SAFETY DATA SHEET

1. IDENTIFICATION

Product identifier

Product code: P1834
Product Name: PROGESTERONE, MICRONIZED POWDER, USP

Other means of identification

Synonyms:
- Corpus luteum hormone
- delta(sup 4)-Pregnene-3,20-dione
- Pregn-4-ene-3,20-dione
- 4-Pregnene-3,20-dione
- Pregnenedione
- Progesterol
- beta-Progesterone
- Prolutone
- Progesteronum
- Progestin
- Progestone
- Prolidon
- Syngesterone

CAS #: 57-83-0
RTECS #: TW0175000
CI#: Not available

Recommended use of the chemical and restrictions on use

Recommended use: Laboratory reagent. Medication.
Uses advised against: No information available

Supplier:
Spectrum Chemical Mfg. Corp
14422 South San Pedro St.
Gardena, CA  90248
(310) 516-8000

Order Online At: https://www.spectrumchemical.com
Emergency telephone number: Chemtrec 1-800-424-9300
Contact Person: Tom Tyner (USA - West Coast)
Contact Person: Ibad Tirmiz (USA - East Coast)

2. HAZARDS IDENTIFICATION

Classification
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)

| Carcinogenicity | Category 2 |
| Reproductive toxicity | Category 2 |
**Label elements**

**Warning**

**Hazard statements**
Suspected of causing cancer
Suspected of damaging fertility or the unborn child

**Hazards not otherwise classified (HNOC)**
Not Applicable

**Other hazards**
Not available

**Precautionary Statements - Prevention**
Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Wear protective gloves/protective clothing/eye protection/face protection

**Precautionary Statements - Response**
*IF exposed or concerned: Get medical advice/attention*

**Precautionary Statements - Storage**
Store locked up

**Precautionary Statements - Disposal**
Dispose of contents/container to an approved waste disposal plant

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Progesterone (yam source)</td>
<td>57-83-0</td>
<td>100</td>
</tr>
</tbody>
</table>

### 4. FIRST AID MEASURES

**First aid measures**

**General Advice:**
National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222.

**Skin Contact:**
Wash off immediately with soap and plenty of water removing all contaminated clothing and shoes. Get medical attention if irritation develops. Consult a physician if necessary.

**Eye Contact:**
Flush eyes with water for 15 minutes. Get medical attention if irritation occurs. If symptoms persist, call a physician.

**Inhalation:**
Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion:
Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Obtain medical attention.

**Most important symptoms and effects, both acute and delayed**

**Symptoms**
May cause eye irritation
May cause skin irritation

**Indication of any immediate medical attention and special treatment needed**

Notes to Physician:
Treat symptomatically.

**Protection of first-aiders**
First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.

### 5. FIRE-FIGHTING MEASURES

**Extinguishing Media**

**Suitable Extinguishing Media:**
Dry chemical. Carbon dioxide (CO2). Water spray. Foam.

**Unsuitable Extinguishing Media:**
No information available.

**Specific hazards arising from the chemical**

**Hazardous combustion products**
carbon oxides.

**Specific hazards**
May be combustible at high temperatures.

**Special Protective Actions for Firefighters**

**Specific Methods:**
No information available

**Special Protective Equipment for Firefighters:**
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

### 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

**Personal Precautions:**
Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid breathing dust. Avoid dust formation. Remove all sources of ignition.

**Environmental precautions**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Prevent entry into waterways, sewers, basements or confined areas.

**Methods and material for containment and cleaning up**

**Methods for containment**
Stop leak if you can do it without risk. Cover with plastic sheet to prevent spreading.

**Methods for cleaning up**
Sweep up and shovel into suitable containers for disposal. Clean contaminated surface thoroughly.

### 7. HANDLING AND STORAGE

**Precautions for safe handling**

**Product code:** P1834  
**Product name:** PROGESTERONE, MICRONIZED POWDER, USP  
**Page** 3 / 12
Technical Measures/Precautions:
Provide sufficient air exchange and/or exhaust in work rooms. Avoid dust formation. Keep away from incompatible materials.

Safe Handling Advice
Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Do not breathe vapors/dust. Do not ingest. Do not breathe dust. Keep away from heat and sources of ignition. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions:
Sensitive to light. Store in light-resistant containers. Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials.

