**Section 1 - Product and Company Information**

**Product Name**
5α-Androstan-17β-ol-3-one

**Product Number**
A9360

**Brand**
Sigma Chemical

**Company**
Sigma-Aldrich

**Street Address**
3005 Spruce Street

**City, State, Zip, Country**
SANT LOUIS, MO 63103 US

**Technical Phone:**
800-325-5432

**Fax:**
800-325-5052

**Emergency Phone:**
314-775-6555

**Section 2 - Composition/Information on Ingredient**

<table>
<thead>
<tr>
<th>Substance Name</th>
<th>CAS #</th>
<th>SARA 313</th>
<th>EC no</th>
<th>Annex Index Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>5α-ANDROSTAN-17β-OL-3-ONE</td>
<td>521-18-6</td>
<td>No</td>
<td>206-307-3</td>
<td></td>
</tr>
</tbody>
</table>

**Formula**
C19H28O3

**Synonyms**
Androsten, Androlique, Androlone, Androstanolone, 5α-Androstan-17β-ol-3-one, Androstan-3-one, 17α-hydroxy-5α-androstan-3-one, 17β-hydroxy-5α-androstan-3-one, 5α-hydroxy-17β-hydroxyandrostan-3-one, Neodrosta, Proden, Trideron, Stanolone

**Section 3 - Hazards Identification**

**Emergency Overview**
Harmful.

**HMIS Rating**
Health: 1
Flammability: 0
Reactivity: 0

**NFPA Rating**
Health: 1
Flammability: 0
Reactivity: 0

*additional chronic hazards present.

For additional information on toxicity, please refer to Section 11.

**Section 4 - First Aid Measures**

**Oral Exposure**
If swallowed, wash out mouth with water provided person is conscious. Call a physician immediately.

**Inhalation Exposure**
If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

**Section 5 - Fire Fighting Measures**

**Autoignition Temp.:**
N/A

**Extinguishing Media**
Suitable
Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

**Firefighting**
Protective Equipment
Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

**Specific Hazard(s)**
Exerts toxic fumes under fire conditions.

**Section 6 - Accidental Release Measures**

**Procedure to be Followed in Case of Leak or Spill**
Evacuate area.

**Procedure(s) of Personal Protection(s)**
Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves. Wear disposable overalls and discard them after use.

**Methods for Cleaning Up**
Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

**Environmental Protection(s)**
Avoid contaminating water supply. Avoid contaminating sewers and waterways with this material.

**Section 7 - Handling and Storage**

**Handling**
User Exposure
Do not breathe dust. Do not get in eyes, on skin, on clothing. Avoid prolonged or repeated exposure.

**Storage**
Suitable
Keep tightly closed.

**Section 8 - Exposure Controls / PPE**

**Engineering Controls**
Use only in a chemical fume hood. Safety shower and eye bath.

**Personal Protective Equipment**
Respiratory
Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Where risk assessment shows air-purifying respirators are appropriate, use a full-face particulate respirator type N95 (US) or type P3 (EN 149) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator.

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Hand
Compatible chemical-resistant gloves.
Eye
Chemical safety goggles.

General Hygiene Measures
Wash contaminated clothing before reuse; Wash thoroughly after handling.

Section 9 - Physical/Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Molecular Weight</td>
<td>30.45 AMU</td>
</tr>
<tr>
<td>pH</td>
<td>N/A</td>
</tr>
<tr>
<td>BP/IP Range</td>
<td>N/A</td>
</tr>
<tr>
<td>MP/IP Range</td>
<td>176 °C</td>
</tr>
<tr>
<td>Freezing Point</td>
<td>N/A</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>N/A</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>N/A</td>
</tr>
<tr>
<td>Saturated Vapor Conc.</td>
<td>N/A</td>
</tr>
<tr>
<td>SG/Density</td>
<td>N/A</td>
</tr>
<tr>
<td>Bulk Density</td>
<td>N/A</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>N/A</td>
</tr>
<tr>
<td>Volatility</td>
<td>N/A</td>
</tr>
<tr>
<td>VOC Content</td>
<td>N/A</td>
</tr>
<tr>
<td>Water Content</td>
<td>N/A</td>
</tr>
<tr>
<td>Solvent Content</td>
<td>N/A</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>N/A</td>
</tr>
<tr>
<td>Viscosity</td>
<td>N/A</td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>N/A</td>
</tr>
<tr>
<td>Decomposition Temp.</td>
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</tr>
<tr>
<td>Flash Point °F</td>
<td>N/A</td>
</tr>
<tr>
<td>Flash Point °C</td>
<td>N/A</td>
</tr>
<tr>
<td>Explosion Limits</td>
<td>N/A</td>
</tr>
<tr>
<td>Flammability</td>
<td>N/A</td>
</tr>
<tr>
<td>Autoignition Temp</td>
<td>N/A</td>
</tr>
<tr>
<td>Optical Rotation</td>
<td>Degree of Rotation = ±3 ° (v/w)</td>
</tr>
<tr>
<td>Solubility</td>
<td>N/A</td>
</tr>
<tr>
<td>N/A = not available</td>
<td></td>
</tr>
</tbody>
</table>

Section 10 - Stability and Reactivity

Stability
Stable

Materials to Avoid
Strong oxidizing agents

Hazardous Decomposition Products
Carbon monoxide, Carbon dioxide

Section 11 - Toxicological Information

Hazardous Polymerization
Hazardous Polymerization
Will not occur.

