## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** **LESCO Spectator T&O Fungicide**
**EPA Reg. No.:** 228-633
**Product Type:** Fungicide

**Company Name:** Nufarm Americas Inc.
11901 S. Austin Avenue
Alsip, IL 60803
1-800-345-3330

**Telephone Numbers:** **For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident, Call CHEMTREC Day or Night: 1-800-424-9300**
**For Medical Emergencies Only, Call 1-877-325-1840**

**This product is an EPA FIFRA registered pesticide. Some classifications on this SDS are not exactly the same as on the FIFRA label. Certain sections are superseded by federal law governed by EPA for a registered pesticide. Please see Section 15. REGULATORY INFORMATION for explanation.**

## 2. HAZARDS IDENTIFICATION

**PHYSICAL HAZARDS:**

| | |
|---|---|
| Flammable liquid | Category 4 |

**HEALTH HAZARDS:**

| | |
|---|---|
| Acute toxicity, oral | Category 4 |
| Skin irritation | Category 2 |
| Eye irritation | Category 2A |
| Specific target organ toxicity – Repeat exposure | Category 2 |
| Carcinogenicity | Category 2 |

**ENVIRONMENTAL HAZARDS:**

| | |
|---|---|
| Hazardous to aquatic environment, acute | Category 1 |
| Hazardous to aquatic environment, chronic | Category 1 |

**SIGNAL WORD:**
WARNING

**HAZARD STATEMENTS:**
Combustible liquid. Harmful if swallowed or inhaled. Suspected of causing cancer. Causes skin irritation. Causes serious eye irritation. May cause damage to organs (liver) through prolonged or repeated exposure. Very toxic to aquatic life with long lasting effects.

**PRECAUTIONARY STATEMENTS:**
Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. If exposed or concerned: get medical advice/attention.

Store locked up.

Keep away from flames and hot surfaces. – No smoking. In case of fire: Use dry chemical, carbon dioxide, foam, water spray or fog to extinguish. Store in well-ventilated place. Keep cool.

Wash hands and exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. If swallowed: Call a poison center/doctor if you feel unwell. Rinse mouth. Dispose of contents/container in accordance with local/regional/national/international regulations.

Wear protective gloves/eye protection/face protection. If on skin: 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. If eye irritation persists: Get medical advice/attention.

Avoid release to the environment.

Collect spillage.

Dispose of contents/container in accordance with state and federal regulations.

See Section 13 and product label for disposal instructions.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

| COMPONENTS | CAS NO. | % BY WEIGHT |
|---|---|---|
| Propiconazole | 60207-90-1 | 40.5 – 43.5 |
| Solvent naphtha (petroleum), heavy arom. | 64742-94-5 | 42.3 – 45 |
| Naphthalene | 91-20-3 | <4.5 |
| Pseudocumene (1,2,4-Trimethylbenzene) | 95-63-6 | <1.0 |
| Other Ingredients | Trade Secret | Trade Secret |

**Synonyms:** Mixture containing Propiconazole: 1-[[2,(2,4-dichloropheyny)-4-propyl-1,3-dioxolan-2-yl]methyl]-1H-1,2,4 triazole

Ingredients not precisely identified are proprietary or non-hazardous. Values are not product specifications.

## 4. FIRST AID MEASURES

**If in Eyes:** Hold eye open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
**If on Skin or Clothing:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.
**If Swallowed:** Call a poison control center or doctor immediately for treatment advice. Do not give any liquid to the person. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.
**Inhaled:** Move person to fresh air. Get medical attention if symptoms develop.
**Most Important symptoms/effects, acute and delayed**: Eye exposure may cause moderate irritation. Skin exposure may cause moderate irritation.
**Indication of Immediate medical attention and special treatment if needed, if necessary**: None expected.

## 5. FIRE FIGHTING MEASURES

**Extinguishing Media:** Use extinguishing media suitable for surrounding materials. Dry chemical, carbon dioxide, foam, water spray or fog.
**Special Fire Fighting Procedures:** Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full fire-fighting turn out gear. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later.
**Unusual Fire and Explosion Hazards:** Combustible liquid. Can release vapors that form explosive mixtures at temperatures at or above the flash point. Containers will burst from internal pressure under extreme fire conditions. If water is used to fight fire or cool containers, dike to prevent runoff contamination of municipal sewers and waterways.

