MATERIAL SAFETY DATA SHEET
PRECOR 2000 PLUS PREMISE SPRAY

Manufacturer: Wellmark International
Address: 1501 East Woodfield Road, Suite 200-West Schaumburg, IL 60173
Emergency Phone: 1-800-950-4783
Transportation Emergency Phone: CHEMTREC: 1-800-424-9300

1. CHEMICAL PRODUCT INFORMATION

Product Name: Precor 2000 Plus Premise Spray
Chemical Name/Synonym: (S)-Methoprene; isopropyl (2E,4E,7S)-11-methoxy-3,7,11-trimethyl-2,4-dodecadienoate, Permethrin; [(3-phenoxyphenyl)methyl(+/-)cis-trans-3- (2,2-dichloroethyl)-2,2-dimethyl cyclopropanecarboxylate], Phenothrin; [3-phenoxyphenyl]methyl 2,2-dimethyl-3-(2-methyl-1-propenyl cyclopropanecarboxylate], Piperonyl Butoxide; 5-[2-(2-butoxyethoxy)ethoxymethyl]-6-propyl-1,3-benzodioxole, N-octyl bicycloheptane dicarboximide, N-(2-ethylhexyl)-5-norbonene-2,3-dicarboximide
Chemical Family: Terpenoid/Pyrethroid
Formula: C_{21}H_{20}C_{12}O_{3}/ C_{19}H_{34}O_{3}/ C_{23}H_{36}O_{3}/ C_{19}H_{30}O_{5}/ C_{17}H_{25}N_{2}
EPA Registration No.: 2724-490
RF Number: 9910

2. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Weight</th>
<th>Tolerance</th>
</tr>
</thead>
<tbody>
<tr>
<td>65733-16-6</td>
<td>0.085%</td>
<td></td>
</tr>
<tr>
<td>52645-53-1</td>
<td>0.350%</td>
<td></td>
</tr>
<tr>
<td>26002-80-2</td>
<td>0.300%</td>
<td></td>
</tr>
<tr>
<td>51-03-6</td>
<td>1.400%</td>
<td>Not established</td>
</tr>
<tr>
<td>113-48-4</td>
<td>2.000%</td>
<td>Not established</td>
</tr>
<tr>
<td>74-98-6</td>
<td>95.865%</td>
<td></td>
</tr>
</tbody>
</table>

Inert ingredients (non-hazardous and/or trade secret):

3. HAZARD INFORMATION

PRECAUTIONARY STATEMENT

**CAUTION:** Keep out of the reach of children. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.
SIGNS AND SYMPTOMS OF OVEREXPOSURE
Symptoms of intoxication to permethrin are hypersensitivity, tremors, diarrhea. Intoxication to solvents may cause dizziness, headache, nausea, narcosis, eye irritation, G.I. tract irritation, and cardiac arrhythmia in certain cases.

PRIMARY ROUTE OF ENTRY

<table>
<thead>
<tr>
<th>PRIMARY ROUTE OF ENTRY</th>
<th>Dermal/Eye:</th>
<th>Oral:</th>
<th>Inhalation:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dermal/Eye:</td>
<td>Yes.</td>
<td>No.</td>
<td>Yes.</td>
</tr>
<tr>
<td>Oral:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50 (rat)</td>
<td>&gt;5,000 mg/kg body weight.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dermal:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50 (rabbit)</td>
<td>&gt;5,000 mg/kg body weight.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inhalation:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4-hour LC50 (rat)</td>
<td>&gt;2.12 mg/L in air.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

OTHER TOXICOLOGICAL INFORMATION

<table>
<thead>
<tr>
<th>OTHER TOXICOLOGICAL INFORMATION</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin Irritation:</td>
<td>Moderately irritating to the skin.</td>
</tr>
<tr>
<td>Eye Irritation:</td>
<td>Not an eye irritant.</td>
</tr>
<tr>
<td>Sensitizer:</td>
<td>Weak sensitizer.</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

**Eye:** Hold eyes open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, and then continue rinsing eyes.

**Skin:** Take off contaminated clothing. Wash skin immediately with soap and water for 15-20 minutes. Call a poison control center or doctor immediately for treatment advice.

**Ingestion:** Call a poison control center or doctor immediately for treatment advice. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.

**Inhalation:** Move individual to fresh air. If not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.

**Note to Physician:** Contains petroleum distillates. Vomiting may cause aspiration pneumonia.

**Information:** In case of emergency, call 1-800-950-4783 or a poison control center. Have the product container or label with you when calling a poison control center, or doctor or going for treatment.

5. FIRE FIGHTING MEASURES

**NFPA Rating:**
- Health: 2
- Fire: 4
- Reactivity: 0

**Flammability Class:** Level 1 aerosol.

**Flash Point:** Negative - no flash at less than 90°F (propellant-free concentrate).

**Explosive Limits (% of Volume):**
- LEL: 1.8
- UEL: 9.5 (propellant-free concentrate).

**Extinguishing Media:**
- Water, CO2, dry chemical, or foam.

**Special Protective Equipment:**
- Firefighters should wear full protective clothing including self-contained breathing apparatus.

