Section 1. Product and Company Identification

Product Name: Attenune
Product ID: A464766

Chemical Name (Synonyms):

Supplier:
LKT Laboratories, Inc
545 Phalen Blvd.
St. Paul, MN 55130 USA
Ph: 651-644-8424 Fax: 651-644-8357
www.lktlabs.com - getinfo@lktlabs.com

Emergency Phone #: 1-800-424-9300

Section 2. Hazards Identification

GHS Classification:
- Acute toxicity - Oral (Category 4) H302
- Acute toxicity - Skin (Category 2) H310
- Acute toxicity - Inhalation (Category 1) H330
- Toxic to Reproduction - (Category 1B) H360

GHS Label elements including precautionary statements

Pictogram:

Signal word: Danger

Hazard and precautionary statements:

Hazard statements:
- H302 - Harmful if swallowed.
- H310 - Fatal in contact with skin.
- H330 - Fatal if inhaled.
- H360 - May damage fertility or the unborn child.

Precautionary statements:
- P201 - Obtain special instructions before use.
- P202 - Do not handle until all safety precautions have been read and understood.
- P260 - Do not breathe dust, fumes, gas, mist, vapors, spray.
- P262 - Do not get in eyes, on skin or on clothing.
- P264 - Wash skin thoroughly after handling.
- P280 - Wear protective gloves, protective clothing, eye protection, face protection.
- P284 - Wear respiratory protection.
- P301 + P312 - IF SWALLOWED: CALL A POISON CENTER or doctor/physician if you feel unwell.
- P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.
- P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P308 + P313 - IF exposed or concerned: Get medical attention/advice.
- P310 - Immediately call a POISON CENTER or doctor/physician.
- P320 - Specific treatment is urgent (see supplemental 1st aid instructions on this label).
- P330 - Rinse mouth.
- P361 + P363 - Remove or take off immediately all contaminated clothing. Wash contaminated clothing before reuse.

HMIS Classification:
- Health hazard: 3
- Chronic health hazard: *
- Flammability: 0
- Physical hazard: 0

NFPA Rating:
- Health hazard: 3
- Fire hazard: 0
- Reactivity hazard: 0

Potential Health Effects:
Inhalation - Acute toxicity. Fatal if inhaled. May cause respiratory tract irritation.
Skin - Acute toxicity. Fatal in contact with 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>( \text{C}<em>{15}\text{H}</em>{16}\text{O}_6 )</td>
<td>( 292.29 )</td>
</tr>
<tr>
<td>CAS No.</td>
<td>889101-41-1</td>
<td></td>
</tr>
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</table>

Section 4. First Aid Measures

General advice

Eye Contact
Flush eyes with water as a precaution.

Skin Contact
Wash off with soap and plenty of water.

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

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

Section 5. Firefighting Measures

Flash Point
Not available.

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

Firefighting Procedures
Wear self-contained breathing apparatus for firefighting if necessary.

Unusual Fire Hazards
Carbon oxides, nitrogen oxides (NOx).

Section 6. Accidental Release Measures

Personal Precautions
Wear respiratory protection. Avoid dust formation. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

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

Methods and materials for containment and cleanup
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

Section 7. Handling and Storage

Handling
Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.

Storage Conditions
Keep container tightly closed in a dry and well-ventilated place. Recommended storage temperature: -20°C

Hazardous Decomposition Products
Not available.

Other Remarks
Section 8. Exposure Controls/Personal Protection

Personal protective equipment

EXPOSURE CONTROLS
Contains no substances with occupational exposure limit values.

General industrial hygiene practice.

PERSONAL PROTECTION

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: 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: Choose body protection in relation to its type, to the concentration and amount of dangerous substances and to the specific workplace. 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 is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. 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>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solid</td>
<td>White to off-white powder.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Physical State</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Color</td>
</tr>
<tr>
<td>Solubility</td>
<td>Not available.</td>
</tr>
<tr>
<td>Volatility</td>
<td>Not available.</td>
</tr>
<tr>
<td>Boiling Point</td>
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</tr>
<tr>
<td>Volatility</td>
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</tr>
<tr>
<td>Melting Point</td>
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<tr>
<td>Density</td>
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</tr>
<tr>
<td>Solubility</td>
<td>10mg/ml in acetone</td>
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<tr>
<td>pH</td>
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<tr>
<td>Flash Point</td>
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</tr>
<tr>
<td>Ignition temperature</td>
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</tr>
<tr>
<td>Lower explosion limit</td>
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</tr>
<tr>
<td>Autoignition temperature</td>
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</tr>
<tr>
<td>Upper explosion limit</td>
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</tr>
<tr>
<td>Vapor pressure</td>
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<tr>
<td>Water solubility</td>
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<tr>
<td>Odor</td>
<td>Not available.</td>
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<tr>
<td>Partition coefficient: n-octanol/water</td>
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<tr>
<td>Odor Threshold</td>
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<tr>
<td>Relative vapor density</td>
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</tr>
<tr>
<td>Evaporation rate</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

Section 10. Stability and Reactivity

Stability
Stable under recommended storage conditions.

Materials To Avoid
Strong oxidizing agents.

Hazardous Decomposition Products
Not available.
### Section 11. Toxicological Information

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral LD50</td>
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</tr>
<tr>
<td>Inhalation LC50</td>
<td>Not available</td>
</tr>
<tr>
<td>Dermal LD50</td>
<td>Not available</td>
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<tr>
<td>Other information on acute toxicity</td>
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<tr>
<td>Reproductive Toxicity</td>
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</tr>
<tr>
<td>Specific organ toxicity single exposure (GHS)</td>
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<tr>
<td>Specific organ toxicity repeated exposure (GHS)</td>
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<tr>
<td>Teratogenicity</td>
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</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>Not available</td>
</tr>
<tr>
<td>Serious eye damage/irritation</td>
<td>Not available</td>
</tr>
<tr>
<td>Respiratory or skin sensitization</td>
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</tr>
<tr>
<td>Germ cell mutagenicity</td>
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</tr>
<tr>
<td>Aspiration Hazard</td>
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<tr>
<td>Synergistic effects</td>
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<tr>
<td>Additional Information</td>
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<tr>
<td>Signs and symptoms of exposure</td>
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</tbody>
</table>

**Potential Health Effects**

- **Inhalation - Acute toxicity**: Fatal if inhaled. May cause respiratory tract irritation.
- **Skin - Acute toxicity**: Fatal in contact with skin. May cause skin irritation.
- **Eyes - Acute toxicity**: May cause eye irritation.
- **Ingestion - Acute toxicity**: Harmful if swallowed.
- **Reproductive Toxicity - Acute toxicity**: May damage fertility of the unborn child.

**Carcinogenicity**

### Section 12. Ecological Information

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Toxicity</td>
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<tr>
<td>Mobility in soil</td>
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<tr>
<td>PBT and vPvB assessment</td>
<td>PBT/vPvB assessment not available as chemical safety assessment not required/not</td>
</tr>
</tbody>
</table>
Persistence and degradability  Not available.
Bioaccumulative potential  Not available.

Other adverse effects
Avoid release into the environment. Runoff from fire control or dilution water may cause pollution.

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

Section 15. Regulatory Information
Reach No.

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

SARA 313 Components
SARA 313: 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 are subject to the Massachusetts Right to Know Act.

Pennsylvania Right
To Know Components
Altenune  CAS #: 889101-41-1  Revision Date:

New Jersey Right
To Know Components
Altenune  CAS #: 889101-41-1  Revision Date:

California Prop 65
Components
This product does not contain any chemicals known to the 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.