1. PRODUCT AND COMPANY IDENTIFICATION

Product name: DRAGNET® SFR TERMITECIDE/INSECTICIDE

Formula code: 1784

Active Ingredient(s): Permethrin

Alternate Commercial Name: Dragnet

Synonyms: FMC 33297; 3-phenoxybenzyl (1RS,3RS;1RS,3SR)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate; (3-phenoxyphenyl)methyl 3-(2,2-dichloroethenyl)-2,2-dimethylcyclopropanecarboxylate

Chemical Family: Pyrethroid Pesticide

Recommended use: Pest control

Manufacturer: FMC Corporation
Agricultural Products Group
1735 Market Street
Philadelphia, PA 19103
General Information:
Phone: (215) 299-6000
E-Mail: msdsinfo@fmc.com

Emergency telephone number

Medical Emergencies:
(800) 331-3148 (U.S.A. & Canada)
(651) 632-6793 (All Other Countries - Collect)

For leak, fire, spill or accident emergencies, call:
(800) 424-9300 (CHEMTREC - U.S.A.)
(703) 527-3887 (CHEMTREC - Collect - All Other Countries)

2. Hazards identification

Appearance: amber liquid

Physical State: Liquid

Odor: Faint hydrocarbon
Physical or Chemical Hazards

Flammable properties
Combustible Liquid

Potential health effects

Acute effects
Eyes
May cause slight irritation.

Skin
Irritating to skin.

Inhalation
Inhalation of vapors in high concentration may cause irritation of respiratory system. May cause drowsiness and dizziness.

Ingestion
Harmful if swallowed. Potential for aspiration if swallowed. May cause drowsiness and dizziness.
Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Chronic effects
May cause adverse kidney effects. May cause adverse liver effects.

3. Composition/information on ingredients

Hazardous ingredients

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permethrin</td>
<td>52645-53-1</td>
<td>36.8</td>
</tr>
<tr>
<td>1,1’-Biphenyl, bis(1-methylethyl)-</td>
<td>69009-90-1</td>
<td>20-30</td>
</tr>
<tr>
<td>Petroleum distillates, hydrotreated light</td>
<td>64742-47-8</td>
<td>10-20</td>
</tr>
</tbody>
</table>

4. First aid measures

Eye contact
Hold eyes 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 further treatment advice.

Skin contact
Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

Inhalation
Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

Ingestion
Immediately call a poison control center or doctor. 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.

Notes to physician
Contains petroleum distillate. Vomiting may cause aspiration pneumonia. This product is a pyrethroid. If large amounts have been ingested, the stomach and intestines should be evacuated. Treatment is symptomatic and supportive. Digestible fats, oils, or alcohol may increase absorption and so should be avoided.

5. Fire-fighting measures

Flammable properties
Combustible Liquid

Flash Point
66-68 °C / 151-154 °F

Method
Tag closed cup

Special hazards arising from the substance or mixture

Sensitivity to Mechanical Impact
not applicable

Sensitivity to Static Discharge
not applicable
DRAGNET® SFR TERMITICIDE/INSECTICIDE

Extinguishing media

Suitable extinguishing media Foam. Carbon dioxide (CO₂). Dry chemical. Water spray or fog.

Advice for fire-fighters

Protective equipment and precautions for firefighters As in any fire, wear self-contained breathing apparatus and full protective gear. Isolate fire area. Evacuate downwind.

NFPA

| Health Hazard | 0 |
| Flammability  | 1 |
| Stability     | 0 |
| Special Hazards | - |

6. Accidental release measures

Personal precautions Isolate and post spill area. Wear suitable protective clothing, gloves and eye/face protection. For personal protection see section 8.

Environmental precautions Keep people and animals away from and upwind of spill/leak. Keep material out of lakes, streams, ponds, and sewer drains.

