Section 1. Product and Company Identification

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Gestrinone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product ID</td>
<td>G1975</td>
</tr>
<tr>
<td>Chemical Name (Synonyms)</td>
<td>13b-ethyl-17a-ethynyl-17b-hydroxy-4,9,11-gonatrien-3-one; 13b-ethyl-17a-ethynyl-D4,9,11-gonatriene-17b-ol-3-one; ethylnorgestrienone</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
Reproductive Toxicity, (Category 1B), H360
Reproductive Toxicity, H362
Acute Toxicity, Aquatic Life (Category 1), H400

GHS Label elements including precautionary statements

Pictogram

Signal word
Danger

Hazard and precautionary statements

Hazard Statement
H360 - May damage fertility or the unborn child.
H362 - May cause harm to breast-fed children.
H400 - Very toxic to aquatic life

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.
P263 - Avoid contact during pregnancy/while nursing.
P264 - Wash face, hands, and any exposed skin thoroughly after handling.
P270 - Do not eat, drink, or smoke when using this product.
P281 - Use personal protective equipment as required.
P308 + P313 - IF exposed or concerned: Get medical advice/attention.
P273 - Avoid release to the environment.
P381 - Collect spillage. Hazardous to the aquatic environment.
P405 - Store locked up.
P501 - Dispose of contents/container carefully

HMIS Classification
Health hazard: 0
Chronic health hazard: *
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 cause eye irritation.
Ingestion - May be harmful if swallowed. Reproduction: May cause harm to breast-fed children. May damage fertility or the unborn child.

Section 3. Composition/Information on Ingredients

| Substances | 13b-ethyl-17α-ethynyl-17β-hydroxy-4,9,11-gonatrien-3-one |
| Formula     | C_{21}H_{24}O_{2} |
| CAS No.     | 16320-04-0 |

Section 4. First Aid Measures

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

Eye Contact
Flush eyes with water as a precaution.

Skin Contact
Wash off with soap and plenty of water. 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.

Section 5. Firefighting Measures

Flash Point
214.9˚C

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.

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
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

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. Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs. 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: Ambient

Hazardous Decomposition Products
Carbon oxides.

Other Remarks
Synthetic
Section 8. Exposure Controls/Personal Protection

Personal protective equipment

EXPOSURE CONTROLS
Contains no substances with occupational exposure limit values. Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

PERSONAL PROTECTION
- Eye 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 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 - 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

<table>
<thead>
<tr>
<th>Physical State</th>
<th>Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solid. (Synthetic)</td>
<td>Yellowish Crystalline Powder</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiling Point</td>
<td>507.6˚C</td>
</tr>
<tr>
<td>Melting Point</td>
<td>154˚C</td>
</tr>
<tr>
<td>Solubility</td>
<td>Not available.</td>
</tr>
<tr>
<td>Flash Point</td>
<td>214.9˚C</td>
</tr>
<tr>
<td>Lower explosion limit</td>
<td>Not available.</td>
</tr>
<tr>
<td>Upper explosion limit</td>
<td>Not available.</td>
</tr>
<tr>
<td>Water solubility</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>pH</td>
<td>Not available.</td>
</tr>
<tr>
<td>Ignition temperature</td>
<td>Not available.</td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>Not available.</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>Not available.</td>
</tr>
<tr>
<td>Odor</td>
<td>Not available.</td>
</tr>
<tr>
<td>Odor Threshold</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
Carbon oxides.
Section 11. Toxicological Information

**Oral LD50**  Rat - 1,000 mg/kg  Skin and appendages (skin): "Dermatitis, other: after systemic exposure. Behavioral: Altered sleep time (including change in righting reflex)."

**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.

**Aspiration Hazard**  Not available.

**Synergistic effects**  Not available.

**Additional Information**  RTECS: JF7964000

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.  Reproduction: May cause harm to breast-fed children. May damage fertility or the unborn child.

Carcinogenicity  US Environmental Defense Scorecard Suspected Carcinogens

Section 12. Ecological Information

**Toxicity**  Toxic to aquatic life with long lasting effects. May cause long-term adverse effects in the aquatic environment.

**Mobility in soil**  Avoid release to the environment.

**PBT and vPvB assessment**  Not available.
Persistence and degradability Not available.

Bioaccumulative potential Not available.

Other adverse effects Runoff from fire control of dilution water may cause pollution.

Section 13. Disposal Considerations

Waste Disposal
Dispose of in accordance with local, state, and federal regulations. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. 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 II, Section 302.

SARA 313 Components SARA 313: This material does not contain any chemical components with known CAS number 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 Gestrinone CAS #: 16320-04-0 Revision Date:

New Jersey Right To Know Components Gestrinone CAS #: 16320-04-0 Revision Date:

California Prop 65 Components WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm. Gestrinone CAS #: 16320-04-0 Revision Date:

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.