1. Identification

<table>
<thead>
<tr>
<th>Product Description</th>
<th>Alpha Bisabolol</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAS #</td>
<td>23089-26-1</td>
</tr>
<tr>
<td>FEMA Number</td>
<td>Not Available</td>
</tr>
<tr>
<td>True Terpenes Item #</td>
<td>RM10001</td>
</tr>
<tr>
<td>Recommended Use</td>
<td>Concentrated aromatic and flavor ingredient which may be used in flavor and fragrance compounds according to legal and IFRA or FEMA GRAS/FDA guidelines.</td>
</tr>
<tr>
<td>Recommended Restrictions</td>
<td>For manufacturing use only</td>
</tr>
<tr>
<td>Company</td>
<td>True Terpenes</td>
</tr>
<tr>
<td></td>
<td>(888) 954-8550</td>
</tr>
<tr>
<td></td>
<td>TrueTerpenes.com</td>
</tr>
<tr>
<td>Emergency Contact</td>
<td>Poison Control Helpline:</td>
</tr>
<tr>
<td></td>
<td>1 (800) 222-1222</td>
</tr>
</tbody>
</table>
Physical Hazards  Not Classified  
Health Hazards  Not Classified  
Environmental Hazards  Acute aquatic toxicity  Category 2  
                      Chronic aquatic toxicity  Category 2  
Label Elements  

Signal Word  None  
Hazard Statement  Toxic to aquatic life with long lasting effects.  
Precautionary Statement  
Prevention  Avoid release to the environment.  
Response  Collect spillage.  
Storage  Not available.  
Disposal  Dispose of contents/container to an approved waste disposal plant.  
Hazard(s) not Otherwise Classified (HNOC)  None  

3. Composition / Information on Ingredients
4. First-Aid Measures

**Inhalation**
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**Skin Contact**
Wash off with soap and plenty of water. Consult a physician.

**Eye Contact**
Flush eyes with water as a precaution.

**Ingestion**
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**Most Important Symptoms / Effects, Acute and Delayed**
The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

**Indication of Immediate Medical Attentional and Special Treatment Needed**
No data available.
General Advice
Consult a physician. Show this safety data sheet to the doctor in attendance.

5. Fire-Fighting Measures

Suitable Extinguishing Media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable Extinguishing Media
No data available.

Specific Hazards Arising from the Chemical
No data available.

Special Protective Equipment and Precautions for Firefighters
Wear self-contained breathing apparatus for firefighting if necessary.

Firefighting Equipment / Instructions
No data available.

Specific Methods
No data available.

General Fire Hazards
No data available.

6. Accidental Release Measures
7. Handling and Storage

Precautions for Safe Handling
For precautions see section 2.

Conditions for Safe Storage, Including any Incompatibilities
Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

8. Exposure Controls / Personal Protection

Occupational Exposure
Contains no substances with occupational exposure limit values. Hazardous
Limits components without workplace control parameters.

Biological Limit Values No data available.

Appropriate Engineering Controls Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Individual Protection Measures, Such as Personal Protective Equipment

Eye / Face Protection Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin Protection

Hand Protection Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Other Impervious clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory Protection Respiratory protection not required. For nuisance exposures use type OV/AG (US) or type ABEK (EU EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Thermal Hazards Not available.

General Hygiene Considerations Not available.
9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appearance</strong></td>
<td>Refer to Spec Sheet</td>
</tr>
<tr>
<td><strong>Physical State</strong></td>
<td>Liquid</td>
</tr>
<tr>
<td><strong>Form</strong></td>
<td>Liquid</td>
</tr>
<tr>
<td><strong>Color</strong></td>
<td>Refer to Spec Sheet</td>
</tr>
<tr>
<td><strong>Odor</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Odor Threshold</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>pH</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Melting Point / Freezing Point</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Initial Boiling Point and Boiling Range</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Flash Point</strong></td>
<td>135.00 °C (275.00 °F) - closed cup</td>
</tr>
<tr>
<td><strong>Evaporation Rate</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Flammability (solid, gas)</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Upper / Lower Flammability or Explosive Limits</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Flammability Limit - Lower (%)</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Flammability Limit - Upper</strong></td>
<td>No data available</td>
</tr>
</tbody>
</table>
10. Stability and Reactivity

