

**SAFETY DATA SHEET**  
Dragnet FT EC

SDS # : 1677-A  
Revision date: 2019-08-15  
Format: NA  
Version 1.09



**1. PRODUCT AND COMPANY IDENTIFICATION**

**Product Identifier**

**Product Name** Dragnet FT EC

**Other means of identification**

**Product Code(s)** 1677-A

**Synonyms** PERMETHRIN (FMC 33297): 3-phenoxybenzyl (1RS,3RS;1RS,3SR)-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate or 3-phenoxybenzyl (1RS)-cis-trans-3-(2,2-dichlorovinyl)-2,2-dimethylcyclopropanecarboxylate (IUPAC name); (3-phenoxyphenyl)methyl 3-(2,2-dichloroethenyl)-2,2-dimethylcyclopropanecarboxylate (CAS name)

**Active Ingredient(s)** Permethrin

**Formula** C<sub>21</sub>H<sub>20</sub>Cl<sub>2</sub>O<sub>3</sub> (Permethrin)

**Chemical Family** Pyrethroid Pesticide

**Alternate Commercial Name** Dragnet FT Emulsifiable Concentrate Insecticide

**PCP #** 24175, 24360

**Recommended use of the chemical and restrictions on use**

**Recommended Use:** Insecticide

**Restrictions on Use:** Use as recommended by the label.

**Supplier Address**

FMC Corporation  
2929 Walnut Street  
Philadelphia, PA 19104  
(215) 299-6000 (General Information)  
msdsinfo@fmc.com (E-Mail General Information)

**Emergency telephone number**

Medical Emergencies :  
1 800 / 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 / 741-5970 (CHEMTREC - International)  
1 703 / 527-3887 (CHEMTREC - Alternate)

**2. HAZARDS IDENTIFICATION**

**Classification**

**OSHA Regulatory Status**

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)


Acute toxicity - Oral	Category 4
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin sensitization	Category 1B
Specific target organ toxicity (single exposure)	Category 2
Specific target organ toxicity (repeated exposure)	Category 2
Aspiration toxicity	Category 1
Flammable liquids	Category 3

**GHS Label elements, including precautionary statements**

**EMERGENCY OVERVIEW**

**Danger**

**Hazard Statements**  
H302 - Harmful if swallowed  
H304 - May be fatal if swallowed and enters airways  
H317 - May cause an allergic skin reaction  
H332 - Harmful if inhaled  
H371 - May cause damage to organs  
H373 - May cause damage to organs through prolonged or repeated exposure



**Precautionary Statements - Prevention**

- P264 - Wash face, hands and any exposed skin thoroughly after handling
- P271 - Use only outdoors or in a well-ventilated area
- P272 - Contaminated work clothing should not be allowed out of the workplace
- P260 - Do not breathe dust/fume/gas/mist/vapors/spray
- P210 - Keep away from heat/sparks/open flames/hot surfaces. No smoking
- P233 - Keep container tightly closed
- P235 - Keep cool
- P240 - Ground/bond container and receiving equipment
- P241 - Use explosion-proof electrical/ventilating/lighting equipment
- P242 - Use only non-sparking tools
- P243 - Take precautionary measures against static discharge
- P270 - Do not eat, drink or smoke when using this product
- P261 - Avoid breathing dust/fume/gas/mist/vapors/spray
- P264 - Wash hands thoroughly after handling
- P280 - Wear protective gloves/protective clothing/eye protection/face protection

**Precautionary Statements - Response**

- P308 + P311 - If exposed or concerned: Call a POISON CENTER or doctor
- P314 - Get medical advice/ attention if you feel unwell
- P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention
- P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
- P302 + P352 - IF ON SKIN: Wash with plenty of water and soap

P362 + P364 - Take off all contaminated clothing and wash it before reuse  
 P304 + P340 - IF INHALED: Remove person to fresh air and keep comfortable for breathing  
 P312 - Call a POISON CENTER or doctor if you feel unwell  
 P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor  
 P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell  
 P330 - Rinse mouth

**Precautionary Statements - Storage**

P405 - Store locked up  
 P403 + P235 - Store in a well-ventilated place. Keep cool

**Precautionary Statements - Disposal**

P501 - Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

No hazards not otherwise classified were identified.

**Other Information**

Very toxic to aquatic life with long lasting effects.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**Chemical Family** Pyrethroid Pesticide.

Chemical name	CAS-No	Weight %
Permethrin	52645-53-1	36.9
Stoddard Solvent	8052-41-3	10-30

Synonyms are provided in Section 1.

**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 further treatment advice.

**Inhalation** Move to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably 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.

**Most important symptoms and effects, both acute and delayed** Central nervous system effects.

**Indication of immediate medical attention and special treatment needed, if necessary** Contains petroleum distillate.

**5. FIRE-FIGHTING MEASURES**

**Suitable Extinguishing Media** Foam. Carbon dioxide (CO<sub>2</sub>). Dry chemical. Water spray or fog.

**Unsuitable extinguishing media** Avoid heavy hose streams.

<b>Specific Hazards Arising from the Chemical</b>	Flammable liquids
<b>Explosion data</b>	
<b>Sensitivity to Mechanical Impact</b>	No information available.
<b>Sensitivity to Static Discharge</b>	No information available.
<b>Protective equipment and precautions for firefighters</b>	As in any fire, wear self-contained breathing apparatus and full protective gear. Isolate fire area. Evaluate upwind. Approach fire from upwind to avoid hazardous vapours and toxic decomposition products.

**6. ACCIDENTAL RELEASE MEASURES**

<b>Personal Precautions</b>	Isolate and post spill area. Remove all sources of ignition. Wear suitable protective clothing, gloves and eye/face protection. For personal protection see section 8.
<b>Other</b>	For further clean-up instructions, call FMC Emergency Hotline number listed in Section 1 "Product and Company Identification" above.
<b>Environmental Precautions</b>	Keep people and animals away from and upwind of spill/leak. Keep material out of lakes, streams, ponds, and sewer drains. Keep out of waterways.
<b>Methods for Containment</b>	Dike to prevent runoff. Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal.
<b>Methods for cleaning up</b>	Clean and neutralize spill area, tools and equipment by washing with 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.

**7. HANDLING AND STORAGE**

<b>Handling</b>	Do not contaminate other pesticides, fertilizers, water, food, or feed by storage or disposal.
<b>Storage</b>	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. Keep/store only in original container.
<b>Incompatible products</b>	None known

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

Control parameters

Chemical name	ACGIH TLV	OSHA PEL	NIOSH	Mexico
Stoddard Solvent (8052-41-3)	TWA: 100 ppm	TWA: 500 ppm TWA: 2900 mg/m <sup>3</sup>	IDLH: 20000 mg/m <sup>3</sup> TWA: 350 mg/m <sup>3</sup> Ceiling: 1800 mg/m <sup>3</sup>	Mexico: TWA 100 ppm
Chemical name	British Columbia	Quebec	Ontario TWAEV	Alberta
Stoddard Solvent (8052-41-3)	TWA: 290 mg/m <sup>3</sup> STEL: 580 mg/m <sup>3</sup>	TWA: 100 ppm TWA: 525 mg/m <sup>3</sup>	TWA: 525 mg/m <sup>3</sup>	TWA: 100 ppm TWA: 572 mg/m <sup>3</sup>

Appropriate engineering controls

<b>Engineering measures</b>	Apply technical measures to comply with the occupational exposure limits. When working in confined spaces (tanks, containers, etc.), ensure that there is a supply of air suitable for breathing and wear the recommended equipment.
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Individual protection measures, such as personal protective equipment

<b>Eye/Face Protection</b>	For exposure to mists or sprays, wear safety goggles or face shield for chemical agents.
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<b>Skin and Body Protection</b>	Use coveralls or long-sleeved uniform and head covering. For large exposures as in case of a spill, use barrier suit covering the entire body, such as a waterproof PVC suit. Leather items, including shoes, belts and watchbands, that have been contaminated should be removed and destroyed. Wash all work clothing before reuse (separately from clothing commonly used).
<b>Hand Protection</b>	Use protective gloves made of chemical materials such as nitrile or neoprene. Wash the outside of gloves with soap and water before reuse. Check regularly for leaks.
<b>Respiratory Protection</b>	For splash, spray or mist exposure wear, as a minimum, a properly fitted half-face or full-face respirator with dust/mists/fume cartridges (approved by U.S. NIOSH/MSHA, EU CEN or comparably certified organization). Respirator use and selection must be based on airborne concentrations.
<b>Hygiene measures</b>	Clean water should be available for washing in case of eye or skin contamination. Remove and wash contaminated clothing before re-use. Wash skin prior to eating, drinking, chewing gum or using tobacco. Shower or bathe at the end of working. Launder work clothing separately from regular household laundry.
<b>General information</b>	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

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Information on basic physical and chemical properties**

<b>Appearance</b>	Amber Liquid
<b>Physical State</b>	Liquid
<b>Color</b>	Amber
<b>Odor</b>	Faint hydrocarbon
<b>Odor threshold</b>	No information available
<b>pH</b>	7.5 @ 20°C (20% solution) (as aqueous solution)
<b>Melting point/freezing point</b>	Not applicable
<b>Boiling Point/Range</b>	No information available
<b>Flash point</b>	42 °C / 107.6 °F
<b>Evaporation Rate</b>	No information available
<b>Flammability (solid, gas)</b>	No information available
<b>Flammability Limit in Air</b>	
<b>Upper flammability limit:</b>	No information available
<b>Lower flammability limit:</b>	No information available
<b>Vapor pressure</b>	No information available
<b>Vapor density</b>	No information available
<b>Relative density</b>	8.66 lb/gal (1037.7 g/L)
<b>Specific gravity</b>	1.039 @ 20°C
<b>Water solubility</b>	Emulsifies
<b>Solubility in other solvents</b>	No information available
<b>Partition coefficient</b>	No information available
<b>Autoignition temperature</b>	No information available
<b>Decomposition temperature</b>	No information available
<b>Viscosity, kinematic</b>	No information available
<b>Viscosity, dynamic</b>	No information available
<b>Explosive properties</b>	No information available
<b>Oxidizing properties</b>	No information available
<b>Molecular weight</b>	No information available
<b>Bulk density</b>	No information available

**10. STABILITY AND REACTIVITY**

<b>Reactivity</b>	Stable under recommended storage conditions
<b>Chemical Stability</b>	Stable under recommended storage conditions.
<b>Possibility of Hazardous Reactions</b>	None under normal processing.

**Hazardous polymerization** Hazardous polymerization does not occur.

**Conditions to avoid** Excessive heat. Keep away from open flames, hot surfaces and sources of ignition.

**Incompatible materials** None known.

**Hazardous Decomposition Products** Chlorine. Hydrogen chloride. Carbon oxides (COx). Aldehydes.

**11. TOXICOLOGICAL INFORMATION**

**Product Information**

**LD50 Oral** 998 mg/kg (rat)  
**LD50 Dermal** > 2000 mg/kg (rabbit)  
**LC50 Inhalation** > 4.3 mg/L 4 hr (rat)

**Serious eye damage/eye irritation** Mildly irritating.  
**Skin corrosion/irritation** Moderately irritating.  
**Sensitization** May cause sensitization by skin contact

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Permethrin (52645-53-1)	3129 mg/kg ( Rat )	> 2000 mg/kg ( Rabbit )	> 2.09 mg/L ( Rat ) 4 h

**Information on toxicological effects**

**Symptoms** Large toxic doses of the formulated product, administered by ingestion to animals, produced central nervous system effects with symptoms that include hypersensitivity to touch and sound, tremors, and clonic convulsions. Overexposure via inhalation produced symptoms such as squinting eyes, irregular and rattling breathing, and ataxia.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Chronic toxicity** Effects are expected to be similar to those that are seen with acute toxicity.

**Mutagenicity** Permethrin: Not genotoxic in laboratory studies.

**Carcinogenicity** Permethrin: Evidence of tumors in mice but is not considered relevant to humans.

**Neurological effects** Permethrin: Clinical signs of neurotoxicity include altered motor activity and neurobehavioral effects, with no signs of histopathology.

**Reproductive toxicity** Permethrin: No toxicity to reproduction in animal studies.

**Developmental toxicity** Permethrin: Not teratogenic in animal studies.

**STOT - single exposure** May cause damage to organs. See listed target organs below.

**STOT - repeated exposure** May cause damage to organs through prolonged or repeated exposure. See listed target organs below.

**Target organ effects** Permethrin: Central Nervous System (CNS).

**Neurological effects** Permethrin: Clinical signs of neurotoxicity include altered motor activity and neurobehavioral effects, with no signs of histopathology.

**Aspiration hazard** Potential for aspiration if swallowed.

Chemical name	ACGIH	IARC	NTP	OSHA
Permethrin 52645-53-1		Group 3		

**Legend:**  
 IARC (International Agency for Research on Cancer)  
 Group 3 - Not classifiable as to its carcinogenicity to humans

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

<b>Permethrin (52645-53-1)</b>				
Active Ingredient(s)	Duration	Species	Value	Units
Permethrin	48 h EC50	Crustacea	0.001	mg/L
	72 h EC50	Algae	0.0125	mg/L
	21 d NOEC	Crustacea	0.039	µg/L
	96 hr NOEC	Algae	0.9	µg/L
	21 d NOEC	Fish	0.3	µg/L
	96 h LC50	Fish	5.3	mg/L
	96 h EC50	Algae	0.010	mg/L

Chemical name	Toxicity to algae	Toxicity to fish	Toxicity to daphnia and other aquatic invertebrates
Glyceral triacetate 102-76-1		48 h LC50: = 170 mg/L (Leuciscus idus) static	48 h EC50: = 380 mg/L (Daphnia magna)

**Persistence and degradability**      Permethrin: Moderately persistent. Does not readily hydrolyze. Not readily biodegradable.

**Bioaccumulation**                      Permethrin: The substance has a potential for bioconcentration.

**Mobility**                                  Permethrin: Immobile; Not expected to reach groundwater.

**13. DISPOSAL CONSIDERATIONS**

**Waste disposal methods**              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. Proper personal protective equipment, as described in Sections 7 and 8, must be worn while handling materials for waste disposal.

**Contaminated Packaging**              Dispose of in accordance with local regulations.

**14. TRANSPORT INFORMATION**

**DOT**

**UN/ID no**                                      UN1993  
**Proper Shipping Name**                  Flammable liquids, n.o.s.  
**Hazard class**                                3  
**Packing Group**                             III  
**Marine Pollutant**                         Permethrin.  
**Description**                                UN1993, Flammable liquid, n.o.s., (Permethrin, Stoddard Solvent), 3, III, Marine Pollutant

**TDG**

**UN/ID no**                                      UN1993  
**Proper Shipping Name**                  Flammable liquid, n.o.s  
**Hazard class**                                3  
**Packing Group**                             III  
**Special Provisions**                        Within Canada only, the "Flammable liquids" general exemption may apply. This material may be shipped as non-regulated material when in small means of containment (<450 L), provided the requirements of TDG section 1.33 are met.  
**Marine Pollutant**                         Permethrin.  
**Description**                                UN1993, Flammable liquid, n.o.s., (Permethrin, Stoddard Solvent), 3, III, Marine Pollutant

**ICAO/IATA**

**UN/ID no**                                      UN1993  
**Proper Shipping Name**                  Flammable liquid, n.o.s

**Hazard class** 3  
**Packing Group** III  
**Description** UN1993, Flammable liquid, n.o.s., (Permethrin, Stoddard Solvent), 3, III, Marine Pollutant

**IMDG/IMO**

**UN/ID no** UN1993  
**Proper Shipping Name** Flammable liquid, n.o.s  
**Hazard class** 3  
**Packing Group** III  
**EmS No.** F-E, S-E  
**Marine Pollutant** Permethrin  
**Description** UN1993, Flammable liquid, n.o.s., (Permethrin, Stoddard Solvent), 3, III, 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	52645-53-1	36.9	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

**Clean Water Act**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**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

*FIFRA Information*

*This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:*

**CAUTION**

*Harmful if swallowed, inhaled or absorbed through the skin. Causes skin irritation.  
 This product is extremely toxic to fish and aquatic invertebrates*

**US State Regulations**

**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**



Chemical name	New Jersey	Massachusetts	Pennsylvania
Permethrin 52645-53-1	X	X	
Stoddard Solvent 8052-41-3	X	X	X

**International Inventories**

Chemical name	TSCA (United States)	DSL (Canada)	EINECS/ELINCS (Europe)	ENCS (Japan)	China (IECSC)	KECL (Korea)	PICCS (Philippines)	AICS (Australia)
Permethrin 52645-53-1			X	X	X	X	X	X
Stoddard Solvent 8052-41-3	X	X	X	X	X	X	X	X

**Mexico - Grade** Moderate risk, Grade 2

Chemical name	Carcinogen Status	Mexico
Stoddard Solvent		Mexico: TWA 100 ppm

**CANADA**

**WHMIS Statement**

This product has been classified in accordance with the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR.

**WHMIS Hazard Class** B3 - Combustible liquid  
 D2B - Toxic materials



**16. OTHER INFORMATION**

NFPA	Health Hazards 2	Flammability 2	Instability 0	Special Hazards -
HMIS	Health Hazards 2*	Flammability 2	Physical hazard 0	Personal Protection X

\*Indicates a chronic health hazard.

**NFPA/HMIS Ratings Legend** Severe = 4; Serious = 3; Moderate = 2; Slight = 1; Minimal = 0

**Revision date:** 2019-08-15  
**Reason for revision:** SDS sections updated

**Disclaimer**

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**Dragnet FT EC**

**SDS # : 1677-A**  
**Revision date: 2019-08-15**  
**Version 1.09**

**Prepared By:**

FMC Corporation

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**End of Safety Data Sheet**