Route of Exposure
Skin Contact
May cause skin irritation.

Skin Absorption
May be harmful if absorbed through the skin.

Eye Contact
May cause eye irritation.

Inhalation
May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.

Ingestion
May be harmful if swallowed.

Target Organ(s) or System(s)
Reproductive system.

RTECS Number: Bu9052000

Chronic Exposure - Carcinogen
Result: This product is or contains a component that has been reported to be possibly carcinogenic based on its IARC, ACGIH, NTP, or EPA classification.

Chronic Exposure - Teratogen
Species | Route of Application | Exposure Time |
---------|----------------------|---------------|
Rat      | Oral                 | (14-21D PREG) |
         | Subcutaneous         |               |
         | Result: Specific Developmental Abnormalities: Urino-genital system. |
         |                       |               |
         | Oral                 | (13-20D PREG) |
         | Intramuscular        |               |
         | Result: Specific Developmental Abnormalities: Skin and skin appendages. |
         |                       |               |
         | Oral                 | (1CD PREG)    |
         | Subcutaneous         |               |
         | Result: Specific Developmental Abnormalities: Urino-genital system. |

Chronic Exposure - Reproductive Hazard
Species | Route of Application | Exposure Time |
---------|----------------------|---------------|
Rat      | Oral                 | (25D PREG)    |
         | Subcutaneous         |               |
         | Result: Effects on Fertility. Female fertility index (e.g., # females pregnant per # females mated). |
         |                       |               |
Rat      | Oral                 | (14D PREG)    |
         | Subcutaneous         |               |
         | Result: Maternal Effects: Uterus, cervix, vagina. Effects on Fertility. Other measures of fertility |
         |                       |               |
Rat      | Oral                 | (14D PREG)    |
         | Parenteral           |               |
         | Result: Maternal Effects: Ovaries, fallopian tubes. |
Rat      | Oral                 | (1D MALE)     |
         | Parenteral           |               |
         | Result: Maternal Effects: Prostate, seminal vesicle, Cowper's gland, accessory glands. |
Rat      | Oral                 | (30D PREG)    |
         | Parenteral           |               |
         | Result: Maternal Effects: Testes, epididymis, sperm duct. Effects on Fertility: Male fertility index (e.g., # males impregnating females per # males exposed to fertile nonpregnant females). Effects on Fertility: Litter size (e.g., # fetuses per litter measured before birth). |
         |                       |               |
Rat      | Oral                 | (1D PREG)     |
         | Subcutaneous         |               |
Mouse    | Oral                 | (1D PREG)     |
         | Subcutaneous         |               |
         | Result: Maternal Effects: Ovaries, fallopian tubes. Effects on Fertility: Litter size (e.g., # fetuses per litter; measured before birth). Effects on Fertility: Other measures of fertility |
Mouse    | Oral                 | (1D PREG)     |
         | Subcutaneous         |               |
Section 12 - Ecological Information

No data available.

Section 13 - Disposal Considerations

Appropriate Method of Disposal of Substance or Preparation
Contact the Drug Enforcement Administration concerning the disposal of controlled substances. Observe all federal, state, and local environmental regulations.

Section 14 - Transport Information

DOT
Proper Shipping Name: None
Non-Hazardous for Transport: This substance is considered to be nonhazardous for transport.

IATA
Non-Hazardous for Air Transport: Non-hazardous for air transport.

Section 15 - Regulatory Information

EU Additional Classification
Symbol of Danger: Xn
Indication of Danger
Health
Risk Statements: R: 40
Limited evidence of a carcinogenic effect.
Safety Statements: S: 36/37/39 46
Wear suitable protective clothing, gloves, and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

US Classification and Label Text
Indication of Danger
Health
Risk Statements
Limited evidence of a carcinogenic effect.
Safety Statements: Wear suitable protective clothing, gloves, and eye/face protection. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

United States Regulatory Information
SARA Listed: No

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United States - State Regulatory Information
California Prop- 65
This product is not contains chemical(s) known to the state of California to cause cancer.

Canada Regulatory Information
WHMIS Classification
This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

DSL: No
NDSL: No

Section 16 - Other Information

Disclaimer
For R&D use only. Not for drug, household or other uses.

Warranty
The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to proper safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above-product. See reverse side of invoice packing slip for additional terms and conditions of sale. Copyright 2008 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.