LKT Laboratories, Inc.

Safety Data Sheet

## Section 1. Product and Company Identification

<table>
<thead>
<tr>
<th><strong>Product Name</strong></th>
<th>20R-Ginsenoside Rh2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product ID</strong></td>
<td>G3558</td>
</tr>
<tr>
<td><strong>Chemical Name</strong>&lt;br&gt;<strong>(Synonyms)</strong></td>
<td>Ginsenoside Rh2</td>
</tr>
<tr>
<td><strong>Supplier</strong></td>
<td>LKT Laboratories, Inc&lt;br&gt;545 Phalen Blvd.&lt;br&gt;St. Paul, MN 55130 USA&lt;br&gt;Ph: 651-644-8424 Fax: 651-644-8357&lt;br&gt;www.lktlabs.com - <a href="mailto:getinfo@lktlabs.com">getinfo@lktlabs.com</a></td>
</tr>
<tr>
<td><strong>Emergency Phone #</strong></td>
<td>1-800-424-9300</td>
</tr>
</tbody>
</table>

## Section 2. Hazards Identification

| **GHS Classification** | Acute oral toxicity (Category 4) |

### GHS Label elements including precautionary statements

<table>
<thead>
<tr>
<th><strong>Pictogram</strong></th>
<th>![Exclamation Mark]</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Signal word</strong></td>
<td>Warning</td>
</tr>
<tr>
<td><strong>Hazard and&lt;br&gt;precautionary statements</strong>&lt;br&gt;Hazard statement</td>
<td>H302 - Harmful if swallowed.</td>
</tr>
<tr>
<td><strong>Precautionary statements</strong>&lt;br&gt;P264 - Wash skin thoroughly after handling.&lt;br&gt;P270 - Do not eat, drink or smoke when using this product.&lt;br&gt;P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.&lt;br&gt;P330 - Rinse mouth.&lt;br&gt;P501 - Dispose of contents/container to an approved waste disposal plant.</td>
<td></td>
</tr>
</tbody>
</table>

### HMIS Classification

| Health hazard: | 1 |
| Flammability: | 0 |
| Physical hazard: | 0 |

### NFPA Rating

| Health hazard: | 1 |
| Fire hazard: | 0 |
| Reactivity hazard: | 0 |

### Potential Health Effects

- **Inhalation** - May be harmful if inhaled. May cause respiratory tract irritation.
- **Skin** - May be harmful if absorbed through skin. May cause skin irritation.
- **Eyes** - May cause eye irritation.
Section 3. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Substances</th>
<th>Ingredient: Title Compound</th>
<th>Percent: 100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formula</td>
<td>C₃₆H₆₂O₈</td>
<td>622.87</td>
</tr>
<tr>
<td>CAS No.</td>
<td>112246-15-8</td>
<td></td>
</tr>
</tbody>
</table>

Section 4. First Aid Measures

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

**Eye Contact**
Remove contact lenses. Flush with water for at least 15 minutes and seek medical attention immediately.

**Skin Contact**
Wash with soap and water for 15 minutes and seek medical attention immediately. Wash contaminated clothing before use.

**Inhalation**
Remove from exposure and provide respiration support if necessary. Seek medical attention.

**Ingestion**
Rinse mouth with water. Contact a physician or poison control immediately.

Section 5. Firefighting Measures

**Flash Point**
393.1 °C

**Extinguishing Media**
Water spray, dry chemical powder, carbon dioxide, polymer foam.

**Firefighting Procedures**
Wear self-contained breathing apparatus and protective clothing.

**Unusual Fire Hazards**
May emit toxic fumes.

Section 6. Accidental Release Measures

**Personal Precautions**
Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

**Environmental Precautions**
Do not let product enter drains.

**Methods and materials for containment and cleanup**
Use appropriate tools to collect material and dispose of in waste container. Avoid raising dust. Ventilate the area and wash spill site after material has been removed.