**Hazardous Decomposition Materials (Under Fire Conditions):** May produce gases such as oxides of carbon and nitrogen.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** Wear appropriate protective gear for the situation. See Personal Protection information in Section 8.
**Environmental Precautions:** Prevent material from entering public sewer systems or any waterways. Do not flush to drain. Large spills to soil or similar surfaces may necessitate removal of topsoil. The affected area should be removed and placed in an appropriate container for disposal.
**Methods for Containment:** Dike spill using absorbent or impervious materials such as earth, sand or clay. Collect and contain contaminated absorbent and dike material for disposal.
**Methods for Cleanup and Disposal:** Avoid creation of dusty conditions. Scrape up and place in appropriate closed container. Wash entire spill area with a detergent slurry, absorb and sweep into container for disposal. Decontaminate tools and equipment following cleanup. See Section 13: DISPOSAL CONSIDERATIONS for more information.
**Other Information:** Large spills may be reportable to the National Response Center (800-424-8802) and to state and/or local agencies.

## 7. HANDLING AND STORAGE

**HANDLING**: Do not get in eyes or on clothing or skin. Users should wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing/Personal Protective Equipment (PPE) immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing. Remove Personal Protective Equipment (PPE) immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

**STORAGE:** Store in original container in a secured dry storage area. Prevent cross-contamination with other pesticides and fertilizers. Do not contaminate water, food, or feed by storage or disposal.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering Controls:**
Where engineering controls are indicated by specific use conditions or a potential for excessive exposure, use local exhaust ventilation at the point of generation.
**Eye/Face Protection:** Not normally required. To avoid contact with eyes, wear chemical goggles or shielded safety glasses. An emergency eyewash or water supply should be readily accessible to the work area.
**Skin Protection:** To avoid contact with skin, wear long pants, long-sleeved shirt, socks and shoes. An emergency shower or water supply should be readily accessible to the work area.
**Respiratory Protection:** Not normally required. If vapors or mists exceed acceptable levels, wear NIOSH approved air-purifying respirator with cartridges/canisters approved for use against pesticides.
**General Hygiene Considerations:** Personal hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material: 1) do not store, use and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored; 2) wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics or using the toilet.
**Exposure Guidelines:**

| | OSHA | | ACGIH | | |
|---|---|---|---|---|---|
| **Component** | **TWA** | **STEL** | **TWA** | **STEL** | **Unit** |
| Propiconazole | NE | NE | NE | NE | |
| Naphthalene | 10 | NE | 10 skin | NE | ppm |
| Pseudocumene (1,2,4-Trimethylbenzene) | 25 | NE | NE | NE | ppm |
| Other Ingredients | NE | NE | NE | NE | |

NE = Not Established

## 9. PHYSICAL AND CHEMICAL PROPERTIES

| | |
|---|---|
| **Appearance:** | Amber liquid |
| **Odor:** | No data available |
| **Odor threshold:** | No data available |
| **pH:** | 5.56 (1% w/w dispersion in DIW) |
| **Melting point/freezing point:** | No data available |
| **Initial boiling point and boiling range** | No data available |
| **Flash point:** | 148.3° F (64.6° C) |
| **Evaporation rate:** | No data available |
| **Flammability (solid, gas):** | No data available |
| **Upper/lower flammability or explosive limits:** | No data available |
| **Vapor pressure:** | No data available |
| **Vapor density:** | No data available |
| **Relative density:** | 1.053 g/mL @ 20º C |
| **Solubility(ies):** | No data available |
| **Partition coefficient: n-octanol/water:** | No data available |
| **Autoignition temperature:** | No data available |
| **Decomposition temperature:** | No data available |
| **Viscosity:** | 17.436 cSt (20° C) and 7.789 cSt (40° C) |

**Note:** Physical data are typical values, but may vary from sample to sample. A typical value should not be construed as a guaranteed analysis or as a specification.

