SAFETY DATA SHEET

MOSI-GUARD NATURAL SPRAY

According to Regulation (EC) No 1907/2006

1 IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

PRODUCT NAME MOSI-GUARD NATURAL SPRAY 100mls
APPLICATION Insect repellent
SUPPLIER Citrefine International Limited
Moorfield Road
Yeadon
Leeds, LS19 7BN
UK
Tel: +44 (0) 113 238 7502
Fax: +44 (0) 113 238 7503
Email: enquiries@citrefine.com

2 HAZARDS IDENTIFICATION

Flammable. Irritating to eyes.

CLASSIFICATION Xi; R36 R10.

PHYSICAL & CHEMICAL HAZARDS When sprayed on a naked flame or any incandescent material the mist/vapours can be ignited.

HUMAN HEALTH Irritating to eyes. Spray mists may cause respiratory tract irritation.

3 COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Name</th>
<th>EC No.</th>
<th>CAS-No.</th>
<th>Content</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS- AND TRANS-P-MENTHANE-3,8-DIOL MIXTURE</td>
<td>255-953-7</td>
<td>42822-86-6</td>
<td>30 - 50%</td>
<td>Xi; R36</td>
</tr>
<tr>
<td>ETHANOL</td>
<td>200-578-6</td>
<td>64-17-5</td>
<td>20 - 40%</td>
<td>F; R11</td>
</tr>
<tr>
<td>PROPAN-2-OL</td>
<td>200-661-7</td>
<td>67-63-0</td>
<td>5 – 20%</td>
<td>F; R11 Xi; R36 R67</td>
</tr>
</tbody>
</table>

The full text for all R-phrases are displayed in Section 16
## 4 FIRST-AID MEASURES

<table>
<thead>
<tr>
<th>INHALATION</th>
<th>May cause nausea, headache, dizziness and intoxication. Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.</th>
</tr>
</thead>
<tbody>
<tr>
<td>INGESTION</td>
<td>May cause discomfort if swallowed. May cause nausea, headache, dizziness and intoxication. Rinse mouth thoroughly. Do not induce vomiting. Get medical attention.</td>
</tr>
<tr>
<td>SKIN CONTACT</td>
<td>Not relevant.</td>
</tr>
<tr>
<td>EYE CONTACT</td>
<td>Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Contact physician if irritation persists.</td>
</tr>
</tbody>
</table>

## 5 FIRE-FIGHTING MEASURES

<table>
<thead>
<tr>
<th>EXTINGUISHING MEDIA</th>
<th>Extinguish with alcohol resistant foam, carbon dioxide, dry powder or water fog. Do not use water jet as an extinguisher, as this will spread the fire.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPECIAL FIRE FIGHTING PROCEDURES</td>
<td>Avoid breathing fire vapours. Fight advanced or massive fires from safe distance or protected location.</td>
</tr>
<tr>
<td>SPECIFIC HAZARDS</td>
<td>Fire creates: Carbon monoxide (CO). Carbon dioxide (CO2).</td>
</tr>
<tr>
<td>PROTECTIVE MEASURES IN FIRE</td>
<td>Self contained breathing apparatus and full protective clothing must be worn in case of fire.</td>
</tr>
</tbody>
</table>

## 6 ACCIDENTAL RELEASE MEASURES

<table>
<thead>
<tr>
<th>PERSONAL PRECAUTIONS</th>
<th>Wear protective clothing as described in Section 8 of this safety data sheet.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPILL CLEAN UP METHODS</td>
<td>Extinguish all ignition sources. Avoid sparks, flames, heat &amp; smoking. Ventilate. Stop leak if possible without risk. Absorb with sand or other inert absorbent. Collect in containers and seal securely. Containers with collected spillage must be properly labelled with correct contents and hazard symbol.</td>
</tr>
</tbody>
</table>

## 7 HANDLING AND STORAGE

<table>
<thead>
<tr>
<th>USAGE PRECAUTIONS</th>
<th>Read and follow manufacturer's recommendations. Keep away from heat, sparks and open flame. Avoid contact with eyes. Avoid inhalation of vapours and spray mists. Use only in well ventilated areas.</th>
</tr>
</thead>
<tbody>
<tr>
<td>STORAGE PRECAUTIONS</td>
<td>Keep away from heat, sparks and open flame. Keep above the chemical’s freezing point. Store in tightly closed original container in a dry, cool and well-ventilated place. Keep out of the reach of children.</td>
</tr>
<tr>
<td>STORAGE CLASS</td>
<td>Flammable liquid storage.</td>
</tr>
</tbody>
</table>
### 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>Name</th>
<th>Std</th>
<th>LT - ppm</th>
<th>LT - mg/m³</th>
<th>ST - ppm</th>
<th>ST - mg/m³</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETHANOL</td>
<td>WEL</td>
<td>1000 ppm</td>
<td>1920 mg/m³</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PROPAN-2-OL</td>
<td>WEL</td>
<td>400 ppm</td>
<td>999 mg/m³</td>
<td>500 ppm</td>
<td>1250 mg/m³</td>
</tr>
</tbody>
</table>

