SAFETY DATA SHEET

SECTION 1: PRODUCT IDENTIFICATION

PRODUCT NAME: DHEA (Prasterone) (Micronized)
PRODUCT CODE: 0733
SUPPLIER:
- MEDISCA Inc.
  Tel.: 1.800.932.1039 | Fax.: 1.855.850.5855
  661 Route 3, Unit C, Plattsburgh, NY, 12901
  3955 W. Mesa Vista Ave., Unit A-10, Las Vegas, NV, 89118
  6641 N. Belt Line Road, Suite 130, Irving, TX, 75063
- MEDISCA Pharmaceutique Inc.
  Tel.: 1.800.665.6334 | Fax.: 514.338.1693
  4509 Rue Dobrin, St. Laurent, QC, H4R 2L8
- MEDISCA Australia Pty Ltd
  Tel.: 1.300.786.392 | Fax.: 61.2.9700.9047
  5-9 Ricketty Street, Mascot, NSW 2020
EMERGENCY PHONE:
- CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300
- NSW Poisons Information Centre: 131 126
USES: Adjuvant; Androgen

SECTION 2: HAZARDS IDENTIFICATION

GHS CLASSIFICATION: Toxic to Reproduction (Category 2)
PICTOGRAM:

SIGNAL WORD: Warning
HAZARD STATEMENT(S):
- Reproductive effector, prohormone.
- Suspected of damaging fertility or the unborn child.
- May cause harm to breast-fed children.
- Causes serious eye irritation.
- Causes skin and respiratory irritation.
- Very toxic to aquatic life with long lasting effects.

AUSTRALIA-ONLY HAZARDS: Not Applicable.

PRECAUTIONARY STATEMENT(S):

Prevention:
- Wash thoroughly after handling.
- Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- Do not breathe dusts or mists.
- Do not eat, drink or smoke when using this product.
- Avoid contact during pregnancy/while nursing.
- Wear protective gloves, protective clothing, eye protection, face protection.
- Avoid release to the environment.

Response:
- IF ON SKIN (HAIR): Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or medical professional.
- IF EXPOSED OR CONCERNED: Get medical advice/attention.
- COLLECT SPILLAGE.
SAFETY DATA SHEET

Storage
Store locked up.

Disposal
Dispose of contents and/or container in accordance with local regulations.

HMIS CLASSIFICATION

<table>
<thead>
<tr>
<th>Health Hazard</th>
<th>Flammability</th>
<th>Reactivity</th>
<th>Personal Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>1</td>
<td>0</td>
<td>G</td>
</tr>
</tbody>
</table>

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME
5-Androsten-3β-OL-17-one

BOTANICAL NAME
Not applicable

SYNONYM
Dehydroepiandrosterone; Dehydroisoandrosterone

CHEMICAL FORMULA
C₁₉H₂₈O₂

CAS NUMBER
53-43-0

ALTERNATE CAS NUMBER
Not applicable

MOLECULAR WEIGHT
288.4282

COMPOSITION

<table>
<thead>
<tr>
<th>CHEMICAL NAME</th>
<th>CAS NUMBER</th>
<th>% BY WEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>DHEA (Prasterone)</td>
<td>53-43-0</td>
<td>100</td>
</tr>
</tbody>
</table>

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as health hazards and hence require reporting in this section.

NOTES
Prasterone is a major C₁₉ steroid produced by the adrenal cortex. It is also produced in small quantities in the testis and the ovary. Dehydroepiandrosterone (DHEA) can be converted to testosterone; androstenedione; estradiol; and estrone.

SECTION 4: FIRST-AID MEASURES

IN CASE OF EYE CONTACT
Flush with copious amounts of water for 15 minutes, separating eyelids with fingers. If irritation persists seek medical aid.

IN CASE OF SKIN CONTACT
Wash with soap & water for 15 minutes. If irritation persists seek medical aid.

IF SWALLOWED
Call a physician. Wash out mouth with water. Do not induce vomiting without medical advice.

IF INHALED
Not expected to present a significant hazard under anticipated conditions of normal use.

SECTION 5: FIREFIGHTING MEASURES

SPECIFIC HAZARDS ARISING FROM THE CHEMICAL
Slightly flammable to flammable in presence of open flames and sparks, heat. Non-flammable in presence of shocks.

