1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name: OIL OF CLOVE LEAF

Other name(s): Clove Leaf Oil Redistilled 85%; Clove Leaf Oil Min 85% Rectified BP 1998; Oil of Clove Leaf 80/85% Rectified; Clove Leaf Oil Rectified; AACL085570

Recommended Use of the Chemical Flavour and fragrance ingredient.

and Restrictions on Use

Supplier: Ixom Operations Pty Ltd (Bronson & Jacobs division) - incorporated in Australia
ABN: 51 600 546 512
Street Address: 70 Marple Avenue
             Villawood NSW 2163
             Australia
Telephone Number: +61 2 8717 2929
Facsimile: +61 2 9755 9611
Emergency Telephone: 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

Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS.

This material is hazardous according to Safe Work Australia; HAZARDOUS CHEMICAL.

Classification of the chemical:
Aspiration hazard - Category 1
Skin Sensitisation - Category 1
Eye Irritation - Category 2A

The following health/environmental hazard categories fall outside the scope of the Workplace Health and Safety Regulations:
Acute Oral Toxicity - Category 5
Acute Dermal Toxicity - Category 5
Skin corrosion/irritation - Category 3
Acute Aquatic Toxicity - Category 2

SIGNAL WORD: DANGER

Hazard Statement(s):
H304 May be fatal if swallowed and enters airways.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
Precautionary Statement(s):

Prevention:
P261 Avoid breathing mist, vapours, spray.
P264 Wash hands thoroughly after handling.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves / protective clothing / eye protection / face protection.

Response:
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P331 Do NOT induce vomiting.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 If eye irritation persists: Get medical advice/attention.
P321 Specific treatment (see First Aid Measures on Safety Data Sheet).
P363 Wash contaminated clothing before re-use.

Storage:
P405 Store locked up.

Disposal:
P501 Dispose of contents and container in accordance with local, regional, national, international regulations.

Poisons Schedule (SUSMP): S6 Poison.

3. COMPOSITION AND INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS Number</th>
<th>Proportion</th>
<th>Hazard Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clove, leaf oil</td>
<td>8000-34-8</td>
<td>100%</td>
<td>H303, H304, H313, H316, H317, H319, H401</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

For advice, contact a Poisons Information Centre (e.g. phone Australia 131 126; New Zealand 0800 764 766) or a doctor at once. Urgent hospital treatment is likely to be needed.

Inhalation:
Remove victim from area of exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. Seek medical advice if effects persist.

Skin Contact:
If skin or hair contact occurs, immediately remove any contaminated clothing and wash skin and hair thoroughly with running water and soap. If swelling, redness, blistering or irritation occurs seek medical assistance.

Eye Contact:
If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre or a doctor, or for at least 15 minutes.
Safety Data Sheet

Ingestion:
Rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water. Never give anything by the mouth to an unconscious patient. Get to a doctor or hospital quickly.

Indication of immediate medical attention and special treatment needed:
Treat symptomatically. Delayed pulmonary oedema may result.

5. FIRE FIGHTING MEASURES

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:
Water.

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

Special protective equipment and precautions for fire-fighters:
Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion. Keep containers cool with water spray.

6. ACCIDENTAL RELEASE MEASURES

Emergency procedures/Environmental precautions:
Shut off all possible sources of ignition. Clear area of all unprotected personnel. If contamination of sewers or waterways has occurred advise local emergency services.

Personal precautions/Protective equipment/Methods and materials for containment and cleaning up:
Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contact and breathing in vapours. Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labelled containers or drums for disposal.

7. HANDLING AND STORAGE

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 S6 and must be stored, maintained and used in accordance with the relevant regulations.

Precautions for safe handling:
Avoid skin and eye contact and breathing in vapour, mists and aerosols. Keep out of reach of children.

Conditions for safe storage, including any incompatibilities:
Store in a cool, dry, well ventilated place and out of direct sunlight. Store away from sources of heat or ignition. Store away from foodstuffs. Store away from incompatible materials described in Section 10. Keep containers closed when not in use - check regularly for leaks.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Product Name: OIL OF CLOVE LEAF
Substance No: 000000032958
Issued: 28/03/2017
Version: 4

Page 3 of 7
Control Parameters: No value assigned for this specific material by Safe Work Australia.

Appropriate engineering controls:
Use in well ventilated areas. If inhalation risk exists: Use with local exhaust ventilation or while wearing organic vapour/particulate respirator. Keep containers closed when not in use.

Individual protection measures, such as Personal Protective Equipment (PPE):
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.

