

MATERIAL SAFETY DATA SHEET

Stock product

Matreya LLC

Date-Issued: 10/13/2004
MSDS Ref. No: 1122
Date-Revised: 10/30/2009
Revision No: 3

Ergosterol**1. PRODUCT AND COMPANY IDENTIFICATION****PRODUCT NAME:** Ergosterol**PRODUCT DESCRIPTION:** Ergosterol**PRODUCT CODE:** 1122**MANUFACTURER**

Matreya
 168 Tressler Street
 Pleasant Gap, PA 16823
 Ph # 814-359-5060

24 HR. EMERGENCY TELEPHONE NUMBERS

800-424-9300

2. COMPOSITION / INFORMATION ON INGREDIENTS

| <u>Chemical Name</u> | <u>Wt. %</u> | <u>CAS#</u> | <u>EINECS#</u> |
|---|--------------|-------------|----------------|
| Ergosterol, (5,7,22-cholestatrien-24 β -methyl-3 β -OL), (ergosta-5,7,22-trien-3 β -OL) | 100 | 57-87-4 | |

EEC LABEL SYMBOL AND CLASSIFICATION

R28 - Very toxic if swallowed.

EEC Very toxic - "T+"

COMMENTS: Source: synthetic or natural, plant**3. HAZARDS IDENTIFICATION****EMERGENCY OVERVIEW****PHYSICAL APPEARANCE:** Solid**IMMEDIATE CONCERNS:** Very toxic if swallowed.**POTENTIAL HEALTH EFFECTS****EYES:** Contact may cause eye irritation.**SKIN:** May cause skin irritation.**SKIN ABSORPTION:** May be harmful if absorbed through the skin.**INGESTION:** This material may be fatal if swallowed.**INHALATION:** Irritating to the nose, throat and respiratory tract.**SIGNS AND SYMPTOMS OF OVEREXPOSURE****EYES:** Causes eye irritation.**SKIN:** Contact causes skin irritation.**SKIN ABSORPTION:** Possible allergic reaction to material if in contact with skin.**INGESTION:** Possible allergic reaction to material if ingested.**INHALATION:** Prolonged or excessive inhalation may cause respiratory tract irritation.

ACUTE TOXICITY: Possible eye, skin, gastrointestinal and/ or respiratory tract irritation.

CHRONIC: Possible hypersensitization and hypercalcemia which may lead to hypertension, kidney failure, cardiovascular failure, or death.

CARCINOGENICITY: This material not known to cause cancer in animals or humans.

MEDICAL CONDITIONS AGGRAVATED: Hypersensitivity to material, hyperphosphatemia, hypercalcemia, hypervitaminosis D, impaired kidney or cardiac function, and arteriosclerosis.

ROUTES OF ENTRY: Skin ,Eyes ,Inhalation ,Ingestion

TARGET ORGAN STATEMENT: Kidneys and cardiovascular system.

CANCER STATEMENT: This material is not known to cause cancer in animals or humans.

IRRITANCY: Harmful by inhalation, contact with skin/eyes, and if swallowed.

SENSITIZATION: May cause allergic skin reaction.

COMMENTS HEALTH: The toxicological properties of this material have not been fully investigated.

HEALTH HAZARDS: Irritant to eyes, skin, and respiratory tract.

PHYSICAL HAZARDS: HAZARDOUS: IRRITANT!

4. FIRST AID MEASURES

EYES: Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes.

SKIN: Wash with soap and water.

INGESTION: Get medical attention immediately.

INHALATION: No specific treatment is necessary since this material is not likely to be hazardous by inhalation. If exposed to excessive levels of dusts or fumes, remove to fresh air and get medical attention if cough or other symptoms develop.

NOTES TO PHYSICIAN: Overdose effects may include: 1- Hypervitaminosis; 2- Hypercalcemic crisis; 3- Cardiac arrhythmias.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray or fog. Cool containing vessels with water in order to prevent pressure build-up, autoignition or explosion.

FIRE FIGHTING PROCEDURES: As in any fire, wear self-contained breathing apparatus pressure-demand, (MSHA/NIOSH approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Clean up spills immediately, observing precautions in Protective Equipment section.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Avoid contact with eyes, skin, and clothing.

HANDLING: Avoid breathing (dust, vapor, mist, gas).

STORAGE: Store at -20C

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: Use only in a well ventilated area.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Wear safety glasses with side shields (or goggles) and a face shield.

