Safety Data Sheet
Orange Valencia Essential Oil
August 15, 2019

Section 1: Chemical Product and Company Identification

Product name: Orange Valencia Essential Oil
Contact Info:
Bramble Berry Inc.
2138 Humboldt Street
Bellingham, WA 98225
info@brambleberry.com
www.brambleberry.com
1-877-627-7883

Emergency Phone Number:
Within USA & Canada: 1.800.424.9300 CCN693143
Outside USA & Canada: +1.703.527.3887 (collect calls accepted)

Relevant identified uses of the substance or mixture and uses advised against
Identified uses: Laboratory chemicals, Manufacture of substances

Section 2: Hazards Identification

2.1 Classification of the substance or mixture
GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)
Flammable liquids (Category 3), H226
Skin irritation (Category 2), H315
For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 GHS Label elements, including precautionary statements

Signal Word: Warning
Hazard statement(s)
H226 Flammable liquid and vapour.
H315 Causes skin irritation.

Precautionary statement(s)
Section 3: Composition/Information on Ingredients

3.1 Substances
Synonyms: Orange oil, Citrus aurantium

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orange Oil</td>
<td>Flam. Liq. 3; Skin Irrit. 2; H226, H315</td>
<td>&lt;= 100%</td>
</tr>
</tbody>
</table>

For the full text of the H-Statements mentioned in this Section, see Section 16.

Section 4: First Aid Measures

4.1 Description of first aid measures

General information:
Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

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

Eye Exposure
Flush eyes with water as a precaution.

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

Ingestion
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labeling (see section 2.2) and/or in section 11.

4.3 Indication of any immediate medical attention and special treatment needed
No data available

Section 5: Fire-Fighting Measures

5.1 Extinguishing media
Suitable:
For small (incipient) fires, use media such as “alcohol” foam, dry chemical, or carbon dioxide. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water.

5.2 Special hazards arising from the substance or mixture
Nature of decomposition products not known.

5.3 Advice for firefighters
Wear self-contained breathing apparatus for fire fighting if necessary.

5.4 Further information
Use water spray to cool unopened containers.

Section 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. For personal protection see section 8.

6.2 Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up
Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

6.4 Reference to other sections
For disposal see section 13
Section 7: Handling and Storage

7.1 Precautions for safe handling
Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.
Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.
For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities
Store in cool place.
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.

7.3 Specific end uses
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

Section 8: Exposure Controls/Personal Protection

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No.</th>
<th>Value</th>
<th>Control Parameters</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orange Oil</td>
<td>8008-57-9</td>
<td>TWA</td>
<td>20.000000 ppm</td>
<td>USA. ACGIH Threshold Limit Values (TLV)</td>
</tr>
<tr>
<td>Remarks</td>
<td></td>
<td></td>
<td></td>
<td>Central Nervous System impairment</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Upper Respiratory Tract irritation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lung damage</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Skin irritation</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Adopted values or notations enclosed are those for which changes are proposed in the NIC</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>See Notice of Intended Changes (NIC)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Not classifiable as a human carcinogen</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Sensitizer</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Varies</td>
</tr>
<tr>
<td>TWA</td>
<td></td>
<td></td>
<td>10.000000 mg/m³</td>
<td>USA. NIOSH Recommended Exposure Limits</td>
</tr>
<tr>
<td>TWA</td>
<td></td>
<td></td>
<td>5.000000 mg/m³</td>
<td>USA. NIOSH Recommended Exposure Limits</td>
</tr>
</tbody>
</table>

81. Control Parameters
Appropriate engineering controls
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

8.2 Exposure controls - Personal protective equipment
Personal protective equipment:
Eye/face protection
Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching gloves 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.

Body Protection
impervious clothing, Flame retardant antistatic protective 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
Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Section 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties
Appearance Form: Liquid
Odor: no data available
Odor Threshold: no data available
pH Value: no data available
Melting/Freezing Point: no data available
Initial Boiling Point: 175°C
Flashpoint: 54°C – closed cup
Explosion limits
   Lower: no data available
   Upper: no data available
Vapor Pressure @25°C: no data available
Relative Density: 0.843 g/cm³ at 25°C
Vapor Density: no data available
Solubility in water: no data available
Partition coefficient: n-octanol/water: no data available
Decomposition temperature: no data available
Viscosity: no data available
Explosive Properties: no data available
Oxidizing Properties: no data available
Other information: No further relevant information available
Section 10: Stability and Reactivity

10.1 Reactivity  no data available
10.2 Chemical stability Stable under recommended storage conditions
10.3 Thermal decomposition / conditions to be avoided: no data available.
10.4 Possibility of hazardous reactions no data available
10.5 Conditions to avoid Heat, flames and sparks
10.6 Incompatible materials Strong oxidizing agents
10.7 Hazardous decomposition products no data available
In the event of fire: see section 5

Section 11: Toxicological Information

11.1 Toxicological Effects
Acute toxicity
LD50 Oral - Rat - &gt; 5,000 mg/kg
Inhalation: No data available
LD50 Dermal - Rabbit - &gt; 5,000 mg/kg
No data available

Skin corrosion/irritation
Skin - Rabbit
Result: Moderate skin irritation - 24 h

Serious eye damage/eye irritation
No data available

Respiratory or skin sensitization
No data available

Germ cell mutagenicity
No data available

Carcinogenicity
IARC: 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.
NTP: 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.
OSHA: 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.

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

Additional Information
RTECS: RI8600000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Section 12: Ecological Information

12.1 Toxicity
No data available

12.2 Persistence and degradability
No data available

12.3 Bioaccumulative potential
No data available

12.4 Mobility in soil
No data available

12.5 Results of PBT and vPvB assessment
PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects
No data available

Section 13: Disposal Conditions

13.1 Waste treatment methods

Product
Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging
Dispose of as unused product.

Section 14: Transport Information

DOT (US)
UN number: 1993
Class: 3
Packing group: III
Proper shipping name: Flammable liquids, n.o.s. (Orange oil)
Poison Inhalation Hazard: No
IMDG
UN number: 1993
Class: 3
Packing group: III EMS-No: F-E, S-E
Proper shipping name: FLAMMABLE LIQUID, N.O.S. (Orange oil)

IATA
UN number: 1993
Class: 3
Packing group: III
Proper shipping name: Flammable liquid, n.o.s. (Orange oil)

Section 15: Regulatory Information

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

SARA 313 Components
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.

SARA 311/312 Hazards
Fire Hazard

Massachusetts Right To Know Components
No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components
Orange Oil
CAS-No. 8008-57-9
Revision Date 1989-08-11

New Jersey Right To Know Components
Orange Oil
CAS-No. 8008-57-9
Revision Date 1989-08-11

California Prop. 65 Components
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Section 16: Other Information

Full text of H-Statements referred to under sections 2 and 3.
Flam. Liq. Flammable liquids
H226 Flammable liquid and vapour.
H315 Causes skin irritation.
Skin Irrit. Skin irritation
HMIS Rating
Health hazard: 2
Chronic Health Hazard:
Flammability: 2
Physical Hazard: 0

NFPA Rating
Health hazard: 2
Fire Hazard: 2
Reactivity Hazard: 0

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