Methods for cleaning up Sweep up and shovel into suitable containers for disposal. Clean and neutralize spill area, tools and equipment by washing with bleach water and soap. Absorb rinsate and add to the collected waste. Waste must be classified and labeled prior to recycling or disposal. Dispose of waste as indicated in Section 13.

Other Information For further clean-up instructions call FMC Emergency Hotline number listed in Section 1 "Product and Company Identification" above.

7. Handling and storage

Handling Do not contaminate other pesticides, fertilizers, water, food or feed by storage or disposal.

Storage Keep in a dry, cool and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition. Keep out of reach of children and animals. Store in original container only.

8. Exposure controls/personal protection

Exposure guidelines

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>British Columbia</th>
<th>Quebec</th>
<th>Ontario TWAEV</th>
<th>Alberta</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petroleum distillates, hydrotreated light 64742-47-8</td>
<td>TWA: 200 mg/m³ Skin</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Occupational exposure controls

Engineering measures Apply technical measures to comply with the occupational exposure limits. Ensure adequate ventilation, especially in confined areas. When working in confined spaces (tanks, containers, etc.), ensure that there is a supply of air suitable for breathing and wear the recommended equipment.

Personal protective equipment

General Information If the product is used in mixtures, it is recommended that you contact the appropriate protective equipment suppliers. These recommendations apply to the product as supplied.
Respiratory protection: For dust, splash, mist or spray exposures wear full-face elastomeric half mask respirator with appropriate cartridges and/or filters, which is approved for pesticides (U.S. NIOSH/MSHA, EU CEN or comparable certification organization).

Eye/face protection: For dust, splash, mist or spray exposure, wear chemical protective goggles or a face-shield.

Skin and body protection: Wear long-sleeved shirt, long pants, socks, shoes, and gloves.

Hand protection: Protective gloves

Hygiene measures: Clean water should be available for washing in case of eye or skin contamination. Wash skin prior to eating, drinking, chewing gum or using tobacco. Shower or bathe at the end of working. Remove and wash contaminated clothing before re-use. Launder work clothing separately from regular household laundry.

9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>amber liquid</td>
</tr>
<tr>
<td>Color</td>
<td>amber</td>
</tr>
<tr>
<td>Physical State</td>
<td>Liquid</td>
</tr>
<tr>
<td>Odor</td>
<td>Faint hydrocarbon</td>
</tr>
<tr>
<td>pH</td>
<td>4 @ 20 °C (5% solution)</td>
</tr>
<tr>
<td>Melting Point/Range</td>
<td>No information available</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No information available /</td>
</tr>
<tr>
<td>Boiling Point/Range</td>
<td>not applicable</td>
</tr>
<tr>
<td>Flash Point</td>
<td>66-68 - 68 °C / 151-154 °F Tag closed cup</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>not applicable</td>
</tr>
<tr>
<td>Autoignition Temperature</td>
<td>Combustible Liquid</td>
</tr>
<tr>
<td>Flammable properties</td>
<td>not applicable</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>not applicable</td>
</tr>
<tr>
<td>Vapor density</td>
<td>No information available</td>
</tr>
<tr>
<td>Density</td>
<td>8.61 lb/gal</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>1.033 @ 20 °C</td>
</tr>
<tr>
<td>Bulk density</td>
<td>Not available</td>
</tr>
<tr>
<td>Water solubility</td>
<td>Emulsifies</td>
</tr>
<tr>
<td>Percent volatile</td>
<td>No information available</td>
</tr>
<tr>
<td>Partition coefficient:</td>
<td>not applicable</td>
</tr>
<tr>
<td>Viscosity</td>
<td>No information available</td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>not applicable</td>
</tr>
</tbody>
</table>

10. Stability and reactivity

| Stability                                   | Stable                                     |
| Conditions to avoid                         | Excessive heat, Fire                       |

Hazardous decomposition products: Chlorine, Hydrogen chloride, Carbon oxides, Aldehydes

Hazardous polymerization: Hazardous polymerization does not occur

11. Toxicological information

<table>
<thead>
<tr>
<th>Contact</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye contact</td>
<td>May cause slight irritation</td>
</tr>
<tr>
<td>Skin contact</td>
<td>Irritating to skin</td>
</tr>
</tbody>
</table>
Ingestion

Large toxic doses of the formulated product, administered to laboratory animals, have produced central nervous system effects with symptoms that include hypersensitivity to touch and sound, tremors, and clonic convulsions. Vomiting after ingestion of this product may cause aspiration of aromatic hydrocarbons into the lungs, which may result in fatal pulmonary edema.