Incompatible Materials:
Oxidizing agents

<table>
<thead>
<tr>
<th>8. EXPOSURE CONTROLS/PERSONAL PROTECTION</th>
</tr>
</thead>
</table>

Control parameters

National occupational exposure limits

United States

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No</th>
<th>OSHA</th>
<th>NIOSH</th>
<th>ACGIH</th>
<th>AIHA WEEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Progesterone (yam source)</td>
<td>57-83-0</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

Canada

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No</th>
<th>Canada - Alberta</th>
<th>Canada - British Columbia</th>
<th>Canada - Ontario</th>
<th>Canada - Quebec</th>
</tr>
</thead>
<tbody>
<tr>
<td>Progesterone (yam source)</td>
<td>57-83-0</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

Australia and Mexico

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No</th>
<th>Australia</th>
<th>Mexico</th>
</tr>
</thead>
<tbody>
<tr>
<td>Progesterone (yam source)</td>
<td>57-83-0</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

Appropriate engineering controls

Engineering measures to reduce exposure: Ensure adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Individual protection measures, such as personal protective equipment

Personal Protective Equipment

Eye protection: Goggles or Safety glasses with side-shields.

Product code: P1834 Product name: PROGESTERONE, MICRONIZED POWDER, USP
**Skin and body protection:**
- Long sleeved clothing
- Chemical resistant apron
- Gloves

**Respiratory protection:**
Effective dust mask. or. Wear respirator with dust filter. Use a dust respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentration of dust (dust clouds), inadequate ventilation, development of respiratory tract irritation), and engineering controls are not feasible. Be sure to use an approved/certified respirator or equivalent.

**Hygiene measures:**
Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product.

---

### 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value/Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physical state:</strong></td>
<td>Solid</td>
</tr>
<tr>
<td><strong>Appearance:</strong></td>
<td>Microcrystalline solid powder.</td>
</tr>
<tr>
<td><strong>Color:</strong></td>
<td>White</td>
</tr>
<tr>
<td><strong>Odor:</strong></td>
<td>Odorless.</td>
</tr>
<tr>
<td><strong>Taste:</strong></td>
<td>No information available.</td>
</tr>
<tr>
<td><strong>Formula:</strong></td>
<td>C21H30O2</td>
</tr>
<tr>
<td><strong>Molecular/Formula weight (g/mole):</strong></td>
<td>314.47</td>
</tr>
<tr>
<td><strong>Flammability (solid, gas):</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Flash Point Tested according to:</strong></td>
<td>Not available</td>
</tr>
<tr>
<td><strong>Autoignition Temperature (°C/°F):</strong></td>
<td>No information available</td>
</tr>
<tr>
<td><strong>Upper Explosion Limit (%):</strong></td>
<td>No information available</td>
</tr>
<tr>
<td><strong>Melting point/range(°C/°F):</strong></td>
<td>126-131°C/ 258.8-267.8°F</td>
</tr>
<tr>
<td><strong>Boiling point/range(°C/°F):</strong></td>
<td>No information available</td>
</tr>
<tr>
<td><strong>Specific gravity:</strong></td>
<td>1.17</td>
</tr>
<tr>
<td><strong>pH:</strong></td>
<td>No information available</td>
</tr>
<tr>
<td><strong>Evaporation rate:</strong></td>
<td>No information available</td>
</tr>
<tr>
<td><strong>Vapor density:</strong></td>
<td>No information available</td>
</tr>
<tr>
<td><strong>Odor threshold (ppm):</strong></td>
<td>No information available</td>
</tr>
<tr>
<td><strong>Partition coefficient</strong></td>
<td>3.87</td>
</tr>
<tr>
<td><strong>Miscibility:</strong></td>
<td>No information available</td>
</tr>
<tr>
<td><strong>Solubility:</strong></td>
<td>Soluble in Acetone</td>
</tr>
<tr>
<td><strong>Insoluble in cold water</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Insoluble in hot water</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Soluble in Alcohol</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Soluble in dioxane</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Soluble in Sulfuric acid</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Soluble in Vegetable oils</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Solubility in water:</strong></td>
<td>8.81 mg/l @ 25°C</td>
</tr>
<tr>
<td><strong>Vapor pressure @ 20°C (kPa):</strong></td>
<td>No information available</td>
</tr>
<tr>
<td><strong>VOC content (g/L):</strong></td>
<td>No information available</td>
</tr>
<tr>
<td><strong>Viscosity:</strong></td>
<td>No information available</td>
</tr>
</tbody>
</table>

### 10. STABILITY AND REACTIVITY

**Reactivity:**
- Reactive with oxidizing agents

**Chemical stability**

<table>
<thead>
<tr>
<th>Property code:</th>
<th>Product name: PROGESTERONE, MICRONIZED POWDER, USP</th>
</tr>
</thead>
<tbody>
<tr>
<td>P1834</td>
<td></td>
</tr>
</tbody>
</table>

Page 5 / 12
Stability: Sensitive to light. Exposure to light accelerates decomposition. Stable under recommended storage conditions.

