**LKT Laboratories, Inc.**

### Safety Data Sheet

#### Section 1. Product and Company Identification

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Prostaglandin E₁</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product ID</td>
<td>P6956</td>
</tr>
<tr>
<td>Chemical Name (Synonyms)</td>
<td>Alprostadil; PGE₁; Caverject; Muse; Prostandin; Prostin VR</td>
</tr>
<tr>
<td>Supplier</td>
<td>LKT Laboratories, Inc</td>
</tr>
<tr>
<td></td>
<td>545 Phalen Blvd.</td>
</tr>
<tr>
<td></td>
<td>St. Paul, MN 55130 USA</td>
</tr>
<tr>
<td></td>
<td>Ph: 651-644-8424 Fax: 651-644-8357</td>
</tr>
<tr>
<td></td>
<td><a href="http://www.lktlabs.com">www.lktlabs.com</a> - <a href="mailto:getinfo@lktlabs.com">getinfo@lktlabs.com</a></td>
</tr>
<tr>
<td>Emergency Phone #</td>
<td>1-800-424-9300</td>
</tr>
</tbody>
</table>

#### Section 2. Hazards Identification

**GHS Classification**

- Acute toxicity, oral (Category 3), H301
- Toxic to reproduction (Category 2), H361

**GHS Label elements including precautionary statements**

- **Pictogram**
- **Signal word** Danger
- **Hazard and precautionary statements**
  - **Hazard statements**
    - H301 - Toxic if swallowed.
    - H361 - Suspected of damaging 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.
    - P264 - Wash skin thoroughly after handling.
    - P270 - Do not eat, drink, or smoke when using this product.
    - P281 - Use personal protective equipment as required.
    - P260 - Do not breathe dust, fumes, gas, mist, vapors, spray.
    - P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
    - P303 + P313 - IF exposed or concerned: Get medical attention/advice.
    - P321 - Specific treatment (see supplemental first aid instructions on this label).
    - P330 - Rinse mouth.
    - P405 + P270 - Store locked up.
    - P501 - Dispose of contents/container to an approved waste disposal plant.

**HMIS Classification**

- Health hazard: 2
- Chronic health hazard: *
- Flammability: 0
- Physical hazard: 0

**NFPA Rating**

- Health hazard: 2
- 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>C_{20}H_{34}O_{5}</td>
<td>Formula Wt.</td>
</tr>
<tr>
<td>CAS No.</td>
<td>745-65-3</td>
<td>EC No.</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

Flush eyes with water as a precaution.

Skin Contact

Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

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 dust, 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.
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

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. Full and Splash contact - Material: Nitrile rubber, Minimum layer thickness: 0.11 mm, Break through time: 480 min., Material tested: Dermatril® (KCL 740 / Aldrich Z677272, Size M).

Body protection: Complete suit protecting against chemicals. 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 particle respirator type N100 (US) or type P3 (EN 143) 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).

Section 9. Physical and Chemical Properties

Physical State
Solid crystals.
Color
White.
Boiling Point
Not available.
Volatility
Not available.
Melting Point
115-116°C
Density
Not available.
Solubility
Soluble in ethanol (5mg/mL) or acetone (10mg/mL).
Flash Point
Not available.
Ignition temperature
Not available.
Lower explosion limit
Not available.
Autoignition temperature
Not available.
Upper explosion limit
Not available.
Vapor pressure
Not available.
Water solubility
Not available.
Odor
Not available.
Partition coefficient: n-octanol/water
Not available.
Odor Threshold
Not available.
Relative vapor density
Not available.
Evaporation rate
Not available.

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

**Oral LD<sub>50** Rat - 228 mg/kg

**Inhalation LC<sub>50** Not available.

**Dermal LD<sub>50** 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.


**Aspiration Hazard** Not available.

**Synergistic effects** Not available.

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

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

**Teratogenicity** Not available.

**Additional Information** RTECS: GY4569800

**Signs and symptoms of exposure** Stomach, irregularities, based on human evidence.

**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. Toxic if swallowed. Reproductive Toxicity - Suspected of damaging fertility or the unborn child.

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
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. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company.

Section 14. Transport Information

**DOT (US)**
- UN number: 2811
- Class: 6.1
- Packing Group: III
- Proper shipping name: Toxic solid, organic, n.o.s. (Prostaglandin E1)

**IATA**
- UN number: 2811
- Class: 6.1
- Packing Group: III
- Proper shipping name: Toxic solid, organic, n.o.s. (Prostaglandin E1)

**IMDG**
- UN number: 2811
- Class: 6.1
- Packing Group: III
- EMS No: F-A, S-A
- Proper shipping name: TOXIC SOLID, ORGANIC, N.O.S. (Prostaglandin E1)

Further Information

Section 15. Regulatory Information

**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**
Acute health hazard, chronic health hazard.

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

**Pennsylvania Right To Know Components**
- Prostaglandin E1
- CAS #: 745-65-3
- Revision Date:

**New Jersey Right To Know Components**
- Prostaglandin E1
- CAS #: 745-65-3
- 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.
For emergencies in the USA, call CHEMTREC 800-424-9300