Inhalation

Overexposure to animals has produced symptoms such as squinting eyes, irregular and rattling breathing, and ataxia. Inhalation of aromatic hydrocarbon vapors may cause dizziness, disturbances in vision, drowsiness, respiratory irritation, and eye, skin and mucous membrane irritation.

LD50 Dermal
> 2,000 mg/kg (rabbit)

LD50 Oral
998 mg/kg (rat)

LC50 Inhalation:
> 4.3 mg/L 4 hr (rat)

Sensitization

May cause sensitization of susceptible persons.

Chronic Toxicity - Active Ingredient(s)

Chronic Toxicity

May cause adverse kidney effects. May cause adverse liver effects.

Carcinogenicity

Not recognized as carcinogenic by Research Agencies (IARC, NTP, OSHA, ACGIH).

Mutagenicity

Permethrin: Did not show mutagenic effects in animal experiments.

Reproductive toxicity

Permethrin: No toxicity to reproduction.

Neurological Effects

Permethrin: Clinical signs of neurotoxicity include altered motor activity and FOB effects, with no signs of histopathology

Developmental Toxicity

Permethrin: Not teratogenic in animal studies

Target Organ Effects

Permethrin: Long-term feeding studies in animals resulted in increased liver and kidney weights, induction of the liver microsomal drug metabolizing enzyme system and histopathological changes in the lungs and liver.

Chronic Toxicity - Other Ingredient(s)

Chronic exposure to aromatic hydrocarbons may cause headaches, dizziness, loss of sensations or feelings (such as numbness), and liver and kidney damage.

12. Ecological information

Marine pollutant

Permethrin

Ecotoxicity

Permethrin (52645-53-1)

<table>
<thead>
<tr>
<th>Active Ingredient</th>
<th>Duration</th>
<th>Species</th>
<th>Value</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permethrin</td>
<td>LC50</td>
<td>aquatic arthropods</td>
<td>0.02 - 7.6</td>
<td>µg/L</td>
</tr>
<tr>
<td></td>
<td>LC50</td>
<td>Fish</td>
<td>0.05 - 315</td>
<td>µg/L</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Bobwhite quail</td>
<td>&gt;5200</td>
<td>mg/kg</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Mallard duck</td>
<td>&gt;5200</td>
<td>mg/kg</td>
</tr>
<tr>
<td></td>
<td>LD50</td>
<td>Bee</td>
<td>0.026 - 0.17</td>
<td>µg/bee</td>
</tr>
</tbody>
</table>

Chemical Name

Petroleum distillates, hydrotreated light

Toxicity to algae

LC50= 5 mg/L Pimephales promelas 96 h LC50= 2.2 mg/L Lepomis macrochirus 96 h LC50= 2.4 mg/L Oncorhynchus mykiss 96 h

Toxicity to daphnia and other aquatic invertebrates

LC50 = 4720 mg/L 96 h
Environmental Fate

<table>
<thead>
<tr>
<th>Active Ingredient</th>
<th>Type of Test</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permethrin</td>
<td>Bioconcentration factor (BCF), Bluegill sunfish (Lepomis macrochirus)</td>
<td>535</td>
</tr>
<tr>
<td></td>
<td>Half-life in soil</td>
<td>~30 days</td>
</tr>
<tr>
<td></td>
<td>Log Pow</td>
<td>6.1</td>
</tr>
<tr>
<td></td>
<td>Mobility in soil</td>
<td>Not expected to reach groundwater</td>
</tr>
<tr>
<td></td>
<td>Stability in water</td>
<td>Stable to hydrolysis over a wide range of pH values.</td>
</tr>
</tbody>
</table>

13. Disposal considerations

Waste disposal methods  Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is prohibited. If these wastes cannot be disposed of by use according to label instructions, contact appropriate disposal authorities for guidance.