SKIN: S37 - Wear suitable gloves. Wash thoroughly after handling.

RESPIRATORY: S38 - In case of insufficient ventilation, wear suitable respiratory equipment.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: solid

BOILING POINT: > 300°C

MELTING POINT: 156°C to 158°C

SOLUBILITY IN WATER: Practically insoluble

SPECIFIC GRAVITY: 1.04 (water=1)

MOLECULAR WEIGHT: 397

MOLE. WT. FORMULA: C₂₈H₄₄O

10. STABILITY AND REACTIVITY

STABLE: YES

CONDITIONS TO AVOID: Sensitive to air, and light.

STABILITY: Stable.

POLYMERIZATION: Will not occur.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon oxides (CO, CO₂)

INCOMPATIBLE MATERIALS: Bases, oxidizing agents, reducing agents.

11. TOXICOLOGICAL INFORMATION

EYE EFFECTS: Not available

SKIN EFFECTS: Not available

TARGET ORGANS: Kidneys and cardiovascular system.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: Do not flush to sewer.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: This material and its container must be disposed of in a safe way.

14. TRANSPORT INFORMATION**DOT (DEPARTMENT OF TRANSPORTATION)**

PROPER SHIPPING NAME: Toxic Solid, Organic, N.O.S.

TECHNICAL NAME: Ergosterol

PRIMARY HAZARD CLASS/DIVISION: 6.1

UN/NA NUMBER: 2811

PACKING GROUP: II

PLACARDS: Toxic

NAERG: 154

CANADA TRANSPORT OF DANGEROUS GOODS

PROPER SHIPPING NAME: Toxic Solid, Organic, N.O.S.
TECHNICAL NAME: Ergosterol
PRIMARY HAZARD CLASS/DIVISION: 6.1
UN/NA NUMBER: 2811
PACKING GROUP: II
PLACARDS: Toxic
CANUTEC GUIDE: 154

AIR (ICAO/IATA)

PROPER SHIPPING NAME: Toxic Solid, Organic, N.O.S.
TECHNICAL NAME: Ergosterol
PRIMARY HAZARD CLASS/DIVISION: 6.1
UN/NA NUMBER: 2811
PACKING GROUP: II
PLACARDS: Toxic

VESSEL (IMO/IMDG)

PROPER SHIPPING NAME: Toxic Solid, Organic, N.O.S.
TECHNICAL NAME: Ergosterol
PRIMARY HAZARD CLASS/DIVISION: 6.1
UN/NA NUMBER: 2811
PACKING GROUP: II
PLACARDS: Toxic

15. REGULATORY INFORMATION**UNITED STATES****DOT LABEL SYMBOL AND HAZARD CLASSIFICATION**

R28 - Very toxic if swallowed.

DOT Toxic

S28 - After contact with skin, wash immediately with plenty of polyethylene glycol.

S36 - Wear suitable protective clothing. S37 - Wear suitable gloves.

S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)**311/312 HAZARD CATEGORIES:****FIRE: NO PRESSURE GENERATING: NO REACTIVITY: NO ACUTE: NO CHRONIC: NO****CANADA****WHMIS HAZARD SYMBOL AND CLASSIFICATION**

R28 - Very toxic if swallowed.

WHMIS Toxic

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S36 - Wear suitable protective clothing. S37 - Wear suitable gloves.

S45 - In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

WHMIS (WORKER HAZARDOUS MATERIALS INFORMATION SYSTEM): This product has been classified in accordance with the hazard criteria of the Controlled Product Regulations and the MSDS contains all required information.

EUROPEAN COMMUNITY

EEC LABEL SYMBOL AND CLASSIFICATION



R28 - Very toxic if swallowed.

EEC Very toxic - "T+"

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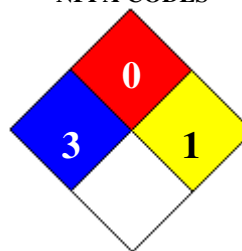
16. OTHER INFORMATION

REVISION SUMMARY Revision #: 3 This MSDS replaces the April 30, 2009 MSDS. Any changes in information are as follows: In Section 9 Melting Point (Operator) Melting °C (From) Melting °C (To)

HMIS RATING

| | | |
|----------------------|--|---|
| HEALTH: | | 3 |
| FLAMMABILITY: | | 0 |
| PHYSICAL HAZARD: | | 1 |
| PERSONAL PROTECTION: | | |

NFPA CODES



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