification: Not classified

3. COMPOSITION / INFORMATION ON INGREDIENTS

Appearance: Clear to slightly yellow, slightly hazy solution with characteristic odour.

Ingredients:

Chemical Name,
d-LimoneneCAS No
68647-72-3Proportion
95-100%

Ingredients determined to be non-hazardous.

4. FIRST AID MEASURES

Poison Information Centres in each state can provide additional assistance for scheduled poisons. Phone 131126 from anywhere in Australia

Inhalation: Remove the affected person to fresh air. Ensure airways are clear and if breathing is difficult have a qualified person give oxygen through a face mask. Seek medical attention.

Ingestion:

Rinse mouth with water. Do not induce vomiting. Seek medical advice.

Eye Contact:

Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for AT LEAST 15 minutes, by the clock, holding the eyelid(s) open. Take care not to rinse contaminated water into the non-affected eye. If irritation persists, repeat flushing. If available, a neutral saline solution may be used to flush the contaminated eye(s) an additional 30 minutes. Obtain medical attention immediately.

Skin Contact:

Remove heavily contaminated clothing. Wash affected area with soap and running water. If irritation persists, seek medical attention immediately.

First Aid Facilities: Eye wash fountains and safety showers should be available for emergency use.

Notes to physician: Treat symptomatically.

5. FIRE FIGHTING METHODS

Product Name: **LEMON OIL**

Hazards from Combustion Products

On burning will emit toxic or irritating fumes. Heating can cause expansion or decomposition leading to violent rupture of containers.

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Specific Methods:

Fire fighters to wear self-contained breathing apparatus if risk of exposure to vapour or products of combustion. Keep containers cool with water spray.

Specific Hazards:

Flammable liquid. May form flammable vapour mixtures with air. Vapour may travel a considerable distance to source of ignition and flash back.

Suitable Extinguishing media:

Foam, dry agent (carbon dioxide, dry chemical powder).

Hazchem Code: 3Y

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures

Shut off all sources of ignition. Slippery when spilt. Avoid accidents-clean up immediately. Wear appropriate protective equipment to prevent skin and eye contamination and breathing in vapour. Contain- prevent product from entering waterways. Soak up with suitable absorbent. Collect in labelled containers for disposal. Advise local authority if contamination of waterways occurs.

7. HANDLING AND STORAGE

Precaution for Safe Handling

Avoid skin and eye contact and breathing in vapour. Use away from all sources of heat and ignition. Do Not smoke. Flameproof equipment is necessary in areas where this product is used. Take precautionary measures against static discharges.

Conditions for Safe Storage

Store in a cool area, out of direct sunlight, store away from heat and sources of ignition, strong acids, chlorate, perchlorates, chromates and dichromate, nitrates, and other oxidising agents. The quality of this product is best preserved by storing under cool condition (below 27c)

Storage Regulations

Store in accordance with AS1940- The storage and handling of flammable and combustible liquids.

.8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Standards: No exposure standards have been established for the mixture by the Australian National Occupational Health & Safety Commission.

Engineering Controls:

Use in a well-ventilated area. Exhaust ventilation may be necessary in poorly ventilated area and confined spaces. Vapour heavier than air--prevent concentration in hollows or sumps. Do Not enter confined spaces where vapour may have collected, keep containers closed when not in use.

Respiratory protection:

If engineering controls and work practices are not effective in controlling exposure to this material, then wear suitable personal protective equipment including approved respiratory protection.

Eye Protection

Safety glasses with side shields or goggles should be worn as described in Australian Standard AS/ANZ 1337-Eye Protectors for industrial applications.

Hand Protection

Wear Laminated film, Nitrile or other suitable gloves confirming to AS/NZS 2161(Occupational protective gloves).

Product Name: Lemon Oil

Personal Protective Equipment

Avoid skin and eye contact and inhalation of vapour. Wear overalls, chemical goggles, and impervious gloves. Use with adequate ventilation. If inhalation risk exists wear organic vapour respirator meeting the requirement of AS/NZS 1715 and AS/NZS 2161.

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Safety goggles should be selected and fitted in accordance with Australian Standard Industrial clothing should confirm to the specifications detailed in AS 1336.

Industrial clothing should conform to the specifications detailed in AS2919. Impermeable gloves should conform to AS 2161.

Hygiene Measures

Ensure a high level of personal hygiene is maintained when using this product. Always wash hands before eating, drinking, smoking, or using the toilet.

9. PHYSICAL AND CHEMICAL PROPERTIES:

Appearance: Clear, colourless to yellow liquid with strong citrus odour.

Specific Gravity: approx 0.84

Flash Point: Non-combustible (does not burn)

Flammability limits Non-flammable PH (1% solution) not available

Solubility in water: 13.8mg/L at 25 degree Melting Point: -74degree to -97 degree Boiling Point: 175 to 178 degrees

Vapour Density: 4.73

Vapour Pressure: 1.4mmHg at 20 degree

Viscosity: 1.28cSt at 20 degree Flammability: Flammable liquid.

10. STABILITY AND REACTIVITY

Chemical Stability

Stable under normal conditions of storage and handling.

Incompatible Materials

Strong acids and strong oxidising agents such as chlorates, perchlorates, nitrates, chromate and dichromate.

Hazardous Reactions

Hazardous reactions with strong oxidisers, strong acids, and polymerisation catalysts such as aluminium chloride and acidic clays.

Hazardous Polymerization

Will not occur.

11. TOXICOLOGICAL INFORMATION

Toxicology Information:

LD50 (Oral, Rat): 4400-5100mg/kg LD50 (Dermal, Rabbit): >5000mg/kg LD50 (Oral, Mouse): 5600-6600mg/kg

Sensitisation: The auto-oxidation products are skin sensitisers.

Acute Effects:

Ingestion:

Ingestion may cause irritation to the gastrointestinal tract, nausea and vomiting.

Eye contact:

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May be irritating to eyes. Eye contact may cause stinging, blurring and tearing.

Skin contact:

Irritating to skin. Symptoms can include redness, itching, possible dermatitis. May cause sensitisation by skin contact.

Inhalation:

Irritation of the nose, throat and lungs would occur due to the corrosive nature of sodium hypochlorite. However, there are no actual reports of industrial workers exposed to sodium hypochlorite experiencing these symptoms.

Long term Effects:

Repeated or prolonged exposure can cause drying, defatting of skin and can lead to dermatitis.

12. ECOLOGICAL INFORMATION

ECOTOXICITY: Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

PERSISTENCE AND DEGRADABILITY:

Biodegradability: 100% in 28 days.

MOBILITY: No information available.

Environmental Protection: Avoid contaminating drains or waterways.

13. DISPOSAL CONSIDERATIONS

Disposal Considerations: Disposal of the spilled or waste material must be done in accordance with applicable local, state and federal regulations.

14. TRANSPORT INFORMATION

UN No: 2319

Proper shipping name: Terpene Hydrocarbons, N.O.S.

DG Class: 3 Packing Group: III Hazchem Code: 3Y

IEPG: 15

Segregation Dangerous Goods: This product is classified as Marine Pollutant according to the IMDG code.

15. REGULATORY INFORMATION

Classified as hazardous according to the criteria of NOHS. Not classified as a Scheduled Poison according to the standard for the uniform scheduling of drugs and Poisons.

Poisons Schedule Not Scheduled

Hazard Category: Irritant, Dangerous for the environment, Flammable, Sensitising.

This material is listed on the Australian Inventory of Chemical Substances.

16. OTHER INFORMATION

MSDS ISSUE DATE: JANUARY 2024