## 10. STABILITY AND REACTIVITY

**Reactivity:** Not reactive
**Chemical Stability:** This material is stable under normal handling and storage conditions.
**Possibility of Hazardous Reactions:** Hazardous polymerization will not occur.
**Conditions to Avoid:** Avoid temperatures near or above flash point 148.3°F (64.6°C).
**Incompatible Materials:** Strong oxidizing agents: bases and acids.
**Hazardous Decomposition Products:** Under fire conditions may produce gases such as hydrogen chloride and oxides of carbon and nitrogen.

## 11. TOXICOLOGICAL INFORMATION

**Likely Routes of Exposure:** Dermal
**Symptoms of Exposure:**
**Eye Contact:** Causes substantial but temporary eye injury. Vapors and mist may cause irritation.
**Skin Contact:** Minimally toxic and moderately irritating based on toxicity studies.
**Ingestion:** May be harmful if swallowed. The petroleum hydrocarbon component, if aspirated into the respiratory system during ingestion or vomiting may cause mild or severe pulmonary injury, possibly progressing to death.
**Inhalation:** Low inhalation toxicity. Overexposure to petroleum hydrocarbon component may cause irritation to respiratory tract, headaches, anesthesia, drowsiness, unconsciousness and other central nervous system effects, possibly including death.
**Delayed, immediate and chronic effects of exposure:** None reported.

**Toxicological Data:**
Data from laboratory studies conducted on this product are summarized below:
**Oral:** Rat $LD_{50}$: 1,030 mg/kg (females)
**Dermal:** Rat $LD_{50}$: >5,000 mg/kg
**Inhalation:** Rat 4-hr $LC_{50}$: >2.04 mg/L (no mortalities at highest dose tested)
**Eye Irritation:** Rabbit: Moderately irritating (MMTS=41.0)
**Skin Irritation:** Rabbit: Moderately irritating (PDII=4.8)
**Skin Sensitization:** Not a contact sensitizer in guinea pigs following repeated skin exposure.

**Subchronic (Target Organ) Effects:** Repeated overexposure to propiconazole may cause effects to liver.
**Carcinogenicity / Chronic Health Effects:** Propiconazole has been shown to cause an increased incidence of benign liver tumors in male mice at extremely high doses. No treatment-related tumors were seen in female mice in the same study or in a separate rat study. The hydrocarbon component may contain naphthalene, which is listed by IARC as a class 2B and the U.S. National Toxicology Program as reasonably anticipated to be a human carcinogen.
**Reproductive Toxicity:** Propiconazole did not demonstrate reproductive effects in animal studies.
**Developmental Toxicity:** Animal tests with propiconazole have not demonstrated developmental effects.
**Genotoxicity:** Studies indicate that propiconazole did not produce genetic damage in mammalian or bacterial cell cultures or in animal studies.

**Assessment Carcinogenicity:**
This product contains substances that are considered to be probable or suspected human carcinogens as follows:

| | Regulatory Agency Listing As Carcinogen | | | |
|---|---|---|---|---|
| **Component** | **ACGIH** | **IARC** | **NTP** | **OSHA** |
| Naphthalene | No | 2B | Yes* | No |

*Reasonably anticipated to be a human carcinogen

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity:**
Data on Propiconazole Technical:

| | | | |
|---|---|---|---|
| 96-hour $LC_{50}$ Bluegill: | 1.3 ppm | Bobwhite Quail Oral $LD_{50}$: | 2,825 mg/kg |
| 96-hour $LC_{50}$ Rainbow Trout: | 0.85 ppm | Bobwhite Quail 8-day Dietary $LC_{50}$: | >5,620 ppm |
| 48-hour $LC_{50}$ Daphnia magna: | 4.8 ppm | Mallard Duck Oral $LD_{50}$: | 2,510 mg/kg |
| 96-hour $LC_{50}$ Mysid: | 0.51 ppm | Mallard Duck 8-day Dietary $LC_{50}$: | >5,620 ppm |
| 48-hour Honey Bee $LD_{50}$: | >25 μg/bee | | |

**Environmental Fate:**
Propiconazole is persistent and relatively immobile in most soil and aqueous environments. Propiconazole degradation in the aquatic environment appears to be dependent solely on aqueous photolysis. In the soil, propiconazole dissipation appears to be dependent on binding to soil organic matter content. The average half-life in soils ranges from months to a year

## 13. DISPOSAL CONSIDERATIONS

**Waste Disposal Method:**
Pesticide wastes may be acutely hazardous. Improper disposal is a violation of Federal law. Pesticide, mixtures, or equipment rinse water that cannot be chemically reprocessed must be disposed of according to applicable Federal, state or local procedures. Contact your state pesticide or environmental control agency or the hazardous waste representative at the nearest EPA Regional Office for guidance.