Explosive Limit - Lower (%)  No data available
Explosive Limit - Upper (%)   No data available
Vapor Pressure               No data available
Vapor Density                No data available
Relative Density            0.929 g/cm³
Solubility(ies)
   Solubility (water)         No data available
Partition Coefficient (n-octanol/water)   No data available
Auto-ignition Temperature    No data available
Decomposition Temperature    No data available
Viscosity                    No data available

Other Information
Explosive Properties         No data available
Oxidizing Properties         No data available
Reactivity

No data available.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reaction

No data available.

Conditions to Avoid

No data available.

Incompatible Materials

Strong oxidizing agents.

Hazardous Decomposition Products

Hazardous decomposition products formed under fire conditions. - Carbon oxides. Other decomposition products - No data available. In the event of fire: see section 5

11. Toxicological Information

Information on Likely Routes of Exposure

Inhalation

No data available

Skin Contact

No data available

Eye Contact

No data available

Ingestion

No data available

Symptoms Related to the Physical, Chemical and...
Toxicological Characteristics

Information on Toxicological Effects

Acute Toxicity

<table>
<thead>
<tr>
<th>Product</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>LEVOMENOL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral LD50</td>
<td>Rat</td>
<td>&gt; 5,000 mg/kg</td>
</tr>
<tr>
<td>Skin Corrosion / Irritation</td>
<td>No data available.</td>
<td></td>
</tr>
<tr>
<td>Serious Eye Damage / Eye Irritation</td>
<td>No data available.</td>
<td></td>
</tr>
</tbody>
</table>

Respiratory or Skin Sensitization

- Respiratory Sensitization: No data available.
- Skin Sensitization: No data available.
- Germ Cell Mutagenicity: No data available.

Carcinogenicity

IARC Monographs. Overall Evaluation of Carcinogenicity

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

US. National Toxicology Program (NTP) Report on Carcinogens
No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.


Not available.

**Reproductive Toxicity**
No data available.

**Specific Target Organ Toxicity - Single Exposure**
No data available.

**Specific Target Organ Toxicity - Repeated Exposure**
No data available.

**Aspiration Hazard**
No data available.

**Chronic Effects**
No data available.

---

### 12. Ecological Information

**Ecotoxicity**
No data available.

**Persistence and Degradability**
No data available.

**Bioaccumulative Potential**
No data available.

**Mobility in Soil**
No data available.

**Other Adverse Effects**
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Toxic to aquatic life with long lasting...
13. Disposal Considerations

Disposal Instructions
Offer surplus and non-recyclable solutions to a licensed disposal company.

Local Disposal Regulations
No data available.

Hazardous Waste Code
No data available.

Waste from Residues / Unused Products
No data available.

Contaminated Packaging
Dispose of as unused product.

14. Transport Information

DOT (US)
Not regulated as dangerous goods.

IMDG
UN Number: 3082
UN Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Levomenol)
Transport Hazard Class(es): 9
Subsidiary Class(es): -
Packing Group: III
Environmental Hazards:
  Marine Pollutant: Yes
  Labels Required: -

IATA
UN Number: 3082
UN Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Levomenol)
Transport Hazard Class(es): 9
Subsidiary Class(es): -
Packing Group: III
Environmental Hazards: No
Labels Required: -

Further Information
EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packagings and combination packagings containing inner packagings with Dangerous Goods > 5L for liquids or > 5kg for solids.
15. Regulatory Information

**US Federal Regulations**

*CERCLA Hazardous Substance List (40 CFR 302.4)*

Not available.

*SARA 304 Emergency Release Notification*

Not available.


Not available.


Not available.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not available.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

*SARA 302 Extremely Hazardous Substance*

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

*SARA 311/312 Hazardous Chemical*

No
SARA 313 (TRI reporting)

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Other Federal Regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not available.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not available.