FLAMMABLE PROPERTIES
May be combustible at high temperature

HAZARDOUS COMBUSTION PRODUCTS
Under fire conditions, hazardous fumes will be present.

EXTINGUISHING MEDIA
Small fire: dry chemical, CO₂ or water spray. Large fire: dry chemical, CO₂, alcohol resistant foam or water spray. Do not get water inside containers.

PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS
Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.
SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS
Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

METHODS & MATERIAL FOR CONTAINMENT
On land, sweep or shovel into suitable containers. Minimize generation of dust.

CLEANUP PROCEDURE
Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Wear respirator, chemical safety goggles, rubber boots and heavy rubber gloves. Stop leak if you can do it without risk. Prevent entry into waterways, sewers, basements or confined areas. Shut off all sources of ignition. Evacuate the area. If necessary, employ water fog to disperse the vapors. Absorb the matter with compatible vermiculite or other absorbing material. Place in a suitable container and retain for disposal. Ventilate and clean the affected area. Do not flush into sewerage system or to drains.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING
Do not inhale. Avoid contact with eyes, skin and clothing. Avoid prolonged or repeated exposure. Wash thoroughly after handling. Store away from incompatible materials, in a well-ventilated area. Eliminate all sources of ignition. Store in accordance with local regulations. Do not store in unlabelled containers. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Use appropriate containment to avoid environmental contamination.

STORAGE CONDITIONS
Store in original container, tightly sealed, protected from direct sunlight and moisture. Preserve in tight, light-resistant containers.

SECTION 8: EXPOSURE CONTROLS/ PERSONAL PROTECTION

Chemical Name: DHEA (Prasterone) CAS #: 53-43-0

<table>
<thead>
<tr>
<th></th>
<th>TWA</th>
<th>Ceiling</th>
<th>STEL</th>
<th>REL</th>
<th>IDLH</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>OSHA PEL</td>
<td>N/L</td>
<td>N/L</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>ACGIH TLV</td>
<td>N/L</td>
<td>N/L</td>
<td>N/L</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>NIOSH</td>
<td>N/L</td>
<td>N/L</td>
<td>N/L</td>
<td>N/L</td>
<td>N/L</td>
<td></td>
</tr>
<tr>
<td>AIHA WEEL</td>
<td>N/L</td>
<td>N/L</td>
<td>N/L</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Safe Work Australia HSIS</td>
<td>N/L</td>
<td>N/L</td>
<td>N/L</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>HSE</td>
<td>N/L</td>
<td>N/L</td>
<td>N/L</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

N/L = Not Listed

EXPOSURE GUIDELINES
Consult local authorities for provincial or state exposure limits. Particulates not otherwise regulated, respirable fraction: 5 mg/m³

PERSONAL PROTECTIVE EQUIPMENT
Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by WHMIS or OSHA’s eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166. Skin: Wear appropriate gloves to prevent skin exposure. Clothing: Wear appropriate protective clothing to minimize contact with skin. Respirators: Follow WHMIS or OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

SPECIFIC ENGINEERING CONTROLS
Adequate mechanical ventilation. Fumehood, eye wash station, and safety shower.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES
<table>
<thead>
<tr>
<th>PHYSICAL STATE</th>
<th>Solid</th>
</tr>
</thead>
<tbody>
<tr>
<td>DESCRIPTION</td>
<td>White or almost white crystalline powder or colorless crystals.</td>
</tr>
<tr>
<td>SOLUBILITY</td>
<td>Not available</td>
</tr>
<tr>
<td>ODOR</td>
<td>Not available</td>
</tr>
<tr>
<td>FLAMMABILITY</td>
<td>May be combustible at high temperature</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ODOR THRESHOLD</th>
<th>Not available</th>
<th>pH</th>
<th>Not available</th>
<th>MELTING POINT</th>
<th>(140 - 151)°C, (284 - 303.8)°F</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOILING POINT</td>
<td>426.7 °C, 800.06 °F</td>
<td>FREEZING POINT</td>
<td>(140 - 151)°C, (284 - 303.8)°F</td>
<td>FLASH POINT</td>
<td>&gt;93.3 °C, &gt;199.94 °F</td>
</tr>
<tr>
<td>SPECIFIC GRAVITY</td>
<td>Not available</td>
<td>EVAPORATION RATE</td>
<td>Not available</td>
<td>EXPLOSIVE LIMIT</td>
<td>Not available</td>
</tr>
<tr>
<td>UPPER FLAMMABLE/EXPLOSIVE LIMIT(S)</td>
<td>Not available</td>
<td>LOWER FLAMMABLE/EXPLOSIVE LIMIT(S)</td>
<td>Not available</td>
<td>VAPOR PRESSURE</td>
<td>2.23E-8 mmHg</td>
</tr>
<tr>
<td>VAPOR DENSITY (AIR = 1)</td>
<td>Not available</td>
<td>RELATIVE DENSITY (WATER = 1)</td>
<td>Not available</td>
<td>log P (OCTANOL-WATER)</td>
<td>3.23</td>
</tr>
<tr>
<td>AUTO-IGNITION TEMPERATURE</td>
<td>Not available</td>
<td>DECOMPOSITION TEMPERATURE</td>
<td>Not available</td>
<td>VISCOSITY</td>
<td>Not available</td>
</tr>
</tbody>
</table>