Possibility of Hazardous Reactions: Hazardous polymerization does not occur


Incompatible Materials: Oxidizing agents

Hazardous decomposition products: Carbon oxides.

Other Information
Corrosivity: No information available

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure: Ingestion. Inhalation.

Acute Toxicity

Component Information

<table>
<thead>
<tr>
<th>Progesterone (yam source)</th>
<th>CAS No</th>
<th>57-83-0</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50/oral/rat =</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>LD50/oral/mouse =</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>LD50/dermal/rabbit =</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>LD50/dermal/rat =</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>LC50/inhalation/rat =</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>LC50/inhalation/mouse =</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Other LD50 or LC50 information =</td>
<td>No information available</td>
<td></td>
</tr>
</tbody>
</table>

Product Information

LD50/oral/rat = Value - Acute Tox = No information available

LD50/oral/mouse = Value - Acute Tox Oral = No information available

LD50/dermal/rabbit Value - Acute Tox = No information available

LD50/dermal/rat VALUE - Acute Tox Dermal = No information available

LC50/inhalation/rat VALUE-Vapor = No information available
VALUE-Gas = No information available
VALUE - Dust/Mist = No information available

LC50/Inhalation/mouse
VALUE - Vapor = No information available
VALUE - Gas = No information available
VALUE - Dust/Mist = No information available

Symptoms

Skin Contact: May cause skin irritation.

Eye Contact: May cause eye irritation.

Inhalation May cause respiratory tract irritation.

Ingestion May cause gastrointestinal (digestive) tract irritation with nausea, vomiting, diarrhea. May affect behavior/central nervous system (mood changes (depression of mood), easy fatigue, dizziness, drowsiness, headache, lack of initiative, ataxia, convulsions), liver, blood (affect on coagulation factors).

Aspiration hazard No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity Ingestion: It can cause nausea, vomiting, and diarrhea. Prolonged or repeated ingestion may rarely cause skin rashes, photosensitivity, alopecia, and hirsutism (deepening of voice). However, chloasma (brownish macules on the face) may appear. It may also cause anovulation and amenorrhea, weight gain, decreased libido, bloating, increase in blood pressure, thromboembolic events, congestive heart failure, and affect the liver (jaundice, hepatitis), behavior/central nervous system (see acute ingestion), and blood (see acute ingestion), endocrine system (pancreas - hyperglycemia), metabolism (increase in LDL levels, increase in sodium levels).

Sensitization: No information available.

Mutagenic Effects: May affect genetic material

Carcinogenic effects: Limited evidence of a carcinogenic effect. Possibly carcinogenic to humans.

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No</th>
<th>IARC</th>
<th>ACGIH - Carcinogens</th>
<th>NTP</th>
<th>OSHA HCS - Carcinogens</th>
<th>Australia - Notifiable Carcinogenic Substances</th>
<th>Australia - Prohibited Carcinogenic Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Progesterone (yam source)</td>
<td>57-83-0</td>
<td>Group 2B - Supplement 7 [1987] Progestins</td>
<td>Not listed</td>
<td>Reasonably Anticipated To Be A Human Carcinogen</td>
<td>Present</td>
<td>Not listed</td>
<td>Not listed</td>
</tr>
</tbody>
</table>

ACGIH (American Conference of Governmental Industrial Hygienists)

IARC (International Agency for Research on Cancer)
Group 2B - Possibly Carcinogenic to Humans

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

Reproductive toxicity Suspected of damaging fertility or the unborn child

Product code: P1834  Product name: PROGESTERONE, MICRONIZED POWDER, USP
**Reproductive Effects:** May cause adverse reproductive effects. Progestins are reportedly distributed into milk. The possible effects of progestins in milk on nursing infants have not been determined.

**Developmental Effects:** No information available.

**Teratogenic Effects:** May cause birth defects (teratogenic effects).

**Specific Target Organ Toxicity**

- **STOT - single exposure:** No information available.
- **STOT - repeated exposure:** No information available.
- **Target Organs:** Reproductive System.

### 12. ECOLOGICAL INFORMATION

**Ecotoxicity**

- **Ecotoxicity effects:** No data available.
- **Persistence and degradability:** No information available.
- **Bioaccumulative potential:** No information available.
- **Mobility in soil:** No information available.
- **Other adverse effects:** No information available.

