MATERIAL SAFETY DATA SHEET
ZODIAC® FLEATROL™ CARPET & UPHOLSTERY AEROSOL SPRAY

Manufacturer: Wellmark International
Address: 1501 E. Woodfield Rd., 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: Zodiac® Fleatrol™ Carpet & Upholstery Aerosol Spray
Chemical Name/Synonym: (S)-Methoprene: Isopropyl (2E,4E,7S)-11-methoxy-3,7,11-trimethyl-2,4-dodecadienoate, and Permethrin: [(3-phenoxyphenyl)methyl(+/-) cis-trans-3-(2,2-dichloroethyl)-2,2-dimethyl cyclopropanecarboxylate]
Chemical Family: Terpenoid/Pyrethroid
Formula: C21 H20 C12 O3 / C19 H34 O3
EPA Registration No.: 2724-483
RF Number: 9404.002

2. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Component (chemical, common name)</th>
<th>CAS Number</th>
<th>Weight</th>
<th>Tolerance</th>
</tr>
</thead>
<tbody>
<tr>
<td>(S)-Methoprene: Isopropyl (2E,4E,7S)-11-methoxy-3,7,11-t rimethyl-2,4-dodecadienoate</td>
<td>65733-16-6</td>
<td>0.09%</td>
<td>Not established</td>
</tr>
<tr>
<td>Permethrin: (3-phenoxyphenyl)methyl(+/-) cis-trans-3- (2,2-dichloroethyl)-2,2-dimethyl cyclopropanecarboxylate</td>
<td>52645-53-1</td>
<td>0.50%</td>
<td>Not established</td>
</tr>
<tr>
<td>Inert ingredients (non-hazardous and/or trade secret):</td>
<td></td>
<td>99.41%</td>
<td></td>
</tr>
<tr>
<td>Propane</td>
<td>74-98-6</td>
<td>1000 ppm (OSHA) simple asphyxiant (ACGIH)</td>
<td></td>
</tr>
</tbody>
</table>

3. HAZARD INFORMATION

PRECAUTIONARY STATEMENT
Keep out of the reach of children. Harmful if swallowed, inhaled, or absorbed through skin. Avoid breathing spray mist. Avoid contact with skin, eyes, or clothing. Wash thoroughly after handling and before smoking or eating.

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  
Dermal/Eye: Yes  
Oral: No  
Inhalation: Yes

ACUTE TOXICITY
Oral: LD50 (rat): >34,000 mg/kg (highest dose tested) (Based on (S) Methoprene)  
Dermal: LD50 (rabbit): >2,000 mg/kg (highest dose tested) (Based on (S) ethoprene)  
Inhalation: LD50 (rat): >5.19 mg/L air (Based on (S) Methoprene)

OTHER TOXICOLOGICAL INFORMATION
Skin Irritation: mild irritant  
Eye Irritation: mild irritant  
Sensitizer: not a sensitizer

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, 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.

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°C (propellant-free concentrate)
Explosive Limits (% of Volume): LEL: 1.8%, UEL: 9.5%; (propellant)
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 original container, away from children. Protect from freezing or high temperatures.

8. EXPOSURE CONTROL / PERSONAL MEASURES

Exposure Limits: Propane: 1000 ppm (OSHA), 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 NIOSH approved organic vapor/pesticide respirator, impervious gloves, goggles, and other appropriate clothing to avoid skin contact.

9. PHYSICAL AND CHEMICAL

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: 0.95 at 20°C (4°C) (propellant-free concentrate); 0.82 at 20°C (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 as an oncogenic compound. The NOEL for non-carcinogen effects in an 18-month mouse study was 250 ppm. 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 [Specific to Active Ingredient(s)]
Methoprene is not a teratogenic compound. The NOEL for maternal and embryotoxicity in rabbits was 200 mg/kg/day. The NOEL for reproductive effects in rats was 500 ppm. Based on (RS) Methoprene

MUTAGENICITY [Specific to Active Ingredient(s)]
Methoprene is not a mutagenic compound. 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: Fish: This product is not intended for aquatic environments.
- Acute Toxicity: aquatic invertebrates: Pyrethroids are potentially toxic to aquatic organisms.

13. DISPOSAL CONSIDERATIONS

Do not puncture or incinerate. If empty, place in trash or offer for recycling if available. If partly filled, call your solid waste agency or 1-800-CLEANUP for disposal instructions.

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 (irritation)
- 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.