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

Product identifier

Product Code(s) LemVerbena
Product Name Lemon Verbena
Other means of identification
CAS No Mixture
Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Fragrances
Uses advised against No information available

Details of the supplier of the safety data sheet

Manufacturer Rustic Escentuals
1050 Canaan Road, Roebuck, SC 29376 USA
TechSupport@RusticEscentuals.com
Tel: 864-582-9335 Fax: 864-582-9334

Emergency telephone number

Emergency Telephone Chemtrec 1-800-424-9300 / International +1 703-527-3887
Customer Contact Number: 227771

2. HAZARDS IDENTIFICATION

Classification
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Skin corrosion/irritation - Category 2
Serious eye damage/eye irritation - Category 2A
Skin sensitization - Category 1B
Specific target organ toxicity (single exposure) - Category 2
Aspiration toxicity - Category 1
Physical hazards - Flammable liquids - Category 3

Label elements

Signal word - Danger

Hazard statements
Causes skin irritation
Causes serious eye irritation
May cause an allergic skin reaction
May cause damage to organs
May be fatal if swallowed and enters airways
Flammable liquid and vapor

Precautionary Statements
Wash face, hands and any exposed skin thoroughly after handling
Contaminated work clothing must not be allowed out of the workplace
Do not breathe dust/fume/gas/mist/vapors/spray
Do not eat, drink or smoke when using this product
Keep away from heat/sparks/open flames/hot surfaces. - No smoking
Keep container tightly closed
Ground/bond container and receiving equipment
Use explosion-proof electrical/ventilating/ lighting/ equipment
Use only non-sparking tools
Take precautionary measures against static discharge
Wear protective gloves/eye protection/face protection
Specific treatment (see .? on this label)
IF exposed or concerned: Call a POISON CENTER or doctor
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention
If skin irritation or rash occurs: Get medical advice/attention
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
Wash contaminated clothing before reuse
IF SWALLOWED: Immediately call a POISON CENTER or doctor
Do NOT induce vomiting
In case of fire: Use CO2, dry chemical, or foam to extinguish

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

Hazards not otherwise classified (HNOC)
Not applicable

Other Information
May be harmful if swallowed May be harmful in contact with skin Toxic to aquatic life with long lasting effects Toxic to aquatic life

Unknown acute toxicity 0 % of the mixture consists of ingredient(s) of unknown toxicity

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Substance</th>
<th>Appearance</th>
<th>Physical State @20°C</th>
<th>Odor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>clear liquid</td>
<td>liquid</td>
<td>Characteristic</td>
</tr>
</tbody>
</table>
### Chemical name | CAS No | Weight-% | Trade secret
---|---|---|---
ORANGE TERPENES | 68647-72-3 | 50 - 60 | *
CITRAL | 5392-40-5 | 20 - 30 | *
CITRONELLOL | 106-22-9 | 1 - 10 | *
LINALYL ACETATE | 115-95-7 | 1 - 10 | *
BETA PINENE | 18172-67-3 | 1 - 10 | *
LINALOOL | 78-70-6 | 1 - 10 | *

*The exact percentage (concentration) of composition has been withheld as a trade secret.

### 4. FIRST AID MEASURES

**Description of first aid measures**

**Inhalation**
Remove to fresh air.

**Eye contact**
Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

**Skin contact**
Wash skin with soap and water.

**Ingestion**
Clean mouth with water and drink afterwards plenty of water.

**Most important symptoms and effects, both acute and delayed**

**Symptoms**
No information available.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians**
Treat symptomatically.

### 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media**
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable extinguishing media**
CAUTION: Use of water spray when fighting fire may be inefficient.

**Specific hazards arising from the chemical**
No information available.

**Explosion data**
- **Sensitivity to Mechanical Impact**: None.
- **Sensitivity to Static Discharge**: None.

**Special protective equipment for fire-fighters**
Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions**
Ensure adequate ventilation.

**Environmental precautions**
Environmental precautions  See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for containment  Prevent further leakage or spillage if safe to do so.
Methods for cleaning up  Pick up and transfer to properly labeled containers.
Prevention of secondary hazards  Clean contaminated objects and areas thoroughly observing environmental regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling  Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Conditions  Keep containers tightly closed in a dry, cool and well-ventilated place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits  The following ingredients are the only ingredients of the product above the cut-off level (or level that contributes to the hazard classification of the mixture) which have an exposure limit applicable in the region for which this safety data sheet is intended or other recommended limit. At this time, the other relevant constituents have no known exposure limits from the sources listed here.