**INGREDIENT COMMENTS**  
WEL = Workplace Exposure Limits

**EYE PROTECTION**  
Avoid contact with eyes.

**HYGIENE MEASURES**  
When using do not eat, drink or smoke.

### 9 PHYSICAL AND CHEMICAL PROPERTIES

**APPEARANCE**  
Liquid

**COLOUR**  
Pale yellow

**RELATIVE DENSITY**  
0.89 – 0.91

**FLASH POINT (°C)**  
26°C

### 10 STABILITY AND REACTIVITY

**STABILITY**  
Stable under normal temperature conditions and recommended use

**CONDITIONS TO AVOID**  
Avoid exposing to heat and contact with strong oxidising substances.

### 11 TOXICOLOGICAL INFORMATION

**INHALATION**  
Spray mists may cause respiratory tract irritation. Drowsiness, dizziness, disorientation, vertigo.

**INGESTION**  
May cause discomfort if swallowed. May cause nausea, headache, dizziness and intoxication.

**SKIN CONTACT**  
No specific health warnings noted.

**EYE CONTACT**  
Irritating to eyes.

<table>
<thead>
<tr>
<th>Name</th>
<th>Toxic Dose 1 – LD 50</th>
<th>Toxic Conc. – LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>ETHANOL</td>
<td>5,840 mg/kg (oral rat)</td>
<td>32,000 ppm/4h (inh-rat)</td>
</tr>
<tr>
<td>PROPAN-2-OL</td>
<td>4570 mg/kg (oral rat)</td>
<td>13400 mg/kg (derm rab)</td>
</tr>
<tr>
<td>CIS AND TRANS P-MENTHANE-3,8-DIOL MIXTURE</td>
<td>30 mg/1/4h (inh-rat)</td>
<td></td>
</tr>
<tr>
<td>ETHANOL</td>
<td>&gt; 2g/kg (oral rat)</td>
<td></td>
</tr>
</tbody>
</table>
12 ECOLOGICAL INFORMATION

ECOTOXICITY
The product is not expected to be hazardous to the environment

13 DISPOSAL CONSIDERATIONS

DISPOSAL METHODS
Dispose of waste and residues in accordance with local authority requirements. Recover and reclaim or recycle if practical.

14 TRANSPORT INFORMATION

GENERAL
The information shown in this section is for the product as described. For limited quantity packaging / limited load information, please consult the relevant modal documentation using this data.

UK ROAD CLASS
3

PROPER SHIPPING NAME
Alcohols, N.O.S. (ETHANOL, PROPAN-2-OL)

UN NO. ROAD
1987
UK ROAD PACK GR.
III

ADR CLASS NO.
3
ADR CLASS
Class 3: Flammable liquids.

ADR PACK GROUP
III
HAZARD NO. (ADR)
30

ADR LABEL NO.
3
HAZCHEM CODE
3Y

CEFIC TEC ® NO.
30GF1-III
RID CLASS NO.
3

RID PACK GROUP
III
UN NO. SEA
1987

IMDG CLASS
3
IMDG PACK GR.
III

EMS
F-E, S-D
MARINE POLLUTANT
No

UN NO. AIR
1987
AIR CLASS
3

AIR PACK GR.
III

15 REGULATORY INFORMATION

LABELLING

Irritant
RISK PHRASES
R10 Flammable
R36 Irritating to eyes

SAFETY PHRASES
S2 Keep out of the reach of children
S23 Do not breathe vapour/spray
S25 Avoid contact with eyes
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
S46 If swallowed, seek medical advice immediately and show this container or label
S51 Use only in well-ventilated areas.

EU DIRECTIVES

STATUTORY INSTRUMENTS
Chemicals (Hazard Information and Packaging) Regulations.

APPROVED CODE OF PRACTICE
Classification and Labelling of Substances and Preparations Dangerous for Supply.

GUIDANCE NOTES
Workplace Exposure Limits EH40.

16 OTHER INFORMATION

REV. NO. / REPL. SDS GENERATED 1/07-2007

RISK PHRASES IN FULL
R11 Highly flammable
R36 Irritating to eyes
R67 Vapours may cause drowsiness and dizziness.