## MATERIAL SAFETY DATA SHEET

MATERIAL IDENTIFICATION

Distributor: Paragon Professional Pest Control Products Address: 3635 Knight Road, Suite 7 Emergency Phone: CHEMTREC 1-800-424-9300 Memphis, TN 38118 Date Prenared: 02/02/09

SECTION 1 - CHEMICAL PRODUCT INFORMATION

Terpenoid; Benzodioxole Product Name Demize EC Chemical Family Chemical Name/Synonym 3,7-Dimethyl-1,6-octadien-3-ol; Formula  $C_{10}H_{18}O; C_{19}H_{30}O_{5}$ 

5-[2(2-butoxyethoxy)ethoxymethyl]-EPA Registration No.: 2724-769 6-propyl-1,3-benzodioxole RF Number: 2110

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

CAS Number Component (chemical, common name) **CAS Number** Weight Tolerance Component (chemical, common name) Weight Tolerance Linalool 78-70-6 37 0% Pineronyl Butoxide 51-03-6 40.0%

SECTION 3 - HAZARD INFORMATION

## PRECAUTIONARY STATEMENTS

## DANGER - KEEP OUT OF THE REACH OF CHILDREN

Corrosive, causes irreversible eye damage. Do not get in eyes, on skin, or on clothing. Wear goggles, face shield or safety glasses. Harmful if swallowed. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

PRIMARY ROUTE OF ENTRY Inhalation: Yes Oral: No.

Eye:

**ACUTE TOXICITY** Oral: Harmful if swallowed. OTHER TOXICOLOGICAL Skin Irritation: Moderate irritant.

Dermal: No specific hazard identified INFORMATION Eve Irritation: Corrosive, causes irreversible eve damage. No specific hazard identified Not a skin sensitizer.

SECTION 4 - FIRST AID MEASURE

Call a poison control center or doctor immediately for treatment advice. Have a person sip a Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, Ingestion after the first 5 minutes, and then continue rinsing. Call a poison control center or doctor for treatment advice glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison

Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor. Do not give anything by mouth to an unconscious person. Skin:

Probable mucosal damage my contraindicate the use of gastric lavage control center or doctor for treatment advice Not to Physician

SECTION 5 - FIRE FIGHTING MEASURES

NFPA: Heath: 3. Fire: 2 Reactivity: 0. Special Protective Equipment: Firefighters should wear full protective clothing including self-contained

Flammability Class: Class IIIA Combustible liquid. breathing apparatus

> 150°F Flash Point: Fire Fighting Procedures: Normal procedures. Do not allow fire fighting water to escape into water

Explosive Limit (% of Volume): Not Available ways or sewers.

Extinguishing Media: Dry Chemical, CO., Foam. Combustion Products: Products of combustion are principally carbon dioxide, carbon monoxide, and Unusual Fire/Explosion Hazards: None Known. water

SECTION 6 - ACCIDENTAL RELEASE MEASURES

Remove all sources of ignition. See section 8 for Personal Protective Equipment Clay granules, dirt, or equivalent

> recommendations. Do not allow spill to enter water ways inhabited by aquatic organisms. None known

Soak up with absorbent material and place in a suitable container for disposal

SECTION 7 - HANDLING AND STORAGE Handling: Do not get in eyes, on skin or on clothing. Corrosive, causes irreversible eye damage. Harmful if swallowed. Wash

Storage: Do not contaminate water, food, or feed by storage. Store in a dry cool place

thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

SECTION 8 - EXPOSURE CONTROL/PERSONAL MEASURES Exposure Limits: Not available Personal Protective Equipment:

Prevent contact with eyes by wearing protective goggles. Depending upon application a face shield may be necessary. Wear chemical Ventilation: Use sufficient general ventilation. resistant gloves. Take appropriate precautions to prevent contact with clothing. Remove contaminated clothing and wash before reuse.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: Clear pale yellow liquid with woody/floral odor. **Boiling Point:** Not known Melting Point: Not applicable (liquid). Not known