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>CITRAL 5392-40-5</td>
<td>TWA: 5 ppm inhalable fraction and vapor S*</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Appropriate engineering controls

Engineering controls  Showers  Eyewash stations  Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection  No special protective equipment required.
Skin and body protection  No special protective equipment required.
Respiratory protection  No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
General hygiene considerations  Handle in accordance with good industrial hygiene and safety practice.
9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State @20°C</td>
<td>liquid</td>
</tr>
<tr>
<td>Appearance</td>
<td>clear liquid</td>
</tr>
<tr>
<td>Odor</td>
<td>Characteristic</td>
</tr>
<tr>
<td>Color</td>
<td>Colorless - Pale Yellow</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No information available</td>
</tr>
<tr>
<td>Specific gravity</td>
<td>0.8505-0.8705</td>
</tr>
<tr>
<td>Refractive Index</td>
<td>1.4640-1.4840</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point / freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
<td>&gt; 35 °C / 95 °F</td>
</tr>
<tr>
<td>Flash point</td>
<td>56 °C / 132 °F</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability Limit in Air</td>
<td></td>
</tr>
<tr>
<td>Upper flammability limit</td>
<td>No data available</td>
</tr>
<tr>
<td>Lower flammability limit</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor density</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Water solubility</td>
<td>No data available</td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>No data available</td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>No data available</td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Kinematic viscosity</td>
<td>No data available</td>
</tr>
<tr>
<td>Dynamic viscosity</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No information available</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No information available</td>
</tr>
<tr>
<td>Softening point</td>
<td>No information available</td>
</tr>
<tr>
<td>Molecular weight</td>
<td>No information available</td>
</tr>
<tr>
<td>VOC Content (%)</td>
<td>No information available</td>
</tr>
<tr>
<td>Density VALUE</td>
<td>No information available</td>
</tr>
<tr>
<td>Bulk density</td>
<td>No information available</td>
</tr>
</tbody>
</table>

10. STABILITY AND REACTIVITY

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reactivity</td>
<td>No information available</td>
</tr>
<tr>
<td>Chemical stability</td>
<td>Stable under normal conditions.</td>
</tr>
<tr>
<td>Possibility of hazardous reactions</td>
<td>None under normal processing.</td>
</tr>
<tr>
<td>Conditions to avoid</td>
<td>None known based on information supplied.</td>
</tr>
<tr>
<td>Incompatible materials</td>
<td>None known based on information supplied.</td>
</tr>
</tbody>
</table>
Hazardous decomposition products: None known based on information supplied.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

**Product Information**

- **Inhalation**: Specific test data for the substance or mixture is not available.
- **Eye contact**: Specific test data for the substance or mixture is not available.
- **Skin contact**: Specific test data for the substance or mixture is not available.
- **Ingestion**: Specific test data for the substance or mixture is not available.

### Information on toxicological effects

#### Symptoms

No information available.

#### Numerical measures of toxicity

**Acute toxicity**

The following values are calculated based on chapter 3.1 of the GHS document.

- **ATEmix (oral)**: 4,667.00 mg/kg
- **ATEmix (dermal)**: 3,839.00 mg/kg

#### Unknown acute toxicity

0 % of the mixture consists of ingredient(s) of unknown toxicity

### Component Information

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Oral LD50</th>
<th>LD50/dermal/rat - NO UNITS (Wizards mg/kg)</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>CITRAL</td>
<td>= 4960 mg/kg (Rat)</td>
<td>= 2250 mg/kg (Rabbit)</td>
<td>-</td>
</tr>
<tr>
<td>5392-40-5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CITRONELLOL</td>
<td>= 3450 mg/kg (Rat)</td>
<td>= 2650 mg/kg (Rabbit)</td>
<td>-</td>
</tr>
<tr>
<td>106-22-9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LINALYL ACETATE</td>
<td>= 13934 mg/kg (Rat)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>115-95-7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LINALOOL</td>
<td>= 2790 mg/kg (Rat)</td>
<td>= 5610 mg/kg (Rat)</td>
<td>-</td>
</tr>
<tr>
<td>78-70-6</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

- **Skin corrosion/irritation**: No information available.
- **Serious eye damage/eye irritation**: No information available.
- **Respiratory or skin sensitization**: No information available.
- **Germ cell mutagenicity**: No information available.
- **Carcinogenicity**: No information available.