**Container Handling and Disposal:** Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by incineration, or, if allowed by State and local authorities, by burning. If burned stay out of smoke.

## 14. TRANSPORTATION INFORMATION

**DOT**

**< 119 gallons per completed package**
Non Regulated

**≥ 119 gallons and < 265 gallons per completed package**
NA 1933, COMBUSTIBLE, N.O.S., (NAPHTHALENE), 3, III

**≥ 265 gallons per completed package**
NA 1933, COMBUSTIBLE, N.O.S., (NAPHTHALENE), 3, III, RQ

**IMDG**

UN 3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S, (PROPICONAZOLE), 9, III, MARINE POLLUTANT

## 15. REGULATORY INFORMATION

### EPA FIFRA INFORMATION

This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is reproduced below. The pesticide label also includes other important information, including directions for use.

WARNING. Causes substantial but temporary eye injury. Causes skin irritation. Harmful if swallowed. Do not get in eyes, on skin, or on clothing. Wear protective eyewear such as goggles, face shield, or safety glasses. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove and wash contaminated clothing before reuse.

### U.S. FEDERAL REGULATIONS

**TSCA Inventory:** This product is exempted from TSCA because it is solely for FIFRA regulated use.

**SARA Hazard Notification/Reporting:**
**Hazard Categories Under Criteria of SARA Title III Rules (40 CFR Part 370):**
Immediate and delayed

**Section 313 Toxic Chemical(s):**
Propiconazole (CAS No. 60207-90-1) 40.5 – 43.5 % by wt. in product.
Naphthalene (CAS No. 91-20-3) <4.0% by wt. in product.
1,2,4-Trimethylbenzene (CAS No. 95-63-6) <1.0% by wt. in product.

**Reportable Quantity (RQ) under U.S. CERCLA:**
Naphthalene (CAS No. 91-20-3) 100 lbs

**RCRA Waste Code:**
Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

**State Information:**
Other state regulations may apply. Check individual state requirements.

**California Proposition 65:** WARNING! This product contains naphthalene, a chemical known to the State of California to cause cancer

## 16. OTHER INFORMATION

**National Fire Protection Association (NFPA) Hazard Rating:**
**Rating for this product: Health:** 3 **Flammability:** 2 **Reactivity:** 0
Hazards Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

This Safety Data Sheet (SDS) serves different purposes than and DOES NOT REPLACE OR MODIFY THE EPA-ACCEPTED PRODUCT LABELING (attached to and accompanying the product container). This SDS provides important health, safety and environmental information for employers, employees, emergency responders and others handling large quantities of the product in activities generally other than product use, while the labeling provides that information specifically for product use in the ordinary course.

Use, storage and disposal of pesticide products are regulated by the EPA under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) through the product labeling, and all necessary and appropriate precautionary, use, storage, and disposal information is set forth on that labeling. It is a violation of Federal law to use a pesticide product in any manner not prescribed on the EPA-accepted label.

Although the information and recommendations set forth herein (hereinafter “Information”) are presented in good faith and believed to be correct as of the date hereof, Nufarm Americas Inc. makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving same will make their own determination as to its suitability for their purposes prior to use. In no event will Nufarm Americas Inc. be responsible for damages of any nature whatsoever resulting from the use of or reliance upon Information. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE ARE MADE HEREUNDER WITH RESPECT TO INFORMATION OR THE PRODUCT TO WHICH INFORMATION REFERS AND ALL SUCH WARRANTIES ARE HEREBY SPECIFICALLY DISCLAIMED.

**Date of Issue:** April 3, 2015 **Supersedes:** October 31, 2014