SAFETY DATA SHEET
CARDAMON TINCTURE COMPOUND

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY:

PRODUCT NAME: CARDAMON TINCTURE COMPOUND
PART No.: RM321
SUPPLIER: J M Loveridge plc
Southbrook Road, Southampton
Hampshire
SO15 1BH
Tel: 023 8022 2008
Fax: 023 8022 2117

2. COMPOSITION/INFORMATION ON INGREDIENTS:

<table>
<thead>
<tr>
<th>NAME</th>
<th>EINECS Nr.:</th>
<th>CLASSIFICATION</th>
<th>CONTENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETHANOL</td>
<td>200-578-6</td>
<td>F R-11</td>
<td>30-60 %</td>
</tr>
</tbody>
</table>

The Full Text for all R-Phrases are Displayed in Section 16

3. HAZARDS IDENTIFICATION:

Flammable.

4. FIRST AID MEASURES:

GENERAL: IN ALL CASES OF DOUBT OR WHEN SYMPTOMS PERSIST, ALWAYS SEEK MEDICAL ATTENTION

INHALATION: Move affected person to fresh air. If recovery not rapid, seek medical attention. If breathing stops, provide artificial respiration. Keep affected person warm and at rest.

INGESTION: DO NOT INDUCE VOMITING. In case of spontaneous vomiting, be sure that vomit can freely drain because of danger of suffocation. Only when conscious, rinse mouth with plenty of water and give plenty of water to drink - (approx. 500ml). Keep patient at rest and obtain medical attention.

SKIN: Remove contaminated clothing. Wash affected area with plenty of soap and water. If irritation persists, seek medical attention.

EYES: Rinse immediately with plenty of water for at least 5 minutes while lifting the eye lids. Seek medical attention. Continue to rinse.
5. FIRE FIGHTING MEASURES:

EXTINGUISHING MEDIA: Dry chemicals, sand, dolomite etc. Halon. Powder, foam or CO2.
UNUSUAL FIRE & EXPLOSION HAZARDS: May explode when heated or when exposed to flames or sparks.
HAZARDOUS COMBUSTION PRODUCTS: Burning will produce oxides of carbon.
PROTECTIVE MEASURES IN FIRE: Fire fighters should wear self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES:

PERSONAL PRECAUTION IN SPILL: Do not breathe vapour or fumes. Avoid direct contact with skin, eyes and clothing. Wear appropriate protective clothing. Eliminate all sources of ignition. Ventilate area to dispel residual vapour or fumes.
PRECAUTIONS TO PROTECT ENVIRONMENT: Prevent contamination of soil, drains and surface water.
SPILL CLEANUP METHODS: Take-up spillage with absorbent, inert material and place in a suitable and closable labelled container for recovery or disposal. Wash the area clean with water and detergent, observing environmental requirements.

7. HANDLING AND STORAGE:

USAGE PRECAUTIONS: HANDLING - Product should be used in accordance with good industrial principles for handling and storing of hazardous chemicals. Spillages will create a fire hazard. Avoid vapour formation and ignition sources. Ensure good ventilation and local exhaust extraction in work place.
STORAGE PRECAUTIONS: Store in a cool, dry, well ventilated place, in securely closed original container. Avoid direct sunlight.
STORAGE CRITERIA: Flammable liquid storage.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION:

<table>
<thead>
<tr>
<th>INGREDIENT NAME:</th>
<th>CAS No.:</th>
<th>STD</th>
<th>LT EXP 8 Hrs</th>
<th>ST EXP 15 Min</th>
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<tbody>
<tr>
<td>ETHANOL</td>
<td>64-17-5</td>
<td>OES</td>
<td>1000 ppm</td>
<td>No std.</td>
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</table>

INGREDIENT COMMENTS: Refer to the current edition of HSE Guidance Note EH 40/200* for occupational exposure limits;
VENTILATION: Work in a fume cupboard or use local exhaust ventilation. Respiratory protection required in insufficiently ventilated working areas.
PROTECTIVE GLOVES: Use impervious gloves made of butyl rubber or PVC.
EYE PROTECTION: Approved chemical safety goggles or face protection.
OTHER PROTECTION: Wear personal protective equipment appropriate to the quantity of material handled.
HYGIENIC WORK PRACTICES: SKIN PROTECTION - use appropriate barrier cream to prevent defatting and cracking of skin.
9. PHYSICAL AND CHEMICAL PROPERTIES:

**APPEARANCE:** Clear red mobile liquid with aromatic odour.

**DENSITY/SPECIFIC GRAVITY (g/ml):** 0.925 - 0.937

**SOLUBILITY DESCRIPTION:** Miscible with water.

**FLASH POINT (°C):** ~ 24

**Method:** CC (Closed cup).

10. STABILITY AND REACTIVITY:

**STABILITY:** Stable under normal conditions of use.

**CONDITIONS TO AVOID:** Avoid heat, flames and other sources of ignition. Avoid vapour formation.

**MATERIALS TO AVOID:** Oxidising agents. Nitric acid.

**HAZARDOUS DECOMP. PRODUCTS:** Thermal decomposition or burning will release oxides of carbon.

11. TOXICOLOGICAL INFORMATION:

**HEALTH HAZARDS, GENERAL:** Intoxicating if inhaled or ingested.

**INHALATION:** Exposure to high vapour concentration may cause central nervous system depression.

**INGESTION:** May cause nausea, vomiting, dizziness and depression of CNS.

**SKIN:** Repeated or prolonged contact may cause mild irritation and/or drying (defatting) of skin.

**EYES:** May cause eye irritation, burning sensation or lacrymation.

**OTHER HEALTH EFFECTS:** For ethanol component of the preparation, adverse effects on male reproductive system have been reported in laboratory animals on prolonged exposure.

**ROUTE OF ENTRY:** Inhalation.

12. ECOLOGICAL INFORMATION:

**MOBILITY:** Water soluble, will partition to aqueous phase. Lost within short period through evaporation and dissolution. Poorly absorbed onto soils or sediments.

**BIO ACCUMULATION:** Low bioaccumulation potential.

**DEGRADABILITY:** Readily biodegradable.

13. DISPOSAL CONSIDERATIONS:
DISPOSAL METHODS:
This material and/or its container must be disposed of as hazardous waste according to Special Waste Regulations 1996 or according to local regulations, in compliance with Duty of Care Regulations and Special Waste Regulations.

WASTE CLASS:
WASTE CODE: 0705** HAZARDOUS PROPERTY: H3-B

14. TRANSPORT INFORMATION:

UK ROAD PACK GR.: III
ADR CLASS No.: 3
ADR CLASS: Class 3: Flammable liquids.
ADR ITEM No.: 31°(c)
HAZARD No. (ADR): 30 Flammable liquid (flash-point between 23°C and 61°C, inclusive) or flammable liquid or solid in the molten state with a flash-point above 61°C, heated to a temperature equal to or above its flash-point, or self heating liquid.
ADR MARGINAL: 2301
ADR LABEL No.: 3
HAZCHEM CODE: 3Y

PROPER SHIPPING NAME I: FLAMMABLE LIQUID, NOS
PROPER SHIPPING NAME II: Technical name - (contains ethanol)
UN No. SEA: UN 1993
IMDG CLASS: 3.3
IMDG PAGE No.: 3345
IMDG PACK GR.: III
MARINE POLLUTANT: No.
UN No., AIR: UN-ID 1993
ICAO CLASS: 3
AIR PACK GR.: III

15. REGULATORY INFORMATION:

RISK PHRASES: R-10 Flammable.
SAFETY PHRASES: S-51 Use only in well ventilated areas.

16. OTHER INFORMATION:

INFORMATION SOURCES: This product has been classified in accordance with CHIP3 regulations.
REVISION COMMENTS: Edition 01; Revised item(s):
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<th>ISSUED BY:</th>
<th>MK</th>
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<tbody>
<tr>
<td>SDS No.:</td>
<td>561</td>
</tr>
<tr>
<td>DATE:</td>
<td>12/07/02</td>
</tr>
<tr>
<td>DISCLAIMER:</td>
<td>The foregoing data has been compiled for safety information only and does not form part of any selling specification. Information contained in this Data Sheet is to the best of JMLs knowledge correct at the time of publication. Customers should always satisfy themselves, that the product which they have selected is entirely suitable for their purpose under their conditions of use and in compliance with current regulations. For any further information, please contact the supplier.</td>
</tr>
<tr>
<td>R-PHRASES (Full Text):</td>
<td>R-11 Highly flammable.</td>
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