Safe Drinking Water Act (SDWA)

Not available.

US State Regulations

Pennsylvania Right To Know Components

Levomenol CAS-No. 23089-26-1

New Jersey Right To Know Components

Levomenol CAS-No. 23089-26-1

California Proposition 65

California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed Substance

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

International Inventories

<table>
<thead>
<tr>
<th>Country(s) or Region</th>
<th>Inventory Name</th>
<th>On Inventory (yes/no)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form 33-SDS-R00</td>
<td>Terpenes.com (888) 954-8550</td>
<td>TrueTerpenes.com</td>
</tr>
<tr>
<td>Country</td>
<td>Inventory Description</td>
<td>Status</td>
</tr>
<tr>
<td>--------------------------</td>
<td>----------------------------------------------------------------------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Australia</td>
<td>Australian Inventory of Chemical Substances (AICS)</td>
<td>Not Available</td>
</tr>
<tr>
<td>Canada</td>
<td>Domestic Substances List (DSL)</td>
<td>Not Available</td>
</tr>
<tr>
<td>Canada</td>
<td>Non-Domestic Substances List (NDSL)</td>
<td>Not Available</td>
</tr>
<tr>
<td>China</td>
<td>Inventory of Existing Chemical Substances in China (IECSC)</td>
<td>Not Available</td>
</tr>
<tr>
<td>Europe</td>
<td>European Inventory of Existing Commercial Chemical Substances (EINECS)</td>
<td>Not Available</td>
</tr>
<tr>
<td>Europe</td>
<td>European List of Notified Chemical Substances (ELINCS)</td>
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<tr>
<td>Japan</td>
<td>Inventory of Existing and New Chemical Substances (ENCS)</td>
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</tr>
<tr>
<td>Korea</td>
<td>Existing Chemicals List (ECL)</td>
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</tr>
<tr>
<td>New Zealand</td>
<td>New Zealand Inventory</td>
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</tr>
<tr>
<td>Philippines</td>
<td>Philippine Inventory of Chemicals and Chemical Substances (PICCS)</td>
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</tr>
<tr>
<td>Taiwan</td>
<td>Taiwan Toxic Chemical Substances (TCS)</td>
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</tr>
<tr>
<td>United States and Puerto Rico</td>
<td>Toxic Substances Control Act (TSCA) Inventory</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

* A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s).

* A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).
16. Other Information

<table>
<thead>
<tr>
<th>Issue Date</th>
<th>11/01/2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revision Date</td>
<td>New Document</td>
</tr>
<tr>
<td>Version #</td>
<td>00</td>
</tr>
<tr>
<td>HMIS® Ratings</td>
<td></td>
</tr>
<tr>
<td>Health</td>
<td>0</td>
</tr>
<tr>
<td>Flammability</td>
<td>1</td>
</tr>
<tr>
<td>Physical Hazard</td>
<td>0</td>
</tr>
</tbody>
</table>

**Disclaimer**

True Terpenes cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user’s responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available. The above information relates only to this product and not to its use in combination with any other material or any particular process and is designed only as guidance for the safe handling, use, processing, storage, transportation, and disposal and should not be considered as a guarantee or quality specification. This product has not been evaluated for safe use in e-cigarettes or any vaping application where the product(s) is/are intentionally vaporized and inhaled. True Terpenes has performed no testing on these products in e-cig/vaping applications. It is the sole responsibility of the individual(s) purchasing this product to assess its’ safety in the final
application. The above information relates only to this product and not to its use in combination with any other material or any particular process and is designed only as guidance for the safe handling, use, processing, storage, transportation, disposal, and should not be considered as a guarantee or quality specification. The above information is based on data provided by and collected from recognized sources such as distributors, manufacturers, and technical groups and is considered to be accurate to the best of True Terpenes knowledge as of the date of this document. It is the responsibility of the user to review all safety information about this product and determine its safety and suitability in their own processes and operations. Appropriate warnings and safe handling procedures should be provided to all handlers and users, taking into account the intended use and the specific conditions and factors relating to such use in accordance with all applicable laws and regulations.