MATERIAL SAFETY DATA SHEET

TESTOSTERONE

PADDOCK LABORATORIES, INC. 3940 QUEBEC AVENUE NORTH **MINNEAPOLIS, MINNESOTA 55427**

CHEMTREC

800-424-9300

202-483-7616

EMERGENCY ASSISTANCE:

PHONE: (763)-546-4676

PADDOCK TECH. ASST. 800-328-5113

BY: Patrick L. Johnson DATE PREPARED: 5-31-89

SECTION 1 - PRODUCT IDENTIFICATION AND HAZARDOUS COMPONENTS

PRODUCT: Testosterone

SYNONYMS: N/A

MOLECULAR WEIGHT: 288.43 MOLECULAR FORMULA: C₁₀H₂₈O₂

CHEMICAL FAMILY: Androgen

INGREDIENT (CAS #) OSHA PEL % ACGIH TLV

Testosterone (58-22-0) 100 N/A N/A

SECTION 2 - PHYSICAL AND CHEMICAL CHARACTERISTICS

BOILING POINT: N/A VAPOR PRESSURE: N/A

VAPOR DENSITY: N/A MELTING POINT: 155 C

SPECIFIC GRAVITY: N/A EVAPORATION RATE: N/A

(WATER = 1) $(BUTYL\ ACETATE = 1)$

WATER SOLUBILITY: Practically insol. WATER REACTIVE: No

APPEARANCE AND ODOR: White or slightly creamy white crystals or crystalline powder; odorless.

SECTION 3 - FIRE AND EXPLOSION DATA

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FLASH POINT (METHOD): N/A AUTOIGNITION TEMPERATURE: N/A

FLAMMABLE LIMITS: LOWER: N/A UPPER: N/A

EXTINGUISHING MEDIA: Water spray, dry chemical, carbon dioxide, or foam.

SPECIAL FIRE FIGHTING PROCEDURES: Fire fighters should wear all protective gear including self-contained breathing apparatus.

UNUSUAL FIRE AND EXPLOSION HAZARDS: This material is assumed to be combustible. When heated to decomposition (as under fire conditions) it may emit toxic fumes.

SECTION 4 - REACTIVITY HAZARD DATA

STABILITY: Stable (X) Unstable ()

INCOMPATIBILITY (MATERIALS TO AVOID): Oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS: When heated to decomposition it may emit toxic fumes.

HAZARDOUS POLYMERIZATION: May Occur () Will Not Occur (X)

SECTION 5 - HEALTH HAZARD DATA

TOXICITY: LD100: Intraperitoneal (rat) = 325 mg/kg

CARCINOGEN LISTED BY: NTP Yes () No (X)

IARC Yes(X) No()OSHA Yes(X) No()Other $Yes(X)^* No()$

* NOTE: There are rare reports of hepatocellular carcinoma in individuals receiving long term androgen therapy in high doses.)

ROUTES OF ENTRY: Inhalation, ingestion, absorption.

HEALTH HAZARDS:

ACUTE: Eye, skin and/or respiratory tract irritation, nausea, vomiting.

CHRONIC: Possible hypersensitization; inhibition of testicular function in males; masculinization, nausea, edema, menstrual irregularities in females; **carcinogen**

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SIGNS AND SYMPTOMS OF OVEREXPOSURE: Eye, skin and/or respiratory tract irritation, nausea, vomiting.

MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE: Hypersensitivity to testosterone. Carcinoma of prostate or breasts. Known or suspected neoplasia. Pregnant women should avoid exposure.

EMERGENCY FIRST AID PROCEDURES: If serious hypersensitivity reactions develop seek immediate medical attention.

INHALATION: Remove to fresh air. Trained personnel should initiate artificial respiration if victim is not breathing. Seek medical attention immediately.

EYES CONTACT: Flush with water for 15 minutes.

SKIN CONTACT: Wash with soap and water.

INGESTION: Rinse mouth out with water and seek medical attention immediately.

SECTION 6 - CONTROL AND PROTECTIVE MEASURES

RESPIRATORY PROTECTION: Approved dust respirator.

PROTECTIVE GLOVES: Rubber or latex.

EYE PROTECTION: Safety glasses or goggles recommended. Avoid wearing contact lenses when working with this or any chemical due to the possibility of increased severity of eye injury.

VENTILATION: Local or mechanical ventilation recommended.

OTHER PROTECTIVE EQUIPMENT: Appropriate laboratory apparel.

HYGIENIC WORK PRACTICES: Do not eat, drink or smoke near this material. Wash any exposed skin areas after handling. Wash contaminated clothing before reuse.

SECTION 7 - HANDLING AND STORAGE PRECAUTIONS

HANDLING PRECAUTIONS: Avoid contact with eyes, skin or clothing. Avoid breathing dust. Wash thoroughly after handling. Wash contaminated clothing before reuse. Do not eat, drink or smoke near this material.

STORAGE PRECAUTIONS: Store in tight container and avoid exposure to excessive heat or humidity.

OTHER PRECAUTIONS: None.

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SECTION 8 - SPILL AND DISPOSAL PROCEDURES

STEPS TO BE TAKEN IN CASE OF SPILL OR DISCHARGE: Wear protective equipment (approved respirator, gloves, goggles) and protect exposed skin. Vacuum or sweep up spillage and place in a tight container for disposal. Ventilate spill area and wash down with soap and water. Wash thoroughly and wash contaminated clothing before reuse.

WASTE DISPOSAL METHOD: Incinerate or landfill according to all local, state, federal, and environmental regulations.

SECTION 9 - DISCLAIMER

The information contained in this Material Safety Data Sheet has been compiled from reliable sources and is believed to be correct as of the date issued. It is the responsibility of the user to determine the appropriateness and applicability to their situation. Paddock Laboratories, Inc. disclaims any expressed or implied warranty as to the accuracy of the above information and shall not be held liable for any direct, incidental, or consequential damages from use or reliance on the above information.

DEFINITIONS OF ABBREVIATIONS USED:

ACGIH: American Conference of Governmental Industrial Hygienists

CAS: Chemical Abstract Service

IARC: Internal Agency for Research on Cancer

IDLH: Immediately Dangerous to Life or Health level

LD50: Median Lethal Dose

N/A: Not available

NTP: National Toxicology Program

OSHA: Occupational Safety and Health Administration

PEL: Permissible Exposure Limit

STEL: Short Term Exposure Limit

TLV: Threshold Limit Value