Section 1. Product and Company Identification

Product Name  β-Elemene  
Product ID  E4418  
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  Not a hazardous substance or mixture.  

GHS Label elements including precautionary statements

Pictogram  
Signal word  
Hazard and precautionary statements

Hazard statement  Not a hazardous substance or mixture.  
Precautionary statement  Not a hazardous substance or mixture.  

HMIS Classification  
Health hazard:  0  
Chronic health hazard:  0  
Flammability:  0  
Physical hazard:  0  

NFPA Rating  
Health hazard:  0  
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 causes eye irritation.
Section 3. Composition/Information on Ingredients

Substances

<table>
<thead>
<tr>
<th>Ingredient: Title Compound</th>
<th>Percent: 100</th>
</tr>
</thead>
<tbody>
<tr>
<td>C15H24</td>
<td>204.35</td>
</tr>
</tbody>
</table>

CAS No. 515-13-9

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
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.

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

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 fire fighting if necessary.

Unusual Fire Hazards
Carbon oxides, nitrogen oxides (NOx), Hydrogen fluoride

Section 6. Accidental Release Measures

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

Environmental Precautions
Do not let product enter drains.

Methods and materials for containment and cleanup
Keep in suitable, closed containers for disposal.

Section 7. Handling and Storage

Handling
Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

Storage Conditions
Keep container tightly closed in a dry and well-ventilated place. Recommended storage temperature: +4°C.

Hazardous Decomposition Products
Not available.

Other Remarks
Ingestion: May be harmful if swallowed.
**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).
- **Control of environmental exposure:** Do not let product enter drains.

---

**Section 9. Physical and Chemical Properties**

<table>
<thead>
<tr>
<th>Physical State</th>
<th>Liquid.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Clear and colorless liquid.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Boiling Point</th>
<th>Not available.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volatility</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Melting Point</th>
<th>Not available.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Solubility</th>
<th>Not available.</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Flash Point</th>
<th>Not available.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ignition temperature</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lower explosion limit</th>
<th>Not available.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autoignition temperature</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Upper explosion limit</th>
<th>Not available.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vapor pressure</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Water solubility</th>
<th>Not available.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odor</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Partition coefficient: n-octanol/water</th>
<th>log Pow: 7.04</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odor Threshold</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Relative vapor density</th>
<th>Not available.</th>
</tr>
</thead>
<tbody>
<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, reducing agents.
- **Hazardous Decomposition Products:** Not available.
### Section 11. Toxicological Information

<table>
<thead>
<tr>
<th>Test Type</th>
<th>Value</th>
<th>Test Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Oral LD50</strong></td>
<td>LD50, mouse - 5,000 mg/kg</td>
<td><strong>Skin</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Inhalation LC50</strong></td>
<td>Not available.</td>
<td><strong>Serious eye damage/irritation</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Dermal LD50</strong></td>
<td>Not available.</td>
<td><strong>Respiratory or skin sensitization</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Other information on acute toxicity</strong></td>
<td>Not available.</td>
<td><strong>Germ cell mutagenicity</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Reproductive Toxicity</strong></td>
<td>Not available.</td>
<td><strong>Aspiration Hazard</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Specific organ toxicity single exposure (GHS)</strong></td>
<td>Not available.</td>
<td><strong>Synergistic effects</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Specific organ toxicity repeated exposure (GHS)</strong></td>
<td>Not available.</td>
<td><strong>Additional Information</strong></td>
<td>RTECS: GU9660000</td>
</tr>
<tr>
<td><strong>Teratogenicity</strong></td>
<td>Not available.</td>
<td><strong>Signs and symptoms of exposure</strong></td>
<td>Not available.</td>
</tr>
</tbody>
</table>

**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: May be harmful if swallowed.

**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.

### Section 12. Ecological Information

<table>
<thead>
<tr>
<th>Test Type</th>
<th>Value</th>
<th>Test Type</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Toxicity</strong></td>
<td>Not available.</td>
<td><strong>Mobility in soil</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>PBT and vPvB assessment</strong></td>
<td>PBT/vPvB assessment not available as chemical safety assessment not required / no</td>
</tr>
</tbody>
</table>
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.

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 are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components β-Elemene CAS #: 515-13-9 Revision Date:

New Jersey Right To Know Components β-Elemene CAS #: 515-13-9 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

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.