### 13. DISPOSAL CONSIDERATIONS

**Disposal Methods**

- **Waste from residues / unused products:** Waste must be disposed of in accordance with Federal, State and Local regulation.
- **Contaminated packaging:** Empty containers should be taken for local recycling, recovery or waste disposal.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Progesterone (yam source)</td>
<td>57-83-0</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

### 14. TRANSPORT INFORMATION

**DOT**

- **UN-No:** Not Regulated
- **Proper Shipping Name:** No information available
- **Hazard Class:** No information available
- **Subsidiary Class:** No information available
- **Packing group:** No information available
- **Emergency Response Guide Number:** No information available
- **Marine Pollutant:** No data available
- **DOT RQ (lbs):** No information available
- **Special Provisions:** No Information available
- **Symbol(s):** No information available
- **Description:** No information available

**Product code:** P1834  **Product name:** PROGESTERONE, MICRONIZED POWDER, USP
15. REGULATORY INFORMATION

International Inventories

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No</th>
<th>U.S. TSCA</th>
<th>KOREA KECL</th>
<th>Philippines (PICCS)</th>
<th>Japan ENCS</th>
<th>China IECSC</th>
<th>Australia (AICS)</th>
<th>EINECS-No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Progesterone (yam source)</td>
<td>57-83-0</td>
<td>PresentACTIV E</td>
<td>Present KE-29250</td>
<td>Present</td>
<td>Not present</td>
<td>Not listed</td>
<td>Present</td>
<td>Present 200-350-6</td>
</tr>
</tbody>
</table>

Product code: P1834

Product name: PROGESTERONE, MICRONIZED POWDER, USP
U.S. Regulations

Progesterone (yam source)

Massachusetts RTK: Present
New Jersey RTK Hazardous Substance List: 1591
Pennsylvania RTK: Special hazardous substance
Pennsylvania RTK - Special Hazardous Substances Present
Minnesota - Hazardous Substance List: Present
California Directors List of Hazardous Substances: Present


Chemicals Known to the State of California to Cause Cancer:

⚠️ WARNING: This product can expose you to chemicals including (see table below) which is (are) known to the State of California to cause cancer. For more information go to www.p65warnings.ca.gov.

Chemicals Known to the State of California to Cause Reproductive Toxicity:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No</th>
<th>Carcinogen</th>
<th>Developmental Toxicity</th>
<th>Male Reproductive Toxicity</th>
<th>Female Reproductive Toxicity:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Progesterone (yam source)</td>
<td>57-83-0</td>
<td>carcinogen</td>
<td>Not Listed</td>
<td>Not Listed</td>
<td>Not Listed</td>
</tr>
</tbody>
</table>

CERCLA/SARA

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No</th>
<th>CERCLA - Hazardous Substances and their Reportable Quantities</th>
<th>Section 302 - Extremely Hazardous Substances and TPQs</th>
<th>Section 302 - Extremely Hazardous Substances and RQs</th>
<th>Section 313 - Chemical Category</th>
<th>Section 313 - Reporting de minimis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Progesterone (yam source)</td>
<td>57-83-0</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

U.S. TSCA

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No</th>
<th>TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)</th>
<th>TSCA 8(d) - Health and Safety Reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Progesterone (yam source)</td>
<td>57-83-0</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

Canada

WHIMIS 2015 - GHS Classifications

WHIMIS 2015 Hazard Classification Information: The WHIMIS 2015 classification of this product has not been validated or reviewed yet.

Canada Hazardous Products Regulation This product has been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR

DSL/NDSL

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No</th>
<th>Canada (DSL)</th>
<th>Canada (NDSL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Progesterone (yam source)</td>
<td>57-83-0</td>
<td>Not Listed</td>
<td>Present</td>
</tr>
</tbody>
</table>

Product code: P1834
Product name: PROGESTERONE, MICRONIZED POWDER, USP
Progesterone (yam source) | 57-83-0 | Not listed
Component | CAS No | CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Progesterone (yam source) | 57-83-0 | Not listed

**EU Classification**

**EU GHS - SV - CLP 1272/2008**

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No</th>
<th>Classification</th>
<th>Concentration Limits:</th>
<th>Safety Phrases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Progesterone (yam source)</td>
<td>57-83-0</td>
<td>EU GHS - SV - CLP (1272/2008)</td>
<td>No information</td>
<td></td>
</tr>
</tbody>
</table>

**EU - CLP (1272/2008)**

**R-phrase(s)**

R40 - Limited evidence of a carcinogenic effect
R63 - Possible risk of harm to the unborn child

**S-phrase(s)**

S36/37 - Wear suitable protective clothing and gloves

**Indication of danger:**

Xn - Harmful

**The product is classified in accordance with Annex VI to Directive 67/548/EEC**

**16. OTHER INFORMATION**

Preparation Date: 06/08/2015
Revision date: 4/5/2019
Prepared by: Sonia Owen

**Disclaimer:**

All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on
technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

End of Safety Data Sheet