**NOTES**

The physical data presented above are typical values and should not be construed as a specification.

**SECTION 10: STABILITY AND REACTIVITY**

**REACTIVITY**

Not established

**STABILITY**

Stable under recommended storage conditions

**MATERIALS TO AVOID**

Strong oxidants

**HAZARDOUS DECOMPOSITION PRODUCTS**

Toxic fumes of carbon monoxide, carbon dioxide, nitrogen oxides and other gases may occur

**HAZARDOUS POLYMERIZATION**

Will not occur

**POSSIBILITY OF HAZARDOUS REACTION**

Not established

**CONDITIONS TO AVOID**

Moisture, sunlight and extreme temperatures

**SECTION 11: TOXICOLOGICAL INFORMATION**

**ACUTE TOXICITY**

Oral: Rat: LD50: (mg/kg): >10 000
Dermal: Rabbit LD50: (mg/kg): Not available
Inhalation: Rat: LD50: (mg/L/4hr): Not available

**SKIN CORROSION/IRRITATION**

Due to lack of data the classification is not possible.

**SERIOUS EYE DAMAGE/EYE IRRITATION**

Due to lack of data the classification is not possible.
SAFETY DATA SHEET

RESPIRATORY OR SKIN SENSITIZATION

Due to lack of data the classification is not possible.

GERM CELL MUTAGENICITY

Tumorigen, mutagen, reproductive effector, hormone. Based on available data, the classification criteria are not met.

CARCINOGENICITY

<table>
<thead>
<tr>
<th>Agency</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>OSHA</td>
<td>PRASTERONE is not listed.</td>
</tr>
<tr>
<td>NTP</td>
<td>PRASTERONE is not listed.</td>
</tr>
<tr>
<td>IARC</td>
<td>PRASTERONE is not evaluated.</td>
</tr>
<tr>
<td>California</td>
<td>This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.</td>
</tr>
</tbody>
</table>

ADDITIONAL CARCINOGENICITY INFORMATION

Tumorigen, mutagen, reproductive effector, hormone. Based on available data, the classification criteria are not met.

REPRODUCTIVE TOXICITY

Based on available data, the classification criteria are not met. May cause adverse reproductive effects based on animal studies: maternal effects/fertility; paternal effects; fetotoxicity.

SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE

Due to lack of data the classification is not possible.

SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE

Due to lack of data the classification is not possible.

ASPIRATION HAZARDS

Due to lack of data the classification is not possible.

SIGNS AND SYMPTOMS OF EXPOSURE

Not expected to present a significant hazard under anticipated conditions of normal use.

POTENTIAL HEALTH EFFECTS

<table>
<thead>
<tr>
<th>Exposure Route</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation</td>
<td>May be harmful if inhaled. Causes respiratory tract irritation.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>May be harmful if swallowed.</td>
</tr>
<tr>
<td>Skin</td>
<td>May be harmful if absorbed through skin. Causes skin irritation</td>
</tr>
<tr>
<td>Eyes</td>
<td>Causes serious eye irritation.</td>
</tr>
</tbody>
</table>

SECTION 12: ECOLOGICAL INFORMATION

TOXICITY

EC50: 48 Hr: Crustacea: (mg/L): Not available
LC50: 96 Hr: Fish: (mg/L): Not available
IC50: 72 Hr: Algae: (mg/L): Not available

PERSISTENCE AND DEGRADABILITY

Not available

BIOACCUMULATIVE POTENTIAL

LogPow: 3.23

MOBILITY IN SOIL

Water Solubility: 63.5mg/L (25°C)
Henry's Law Constant: 6.62E-09 atm-m3/mole (25°C)

OTHER ADVERSE EFFECTS

Very toxic to aquatic life with long lasting effects
This product is not intended to be released into the environment

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL

Dispose of in accordance with federal / local laws and regulations. Avoid release into the environment.