Section 7. Handling and Storage

**Handling**
Wear gloves, goggles, and lab coat when handling this material. Use in a well ventilated area. Use only in a chemical fume hood. Wash thoroughly after handling material.

**Storage Conditions**
Store in a cold, dry place in a tightly closed container. Recommended storage temperature: +4 °C

**Hazardous Decomposition Products**
Carbon monoxide, Carbon dioxide.

**Other Remarks**
None
Section 8. Exposure Controls/Personal Protection

**Personal protective equipment**

**Eye and face protection:** Safety glasses with side-shields conforming to EN 166 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 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.

**Body protection:** 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:** For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Section 9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Physical State</th>
<th>Solid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>White to off-white powder.</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>762.4 °C</td>
</tr>
<tr>
<td>Volatility</td>
<td>Not available.</td>
</tr>
<tr>
<td>Melting Point</td>
<td>Not available.</td>
</tr>
<tr>
<td>Density</td>
<td>Not available.</td>
</tr>
<tr>
<td>Solubility</td>
<td>Soluble in water.</td>
</tr>
<tr>
<td>Flash Point</td>
<td>393.1 °C</td>
</tr>
<tr>
<td>Ignition temperature</td>
<td>Not available.</td>
</tr>
<tr>
<td>Lower explosion limit</td>
<td>Not available.</td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>Not available.</td>
</tr>
<tr>
<td>Upper explosion limit</td>
<td>Not available.</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>Not available.</td>
</tr>
<tr>
<td>Water solubility</td>
<td>Not available.</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not available.</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>Not available.</td>
</tr>
<tr>
<td>Relative vapor density</td>
<td>Not available.</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not available.</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

Section 10. Stability and Reactivity

**Stability**

Stable

**Materials To Avoid**

Keep away from heat and strong oxidizing agents.

**Hazardous Decomposition Products**

Carbon monoxide, Carbon dioxide.
Section 11. Toxicological Information

Oral LD50: Not available.

Inhalation LC50: Not available.

Dermal LD50: Not available.

Other information on acute toxicity: Not available.

Skin corrosion/irritation: Not available.

Serious eye damage/irritation: Not available.

Respiratory or skin sensitization: Not available.

Germ cell mutagenicity: Not 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.
- ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
- 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: Not available.

Teratogenicity: Not available.

Specific organ toxicity single exposure (GHS): Not available.

Specific organ toxicity repeated exposure (GHS): Not available.

Aspiration Hazard: Not available.

Synergistic effects: Not available.

Additional Information: Not available.

Signs and symptoms of exposure: Not available.

Potential Health Effects:
- Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.
- Skin: May be harmful if absorbed through skin. May cause skin irritation.
- Eyes: May cause eye irritation.
- Ingestion: Acute toxicity. Harmful if swallowed.

Section 12. Ecological Information

Toxicity: Not available.

Mobility in soil: Not available.

PBT and vPvB assessment: PBT/vPvB assessment not available as chemical safety assessment not required/not
Persistence and degradability: Not available.

Bioaccumulative potential: Not available.

Other adverse effects: Not available.

Section 13. Disposal Considerations

Waste Disposal
- Dispose of material according to all federal, state and local regulations.
- Offer material to a licensed, professional waste disposal company to dispose of as unused product.

Section 14. Transport Information

DOT (US) Not dangerous goods.

IATA Not dangerous goods.

IMDG Not dangerous goods.

Further Information Transport in accordance with all local, state, and federal regulations.

Section 15. Regulatory Information

Reach No.

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 Components No SARA hazards.

Massachusetts Right To Know Components No components listed.

Pennsylvania Right To Know Components 20R-Ginsenoside Rh2 CAS #: 112246-15-8 Revision Date:

New Jersey Right To Know Components 20R-Ginsenoside Rh2 CAS #: 112246-15-8 Revision Date:

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

Other information The information in this document is believed to be correct but is not necessarily complete. LKT does not guarantee the accuracy of the information. The burden of verifying the information in this document rests solely upon the user.