Contaminated packaging  Containers must be disposed of in accordance with local, state and federal regulations. Refer to the product label for container disposal instructions.

14. Transport information

DOT  Not regulated for transportation if shipped in Non Bulk packaging. The classification below pertains to the shipment in Bulk packaging.

- **Packaging Type**: Bulk, Non-Bulk
- **Proper shipping name**: Combustible liquid, n.o.s.
- **Hazard Class**: Combustible
- **UN/ID No**: NA1993
- **Packing group**: III
- **Marine pollutant**: Permethrin

TDG  Environmentally hazardous substance, liquid, n.o. s.

- **Proper shipping name**: Environmentally hazardous substance, liquid, n.o. s.
- **Hazard Class**: 9
- **UN/ID No**: UN3082
- **Packing group**: III

ICAO/IATA  Environmentally hazardous substance, liquid, n.o. s.

- **UN/ID No**: UN3082
- **Proper shipping name**: Environmentally hazardous substance, liquid, n.o. s.
- **Hazard Class**: 9
- **Packing group**: III
- **Marine pollutant**: Permethrin
- **Description**: Environmentally hazardous substance, liquid, n.o.s. (permethrin), UN3082 + Marine Pollutant
- **Limited quantity**: 914 / 450 L

IMDG/IMO  Environmentally hazardous substance, liquid, n.o. s.

- **UN/ID No**: UN3082
- **Proper shipping name**: Environmentally hazardous substance, liquid, n.o. s.
- **Hazard Class**: 9
- **Packing group**: III
15. Regulatory information

U.S. Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No</th>
<th>Weight %</th>
<th>SARA 313 - Threshold Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permethrin</td>
<td>52645-53-1</td>
<td>38.85</td>
<td>1.0</td>
</tr>
</tbody>
</table>

SARA 311/312 Hazard Categories
- Acute Health Hazard: yes
- Chronic Health Hazard: yes
- Fire Hazard: yes
- Sudden Release of Pressure Hazard: No
- Reactive Hazard: No

CERCLA
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>U.S. - TSCA (Toxic Substances Control Act) - Section 8(a) - Chemical-Specific Reporting and Recordkeeping</th>
</tr>
</thead>
<tbody>
<tr>
<td>Petroleum distillates, hydrotreated light</td>
<td>Partially exempt chemical substance termed Petroleum Process Stream</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>U.S. - TSCA (Toxic Substances Control Act) - Section 8(d) - 716.120(a) - Health and Safety Reporting - List of Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,1'-Biphenyl, bis(1-methylethyl)-</td>
<td>06/28/1984</td>
</tr>
</tbody>
</table>

International Regulations

Mexico - Grade
No information available

Canada
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class
D2B Toxic materials

16. Other information

Revision Date: 2011-04-15
Reason for revision: No information available
Disclaimer
FMC Corporation believes that the information and recommendations contained herein (including data and statements) are accurate as of the date hereof. NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, IS MADE CONCERNING THE INFORMATION PROVIDED HEREIN. The information provided herein relates only to the specified product designated and may not be applicable where such product is used in combination with any other materials or in any process. Further, since the conditions and methods of use are beyond the control of FMC Corporation, FMC corporation expressly disclaims any and all liability as to any results obtained or arising from any use of the products or reliance on such information. Use of this product is regulated by the U.S. Environmental Protection Agency (EPA). It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Prepared By
FMC Logo and Dragnet - Trademarks of FMC Corporation

© 2011 FMC Corporation. All Rights Reserved.

End of Material Safety Data Sheet