SECTION 14: TRANSPORT INFORMATION

UNITED STATES & CANADA
**SAFETY DATA SHEET**

**UN PROPER SHIPPING NAME**
Not dangerous good

**UN NUMBER**
Not applicable

**CLASS**
Not applicable

**PACKING GROUP**
Not applicable

**AUSTRALIA**

**UN PROPER SHIPPING NAME**
Not dangerous good

**UN NUMBER**
Not applicable

**CLASS**
Not applicable

**PACKING GROUP**
Not applicable

**HAZCHEM**
Not applicable

**ENVIRONMENTAL HAZARDS**
Not available

**SPECIAL SHIPPING INFORMATION**
Not applicable

**SECTION 15: REGULATORY INFORMATION**

<table>
<thead>
<tr>
<th>Chemical Name &amp; CAS</th>
<th>CERCLA 40 CFR Part 302.4</th>
<th>SARA (Title III) 40 CFR Part 372.85 Appendix A</th>
<th>EPA 40 CFR Part 355 Appendix B</th>
<th>Pennsylvania</th>
<th>Right-to-know New Jersey</th>
<th>Massachusetts</th>
<th>California Prop 65</th>
</tr>
</thead>
<tbody>
<tr>
<td>DHEA (Prasterone), 53-43-0</td>
<td>N/L</td>
<td>N/L</td>
<td>N/L</td>
<td>N/L</td>
<td>N/L</td>
<td>N/L</td>
<td>N/L</td>
</tr>
</tbody>
</table>

N/L = Not Listed; X = Listed

**AUSTRALIAN REGULATIONS**

<table>
<thead>
<tr>
<th>Chemical Name &amp; CAS</th>
<th>Poisons and Therapeutic Goods Regulation</th>
<th>Therapeutic Goods Act</th>
<th>Code of Practices - Illicit Drug Precursors</th>
</tr>
</thead>
<tbody>
<tr>
<td>DHEA (Prasterone), 53-43-0</td>
<td>Listed</td>
<td>Listed as Schedule 4</td>
<td>N/L</td>
</tr>
</tbody>
</table>

**SECTION 16: OTHER INFORMATION**

**REFERENCES**
Available upon request

**ABBREVIATIONS AND ACRONYMS**
CAS – Chemical Abstract Service; GHS – Global Harmonized System; OSHA PEL – Occupational Safety & Health Administration Permissible Exposure Limits; TWA – Time Weighted Average; HSIS – Hazardous Substances Information System; STEL – Short Term Exposure Limit; AIHA WEEL – American Industrial Hygiene Association Workplace Environment Exposure Levels; LD50 – Lethal Dose, 50%; IARC – International Agency for Research on Cancer; NTP – National Toxicology Program; WHMIS – Workplace Hazardous Materials Information System; SARA – Superfund Amendments and Reauthorization Act; EPA – Environmental Protection Agency; CERCLA – Comprehensive Environmental Response, Compensation, and Liability Act; HMIS – Hazardous Materials Information System; NIOSH – National Institute for Occupational Safety and Health; MSHA – Mine Safety and Health Administration; ACGIH – American Conference of Governmental Industrial Hygienists; IDHL – Immediately Dangerous to Health or Life; TLV – Threshold Limit Value; HSE – Health and Safety Executive; REL - Recommended Exposure Limit

**LAST REVISION**
04/2018

**SUPERSEDES**
03/2016
This document was created in accordance with OSHA, Safe Work Australia and WHMIS regulations. 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 appropriate safety precautions. It does not represent any guarantee of the properties of the product. MEDISCA® shall not be held liable for any damage resulting from handling or from contact with the above product. Recipients of the product must take responsibility for observing existing laws and regulations.