> 0.4 mm Hg. Vapor Density (Air 1): Not known. Specific Gravity: 0.960 Vapor Pressure (mm Hg): **Bulk Density:** 8.0 lbs./gallon Solubility Miscible **Evaporation Rate** Not known

SECTION 10 - STABILITY AND REACTIVITY

Stability: Stable. Decomposition Products: Products of combustion are principally carbon dioxide, carbon monoxide, and

Reactivity Not reactive water. Incompatibility w/ Other Materials: None Known Hazardous Polymerization: Will not occur

SECTION 11 - TOXICOLOGICAL INFORMATION **ACUTE TOXICITY** CHRONIC TOXICITY [Specific to Active Ingredient(s)]

Acute oral toxicity (rat): LD50 4.508 mg/kg (males) and 5.546 mg/kg (females): 5.000 mg/kg (combined) Linalool is considered Generally Recognized as Safe (GRAS) by US FDA. Linalool is used in fragrances, deter-

Acute dermal toxicity: LD50 > 2,000 mg/kg. gents and soaps up to a level of 1.5%. There has been no evidence to date for ocular or respiratory effects Acute inhalation toxicity: 4-hr LC50 > 2.2 mg/L arising from perfume evaporation and no evidence to indicate any carcinogenic hazard.

Eye irritation: Corrosive, causes irreversible eye damage.

Dermal Sensitization: Not a sensitizer. Piperonyl butoxide: An increase in the number of benign liver tumors in mice fed piperonyl butoxide technical Skin Irritation: Moderate irritant at doses which far exceeded any anticipated daily human intake. Independent and industry toxicology experts have reviewed the data and agree that the findings of the study do not indicate a health risk to humans.

SUBCHRONIC TOXICITY [Specific to Active Ingredient(s)] Linalool: In a 90-day study in rats the NOAEL > 250mg/kg bw/day Carcinogenicity: IARC: No. OSHA: No.

MUTAGENICITY [Specific to Active Ingredient(s)]

<u>DEVELOPMENTAL/REPRODUCTIVE TOXICITY</u> [Specific to Active Ingredient(s)] Linalool is not a mutagen.

Piperonyl butoxide is not genotoxic in several tests including the Ames mutagenicity assay, chromosome aberrations in Piperonyl butoxide:

Chinese hamster ovary (CHO) cells, CHO/HGPRT assay with S9 activation, and in the unscheduled DNA synthesis (UDS) There were no birth defects or adverse effects on reproductive parameters in assay in cultured human liver cells tests with rats or rabbits. It is not considered to be teratogenic

SECTION 12 - ECOLOGICAL INFORMATION Linalool

Piperonyl butoxide is highly toxic to fish. Do not discharge effluents containing this product into lakes, streams, Volatilizes from water surface with a half-live of 2.4 days in rivers. nonds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge The Koc in soil is estimated to be 75 and it is expected to be highly mobile in soil. Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not

Half life in air expected to be 3.8 hours. discharge effluent containing these components to sewer systems without previously notifying the local sewage treat-

ment plant authority. Do not contaminate water by cleaning of equipment or disposal of wastes. It is not expected to adsorb strongly to sediments.

It has low potential for bioaccumulation.

SECTION 13 - DISPOSAL CONSIDERATIONS

Wastes resulting from use of this product should be disposed of in accordance with all federal, state and local requirements. For additional regulatory information, see section 15 of this document

SECTION 14 - TRANSPORT INFORMATION

INSECTICIDES NOI O/T POISON NMFC 102120 CL. 60. DOT49CFR Description: Not applicable. Freight Classification:

**SECTION 15 - REGULATORY INFORMATION** Yes. CERCLA (Superfund): Not regulated. SARA 311/312 HAZARD CATEGORIES Immediate Health Delayed Heath: Fire: Yes. RCRA: Not regulated Sudden Pressure No Reactivity:

The information presented herein, while not quaranteed, was prepared by technically knowledgeable personnel and to the best of our knowledge is true and accurate. It is not intended to be all inclusive and the manner and conditions of use and handling may involve other or additional consideration.