Wear overalls, chemical goggles and impervious gloves. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. If determined by a risk assessment an inhalation risk exists, wear an organic vapour/particulate respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Clear Liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>Colourless to Light Yellow / Orange, darkens with age, darkens with exposure to air</td>
</tr>
<tr>
<td>Odour</td>
<td>Dry, Sweet, Warm, Pungent, Spicy</td>
</tr>
<tr>
<td>Odour Threshold</td>
<td>Not available</td>
</tr>
<tr>
<td>Solubility</td>
<td>Insoluble in water. Soluble in alcohol, ether, and oil.</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.02 - 1.05 @ 20°C</td>
</tr>
<tr>
<td>Relative Vapour Density (air=1)</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapour Pressure (20 °C)</td>
<td>Not available</td>
</tr>
<tr>
<td>Flash Point (°C)</td>
<td>&gt;=109</td>
</tr>
<tr>
<td>Flammability Limits (%)</td>
<td>Not available</td>
</tr>
<tr>
<td>Autoignition Temperature (°C)</td>
<td>Not available</td>
</tr>
<tr>
<td>Melting Point/Range (°C)</td>
<td>Not available</td>
</tr>
<tr>
<td>Boiling Point/Range (°C)</td>
<td>250</td>
</tr>
<tr>
<td>Decomposition Point (°C)</td>
<td>Not available</td>
</tr>
<tr>
<td>pH</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not available</td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>Not available</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

Reactivity: No hazardous reactions if stored and handled as prescribed/indicated.

Chemical stability: Stable under normal conditions of use.
Safety Data Sheet

Possibility of hazardous reactions: Hazardous polymerisation will not occur.

Conditions to avoid: Avoid exposure to heat, sources of ignition, and open flame.

Incompatible materials: Incompatible with oxidising agents.

Hazardous decomposition products: Oxides of carbon.

11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

Ingestion: Swallowing may result in nausea, vomiting, diarrhoea and abdominal pain. Swallowing can result in nausea, vomiting and central nervous system depression. If the victim is showing signs of central system depression (like those of drunkeness) there is greater likelihood of the patient breathing in vomit and causing damage to the lungs. Breathing in vomit may lead to aspiration pneumonia (inflammation of the lung).

Eye contact: An eye irritant.

Skin contact: Contact with skin will result in mild irritation. A skin sensitiser. Repeated or prolonged skin contact may lead to allergic contact dermatitis.

Inhalation: Material may be irritant to the mucous membranes of the respiratory tract (airways).

Acute toxicity:
Average Toxicity Estimate (ATE mix, oral): >2,000 mg/kg (1)

Skin corrosion/irritation: Mild irritant.
Serious eye damage/irritation: Irritant.
Respiratory or skin sensitisation: A skin sensitiser.

Chronic effects: No information available for the product.

Mutagenicity: Not classified.
Carcinogenicity: Not classified.
Reproductive toxicity: Not classified.
Specific Target Organ Toxicity (STOT) - single exposure: Not classified.
Specific Target Organ Toxicity (STOT) - repeated exposure: Not classified.
Aspiration hazard: May be fatal if swallowed and enters airways.

12. ECOLOGICAL INFORMATION

Product Name: OIL OF CLOVE LEAF
Substance No: 000000032958

 Issued: 28/03/2017
Version: 4
Ecotoxicity: Avoid contaminating waterways.

Persistence/degradability: No information available.

Bioaccumulative potential: No information available.

Mobility in soil: No information available.

Aquatic toxicity: Toxic to aquatic organisms.

13. DISPOSAL CONSIDERATIONS

Disposal methods:
Refer to Waste Management Authority. Dispose of contents and container in accordance with local, regional, national, international regulations. Normally suitable for incineration by an approved agent.

14. TRANSPORT INFORMATION

Road and Rail Transport
Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS.

Marine Transport
Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; NON-DANGEROUS GOODS.

Air Transport
Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; NON-DANGEROUS GOODS.

15. REGULATORY INFORMATION

Classification:
This material is hazardous according to Safe Work Australia; HAZARDOUS CHEMICAL.

Classification of the chemical:
Aspiration hazard - Category 1
Skin Sensitisation - Category 1
Eye Irritation - Category 2A

The following health/environmental hazard categories fall outside the scope of the Workplace Health and Safety Regulations:
Acute Oral Toxicity - Category 5
Acute Dermal Toxicity - Category 5
Skin corrosion/irritation - Category 3
Acute Aquatic Toxicity - Category 2

Hazard Statement(s):
H304 May be fatal if swallowed and enters airways.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
16. OTHER INFORMATION

(1) Supplier Safety Data Sheet; 02/ 2016.

This safety data sheet has been prepared by Ixom Operations Pty Ltd Toxicology & SDS Services.

Reason(s) for Issue:
Revised Primary SDS
Change to Product Name
Addition/Change of synonymous name(s)
Change in Hazardous Chemical Classification
Change in First Aid Measures
Change in Physical Properties
Update in Toxicological Information
Change in Ecological Information

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.