

Material Safety Data Sheet
DRAGNET® SFR TERMITICIDE/INSECTICIDE

SDS # : 1784-A
Revision Date: 2012-05-15
Version 1.01



This MSDS has been prepared to meet U.S. OSHA Hazard Communication Standard 29 CFR 1910.1200
and Canada's Workplace Hazardous Materials Information System (WHMIS) requirements.

1. PRODUCT AND COMPANY IDENTIFICATION

| | |
|---|--|
| Product name | DRAGNET® SFR TERMITICIDE/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 | Insecticide |
| <u>Manufacturer</u> | <u>Emergency telephone number</u> |
| FMC Corporation Agricultural Products Group 1735 Market Street Philadelphia, PA 19103 General Information: Phone: (215) 299-6000 E-Mail: msdsinfo@fmc.com | Medical Emergencies: (800) 331-3148 (U.S.A. & Canada) +1 (651) 632-6793 (All Other Countries - Collect) For leak, fire, spill or accident emergencies, call: +1 800 / 424 9300 (CHEMTREC - U.S.A.) +1 703 / 527 3887 (CHEMTREC - Collect - All Other Countries) |

2. Hazards identification

| | |
|--|--|
| <u>Appearance</u> | amber liquid |
| <u>Physical state</u> | liquid |
| <u>Odor</u> | Faint hydrocarbon |
| <u>Physical or Chemical Hazards</u> | . |
| Flammable properties | Combustible liquid |
| <u>Potential health effects</u> | |
| <u>Acute effects</u> | |
| 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

| Chemical Name | CAS-No | Weight % |
|---|------------|----------|
| Permethrin | 52645-53-1 | 36.8 |
| 1,1'-Biphenyl, bis(1-methylethyl)- | 69009-90-1 | 20-30 |
| Petroleum distillates, hydrotreated light | 64742-47-8 | 10-20 |

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 induce vomiting or 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 Method 66-68 °C / 151-154 °F
Tag Closed Cup

Sensitivity to Mechanical Impact not applicable
Sensitivity to Static Discharge not applicable

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

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

| Chemical Name | British Columbia | Quebec | Ontario TWAEV | Alberta |
|--|------------------------------------|--------|---------------|---------|
| Petroleum distillates, hydrotreated light 64742-47-8 | TWA: 200 mg/m ³ Skin | | | |

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

| | |
|--------------------------|---|
| Appearance | amber liquid |
| Color | amber |
| Physical state | liquid |
| Odor | Faint hydrocarbon |
| pH | 4 @ 25 °C (5% solution) |
| Melting Point/Range | No information available. |
| Freezing point | No information available / |
| Boiling Point/Range | not applicable |
| Flash Point | 66-68 - 68 °C / 151-154 °F Tag Closed Cup |
| Evaporation rate | not applicable |
| Autoignition Temperature | not applicable |
| Flammable properties | Combustible liquid |
| Vapor pressure | No information available |
| Vapor density | No information available |
| Density | 8.61 lb/gal |
| Specific Gravity | 1.033 @ 20 °C |
| Water solubility | Emulsifies |
| Percent volatile | No information available |
| Partition coefficient: | not applicable |
| Viscosity | No information available |
| Oxidizing properties | not applicable |

10. Stability and reactivity

| | |
|----------------------------------|---|
| Stability | Stable. |
| Conditions to avoid | Excessive heat, Extreme risk of explosion by shock, friction, fire or other sources of ignition |
| Hazardous decomposition products | Chlorine, Hydrogen chloride, Carbon oxides, Aldehydes. |
| Hazardous polymerization | Hazardous polymerization does not occur. |

11. Toxicological information

| | |
|---|--|
| Eye contact | May cause slight irritation |
| Skin contact | Irritating to skin |
| 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 | In animals overexposure has produced symptoms such as squinting eyes, irregular and rattling breathing, and ataxia. Inhalation of hydrocarbon vapors may cause headaches, dizziness, disturbances in vision, drowsiness, respiratory irritation, anesthesia, unconsciousness, and other central nervous system effects. |
| 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. |
| <u>Chronic Toxicity - Other Ingredient(s)</u> | |
| 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

| Active Ingredient(s) | | | | |
|-----------------------------|-----------|--------------------|--------------|--------|
| Permethrin (52645-53-1) | | | | |
| Active Ingredient(s) | Duration | Species | Value | Units |
| Permethrin | LC50 | aquatic arthropods | 0.02 - 7.6 | µg/L |
| | LC50 | Fish | 0.05 - 315 | µg/L |
| | LD50 Oral | Bobwhite quail | >5200 | mg/kg |
| | LD50 Oral | Mallard duck | >5200 | mg/kg |
| | LD50 | Bee | 0.026 - 0.17 | µg/bee |

| Chemical Name | Toxicity to algae | Toxicity to fish | Toxicity to microorganisms | Toxicity to daphnia and other aquatic invertebrates |
|---|-------------------|---|----------------------------|---|
| Petroleum distillates, hydrotreated light | | LC50 45 mg/L Pimephales promelas 96 h LC50 2.2 mg/L Lepomis macrochirus 96 h LC50 2.4 mg/L Oncorhynchus mykiss 96 h | | LC50 4720 mg/L 96 h |

Environmental Fate

| Active Ingredient(s) | | |
|-----------------------------|---|--|
| Permethrin (52645-53-1) | | |
| Active Ingredient(s) | Type of Test | Result |
| Permethrin | Bioconcentration factor (BCF) Bluefill sunfish (<i>Lepomis macrochirus</i>) | 535 |
| | Half-life in soil | ~30 days |
| | log Pow | 6.1 |
| | Mobility in soil | Not expected to reach groundwater |
| | Stability in water | Stable to hydrolysis over a wide range of pH values. |

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

ICAO/IATA
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
Proper shipping name Environmentally hazardous substance, liquid, n.o. s.
Hazard Class 9
UN/ID No UN3082
Packing group III
Marine pollutant Permethrin
Description Environmentally hazardous substance, liquid, n.o.s. (permethrin), UN3082 + Marine Pollutant

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:

| Chemical Name | CAS-No | Weight % | SARA 313 - Threshold Values % |
|---------------|------------|----------|-------------------------------|
| Permethrin | 52645-53-1 | 38.85 | 1.0 |

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.

| | |
|---|--|
| Chemical Name | U.S. - TSCA (Toxic Substances Control Act) - Section 8(a) - Chemical-Specific Reporting and Recordkeeping |
| Petroleum distillates, hydrotreated light | Partially exempt chemical substance termed Petroleum Process Stream |
| Chemical Name | U.S. - TSCA (Toxic Substances Control Act) - Section 8(d) - 716.120(a) - Health and Safety Reporting - List of Substances |
| 1,1'-Biphenyl, bis(1-methylethyl)- | 06/28/1984 |

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: 2012-05-15
Reason for revision: No information available.

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Prepared By

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End of Material Safety Data Sheet