**Fire Fighting Procedures:**
- Contents under pressure. Exposure to temperatures above 130°F may cause bursting. Use water to keep fire exposed containers cool. Do not allow run-off water to enter waterways or sewers.

**Combustion Products:** Oxides of carbon.

**Unusual Fire/Explosion Hazards:**
- Contents under pressure. Do not puncture containers. Exposure to temperatures above 130°F may cause bursting.
6. ACCIDENTAL RELEASE MEASURES

Steps to be taken: Absorb spills with an inert material and put in container for disposal.

Absorbents: Clay granules, sawdust, dirt or equivalent.

Incompatibles: Strong oxidizers.

7. HANDLING AND STORAGE

Handling: Do not puncture or incinerate container. Do not use in food areas of food handling establishments, restaurants or other areas where food is commercially prepared or processed. Do not use in serving areas while food is exposed or facility is in operation.

Storage: Store in a cool, dry area. Do not transport or store below 32º F.

8. EXPOSURE CONTROL / PERSONAL MEASURES

Exposure Limits: Propane: 1000 ppm (OSHA TWA), simple asphyxiant (ACGIH).

Ventilation: Use in a well ventilated area.

Personal Protective Equipment: If prolonged exposure is anticipated, it is recommended for handlers to wear a MSHA/NIOSH approved organic vapor/pesticide respirator, impervious gloves, goggles, and other appropriate clothing to avoid skin contact.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: Turbid to opaque, almost colorless emulsion.

Boiling Point: N/A.

Melting Point: N/A.

Vapor Pressure (mm Hg): N/A.

Vapor Density (Air = 1): N/A.

Specific Gravity: 0.96 at 20° F (4° C) (propellant-free concentrate); 0.82 at 20° F (4° C) (end-use aerosol).

Bulk Density: N/A.

Solubility: N/A.

Evaporation Rate: N/A.

pH: 7.89 (propellant-free concentrate).

10. STABILITY AND REACTIVITY

Stability: Stable.

Reactivity: Non-reactive.

Incompatibility w/ Other Materials: Strong oxidizers.

Decomposition Products: None except oxides of carbon.

Hazardous Polymerization: Will not occur.
11. TOXICOLOGICAL INFORMATION

**CHRONIC TOXICITY [Specific to Active Ingredient(s)]**
Methoprene is not considered an oncogenic compound. The NOEL for non-carcinogen effects in an 18-month mouse study was 250ppm (based on (RS)-Methoprene).

Permethrin showed no evidence of oncogenicity. A NOEL of 100 mg/kg was based on decreased body weight gain in the oncogenicity study.

**DEVELOPMENTAL/REPRODUCTIVE TOXICITY [Based on (RS) Methoprene Technical]**
Methoprene is not a teratogen. The NOEL for maternal and embryotoxicity in rabbits was 200 mg/kg/day. The NOEL for reproductive effects in rats was 500 ppm.

Permethrin is not a teratogen. Rats were fed dose levels of 20 and 100 mg/kg diet in a 3-generation study. There was no effect on mortality, mating, pregnancy or fertility. Pup survival and growth were unaffected. Permethrin does not adversely affect reproduction in the rat.

**MUTAGENICITY [Specific to Active Ingredient(s)]**
Methoprene is not a mutagen. [Based on (RS)-Methoprene].

Permethrin was determined to be non-mutagenic in the following studies: Ames Test (in vitro), Chromosomal Aberration, and Host-Mediated.

12. ECOLOGICAL INFORMATION

**ENVIRONMENTAL FATE [Active Ingredients Only]**
- **Hydrolysis:** N/A.
- **Photolysis:** N/A.
- **Soil half life:** N/A.
- **Water solubility:** N/A.

**ECOTOXICITY [Active Ingredients Only]**
- **Acute Toxicity:** This product is not intended for aquatic environments. Pyrethroids are potentially toxic to aquatic organisms.

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.

14. TRANSPORT INFORMATION

- **DOT49CFR Description:** Consumer Commodity, ORM-D.
- **Freight Classification:** Insecticides, O/T Poison N.O.S., NMFC I - 102120.

15. REGULATORY INFORMATION

- **CERCLA (Superfund):** Not regulated by CERCLA.
- **RCRA:** Regulated due to ignitability.

**SARA 311/312 HAZARD CATEGORIES**
- **Immediate Health:** Yes (irritant).
- **Delayed Health:** No.
- **Fire:** Yes.
- **Sudden Pressure:** Yes.
- **Reactivity:** No.

_The information presented herein, while not guaranteed, 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 considerations._

Precor 2000 Plus Premise Spray

Page 4 of 4