The table below indicates whether each agency has listed any ingredient as a carcinogen.

### Reproductive toxicity

No information available.

### STOT - single exposure

No information available.
12. ECOLOGICAL INFORMATION

Ecotoxicity

The environmental impact of this product has not been fully investigated.

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Toxicity to microorganisms</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>CITRAL 5392-40-5</td>
<td>16: 72 h Desmodesmus subspicatus mg/L EC50 19: 96 h Desmodesmus subspicatus mg/L EC50</td>
<td>4.6 - 10: 96 h Leuciscus idus mg/L LC50 static</td>
<td>-</td>
<td>7: 48 h Daphnia magna mg/L EC50</td>
</tr>
<tr>
<td>LINALOOL 78-70-6</td>
<td>88.3: 96 h Desmodesmus subspicatus mg/L EC50</td>
<td>22 - 46: 96 h Leuciscus idus mg/L LC50 static</td>
<td>-</td>
<td>20: 48 h Daphnia magna mg/L EC50</td>
</tr>
</tbody>
</table>

Persistence and degradability

No information available.

Bioaccumulation

There is no data for this product.

Component Information

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Partition coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>CITRAL 5392-40-5</td>
<td>2.76</td>
</tr>
<tr>
<td>LINALOOL 78-70-6</td>
<td>2.84 - 3.1</td>
</tr>
</tbody>
</table>

Other adverse effects

No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues/unused products

Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging

Do not reuse empty containers.

14. TRANSPORT INFORMATION

DOT

Not regulated

IATA

UN/ID no UN1169
Proper Shipping Name EXTRACTS, AROMATIC, LIQUID
Hazard Class 3
Packing group: III
ERG Code: 3L
Description: UN1169, EXTRACTS, AROMATIC, LIQUID, 3, III

IMDG
UN/ID no: UN1169
Proper Shipping Name: EXTRACTS, AROMATIC, LIQUID
Hazard Class: 3
Packing group: III
EmS No.: F-E, S-D
Special Provisions: 223, 955
Marine pollutant: This product contains a chemical which is listed as a marine pollutant according to IMDG/IMO
Description: UN1169, EXTRACTS, AROMATIC, LIQUID, 3, III, (56°C C.C.)

ADR
UN/ID no: UN1169
Proper Shipping Name: EXTRACTS, AROMATIC, LIQUID
Hazard Class: 3
Packing group: III
Classification code: F1
Tunnel restriction code: D/E
Special Provisions: 601, 640E
Description: UN1169, EXTRACTS, AROMATIC, LIQUID, 3, III
ADR/RID-Labels: 3

15. REGULATORY INFORMATION

International Inventories
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
Complies
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
Complies
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
Complies
ENCS - Japan Existing and New Chemical Substances
Complies
IECSC - China Inventory of Existing Chemical Substances
Complies
KECL - Korean Existing and Evaluated Chemical Substances
Complies
PICCS - Philippines Inventory of Chemicals and Chemical Substances
Complies
NZIoC - New Zealand Inventory of Chemicals
Complies
AICS - Australian Inventory of Chemical Substances
Complies

Legend:
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
NZIoC - New Zealand Inventory of Chemicals
AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories
Acute health hazard: Yes
Chronic Health Hazard: Yes
Fire hazard: Yes
Sudden release of pressure hazard: No
Reactive Hazard: No

CWA (Clean Water Act)
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65
This product contains the following Proposition 65 chemicals.

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>California Proposition 65</th>
</tr>
</thead>
<tbody>
<tr>
<td>MYRCENE - 123-35-3</td>
<td>Carcinogen</td>
</tr>
</tbody>
</table>

U.S. State Right-to-Know Regulations

US State Regulations
This product does not contain any substances regulated by state right-to-know regulations

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALPHA PINENE 80-56-8</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>TERPINOLENE 90 586-62-9</td>
<td>X</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

U.S. EPA Label Information

EPA Pesticide Registration Number
Not applicable

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

NFPA
Health hazards: 2
Flammability: 2
Instability: 0
Physical and chemical properties:

HMIS
Health hazards: 2
Flammability: 2
Physical hazards: 0
Personal protection: X

Revision Date: 06-Oct-2016
Revision Note: No information available.

Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet