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SECTION 1: IDENTIFICATION

Product Name: Martin's Permethrin SFR

EPA Registration No.: 70506-6-53883

Insecticide; See product label for a complete list of uses and use sites. Recommended Use:

Restrictions on Use: See product label for any restrictions on the use of this product.

Chemical Family: Pyrethroid

Chemical Name of Active

Permethrin

Ingredient(s): Manufactured for:

Control Solutions, Inc.

5903 Genoa-Red Bluff Pasadena, TX 77507

FOR FIRE, SPILL, AND/OR LEAK EMERGENCIES CONTACT: CHEMTREC 1-800-424-9300

FOR MEDICAL EMERGENCIES AND HEALTH AND SAFETY INQUIRIES CONTACT: Safety Call 1-866-897-8050

SECTION 2: HAZARD(S) IDENTIFICATION

EMERGENCY OVERVIEW: Amber liquid with a mild petroleum odor.

OSHA HCS CLASSIFICATION (29 CFR 1910.1200)

Skin Sensitization	Category 1
Germ Cell Mutagenicity	Category 1B
Carcinogenicity	Category 1B
Aspiration Toxicity	Category 1

Signal Word: DANGER



Hazard Statement(s): May cause an allergic skin reaction.

May cause genetic defects.

May cause cancer.

May be fatal if swallowed and enters airways.

Precautionary Statement(s):

Prevention: Do not handle until all safety precautions have been read and understood.

Wear cold insulating gloves/face shield/eye protection.

Do not get in eyes, on skin, or on clothing.

Contaminated work clothing must not be allowed out of the workplace.

Wear protective gloves.

Response: IF EXPOSED OR CONCERNED: Get medical advice/attention.

IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical attention/advice. Wash contaminated clothing before

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

Do NOT induce vomiting.

Storage: Store locked up

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Disposal: Dispose of contents/container in accordance with Federal, state and local

regulations.

SECTION 3: COMPOSTION/INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Weight %
Permethrin	52645-53-1	36.8%
Hydrocarbon solvent	Proprietary	>15.0%

^{*}Ingredients not listed or listed with a weight % range are considered a trade secret and are withheld under 29 CFR 1910.1200(i).

SECTION 4: FIF	RST AID MEASURES
IF IN EYES:	Hold eye 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 treatment advice.
IF ON SKIN:	Take off contaminated clothing. Rinse skin immediately with plenty of water for 1 5 to 20 minutes. Call a poison control center or doctor for treatment advice.
IF INHALED:	Move person 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.
IF INGESTED:	Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

Most important symptoms/effects, acute and delayed: Allergic skin reaction. For paresthesia, Vitamin E topical application is highly effective.

SECTION 5: FIRE-FIGHTING MEASURES

Suitable Extinguishing Media: Foam, dry chemical, carbon dioxide or water spray

Unsuitable Extinguishing Media: Water jet

Hazardous Combustion Products: Thermal decomposition may produce toxic carbon and nitrogen

oxides, chlorine and/or hydrogen chloride.

Special Protective Equipment &

Precautions:

Evacuate area and fight fire upwind from a safe distance to avoid hazardous vapors and decomposition products. Foam and/or dry chemical are preferred to minimize environmental contamination. If water is used, dike and collect water to prevent run-off. Wear self-contained breathing apparatus and full fire-fighting turn-out gear

(Bunker gear).

Unusual Fire & Explosion Hazards: None known

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: See Section 8 for personal protection equipment.

Environmental Precautions: Keep spilled material and any rinsate from contaminating soil or from entering

sewage and drainage systems and bodies of water.

Methods for Containment: Isolate the spill area. Keep unnecessary and unprotected personnel from

entering. Absorb small spills with sand, vermiculite or other inert absorbent. Dike large spills using absorbent or impervious material such as clay or sand.

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Recover and contain as much free liquid as possible for reuse. Allow absorbed

material to solidify and scrape up for disposal.

Methods for Clean-up: Place contaminated material in appropriate container for disposal. After

removal, flush contaminated area thoroughly with water. Pick up wash liquid with additional absorbent and place in a disposable container. Do not put

spilled material back in the original container.

Other Information: None known

SECTION 7: HANDLING AND STORAGE

Handling:

RECOMMENDATIONS ARE INTENDED FOR MANUFACTURING, PACKAGING AND COMMERCIAL BLENDING WORKERS. PESTICIDE APPLICATORS AND WORKERS must refer to the product label and Directions for Use attached to the product for Agricultural Use Requirements in accordance with the EPA Worker Protection Standard 40 CFR part 170. Handle and open container in a manner as to prevent spillage. Do not eat, drink or smoke while handling this product. Immediately wash off accidental splashes of the concentrate or spray mixture from skin, clothing and out of eyes. Keep away from open flames, hot surfaces and sources of ignition. Check that all equipment is properly bonded and grounded. Use spark resistant tools. Remove and wash contaminated clothing before re-use.

Storage:

See pesticide label for full information on product storage. Do not contaminate water, food or feed by storage of this product. Store away from sources of heat, out of direct sunlight and away from incompatible materials. Pesticides should be stored in secured areas away from children and animals.

Storage Temperature (Min/Max): Not determined

Product Incompatibilities: Strong oxidizing agents

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Users of a pesticide product must refer to the product label for personal protective equipment requirements.

Exposure Guidelines:

COMPONENT	OSHA PEL	ACGIH TLV	NIOSH REL
Hydrocarbon solvent	TWA: 500 ppm TWA: 2900 mg/m3	TWA: 100 ppm	

Engineering Controls: Provide general or local exhaust ventilation systems to maintain airborne

concentrations below OSHA PELs or other specified exposure limits. Local exhaust

ventilation is preferred.

Respiratory Protection: In areas of poor ventilation, use a NIOSH approved respirator with

cartridges/canisters approved for pesticides.

Eye Protection: Chemical goggles or safety glasses and full-face shield.

Protective Gloves: Chemical-resistant gloves such as barrier laminate, butyl rubber, nitrile,

neoprene rubber, polyvinyl chloride (PVC) or Viton.

Other Protective Clothing: Long-sleeved shirt, long pants and shoes plus socks.

General Safety Measures: Wash hands before eating, drinking, chewing gum, using tobacco, or using the

toilet. Remove clothing immediately after handling this product. Wash outside of gloves before removing. Discard clothing and other absorbent materials that

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have been drenched or heavily contaminated with this product's concentrate. Do not reuse them. Follow manufacturer's instructions for cleaning and maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Amber liquid	Upper/Lower Flammability Limits:	Not determined
Odor:	Mild petroleum	Vapor Pressure:	Not determined
Odor Threshold:	Not determined	Vapor Density:	Not determined
pH (1% dispersion):	4.9	Relative Density (@24°C):	1.039 (typical)
Melting /Freezing Point:	5.9°C/43°F	Solubility:	Not determined
Boiling Point/Range:	Not determined	Partition Coefficient:	Not determined
Flash Point:	44°C/111°F	Auto-ignition Temperature:	Not determined
Evaporation Rate:	Not determined	Decomposition Temperature:	Not determined
Flammability:	Not applicable	Viscosity:	Not determined

SECTION 10: STABILITY AND REACTIVITY

Reactivity: No hazardous chemical reactions known.

Chemical Stability: Stable under normal storage and handling conditions.

Possibility of Hazardous Reactions: No potential for hazardous reactions known.

Conditions to Avoid: Excessive heat, sources of ignition

Incompatible Materials: None known

Hazardous Decomposition Products: Thermal decomposition may produce toxic carbon and nitrogen

oxides, chlorine, hydrogen chloride.

SECTION 11: TOXICOLOGICAL INFORMATION

Likely Routes of Exposure: Eye contact, Skin contact, Inhalation, Ingestion

Symptoms of Exposure: Allergic skin reaction, respiratory irritation (including rhinitis, sneezing, cough

and scratchy throat).

Oral LD₅₀: 777 mg/kg (Estimated based upon component data)

Dermal LD₅₀: Not calculated on final mixture. Prolonged exposure to permethrin might result

in paresthesia (tingling sensation), which is reversible within 12 hours.

Inhalation LC₅o: Not calculated on final mixture. The clinical manifestations of inhalation

exposure to permethrin are confined to the upper respiratory tract and include

rhinitis, sneezing, cough and scratchy throat.

Eye Irritation/Damage: Not anticipated to cause eye irritation based upon component data. **Skin Corrosion/Irritation:** Not anticipated to cause skin irritation based upon component data.

Skin Sensitization: In repeat patch tests in humans, dermal applications of permethrin at 1% for up

to 9 days did not result in irritation or sensitization.

Chronic/Subchronic Toxicity: No data available
Mutagenicity: No data available
Reproductive Toxicity: No data available
Neurotoxicity: No data available

Target Organs: Kidney, Respiratory System, Eyes, Skin, Central Nervous System (CNS)

Aspiration Hazard: Hydrocarbon solvent makes aspiration hazard a possibility.

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Carcinogenicity: See below.

Chemica	al Name	ACGIH	IARC	NTP	OSHA
Perm	ethrin		3		

SECTION 12: ECOLOGICAL INFORMATION

Environmental Hazards Statement from FIFRA Regulated Pesticide Label:

This pesticide is extremely toxic to aquatic organisms, including fish and invertebrates. To protect the environment, do not allow pesticide to enter or run off into storm drains, drainage ditches, gutters or surface waters. Applying this product in calm weather when rain is not predicted for the next 24 hours will help to ensure that wind or rain does not blow or wash pesticide off the treatment area. Rinsing application equipment over the treated area will help avoid run off to water bodies or drainage systems.

This product is highly toxic to bees exposed to direct treatment on blooming crops or weeds. Do not apply this product or allow it to drift to blooming crops or weeds while bees are actively visiting the treatment area.

ECOTOXICITY DATA:

Fish Toxicity: Permethrin: Rainbow trout 96 hour LC50 = $2.5 \mu g/L$

Bluegill sunfish 95 hour LC50 = $1.8 \mu g/L$

Aquatic Invertebrate Toxicity: No data available
Aquatic Plant Toxicity: No data available

Avian Toxicity: Permethrin: Japanese quail oral LD50 = 23,000 mg/kg

Mallard duck oral LD50 = 11,257 mg/kg

Honeybee Toxicity: No data available

ENVIRONMENTAL EFFECTS:

Persistence and Degradability: Permethrin has a moderate rate of degradation in soil.

Bioaccumulation: Permethrin has a low Pow (6.5) but a low potential to bioconcentrate (BCF

= 500) due to the ease with which it is metabolized.

Mobility: Due to its high affinity for organic matter, there is little potential for

Permethrin movement in soil or entry into groundwater.

Other Adverse Effects: No data available

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal: Refer to the pesticide label for full information on disposal. Pesticide wastes are

toxic. Improper disposal of unused pesticide, spray mixture, or rinse water is a violation of Federal law. If these wastes cannot be used according to label instructions, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office for guidance in

proper disposal methods.

Container Disposal: Refer to the pesticide label for full information on disposal. When possible, triple

rinse the container and offer for recycling if available.

RCRA Characteristics: It is the responsibility of the individual disposing of this product to determine the

RCRA classification and hazard status of the waste.

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SECTION 14: TRANSPORTATION INFORMATION

DOT Not regulated as per 173.150(f) when shipped by highway in non-bulk (below 119 gallon)

(**Ground**): containers. When shipped in containers of greater than or equal to 119 gallons:

UN1993, Flammable liquid, n.o.s. (Hydrocarbon), 3, PGIII

IMDG

UN1993, Flammable liquid, n.o.s. (Hydrocarbon), 3, PGIII, Marine Pollutant

(Sea): IATA

(Air): UN1993, Flammable liquid, n.o.s. (Hydrocarbon), 3, PGIII, Marine Pollutant

SECTION 15: REGULATORY INFORMATION

Labeling Requirements Under FIFRA: 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 skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Avoid breathing vapor or spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Remove contaminated clothing and wash before reuse.

TSCA Inventory: This product is exempt from TSCA inventory listing requirements as it is solely for FIFRA

regulated use.

SARA Title III Information:

Section 302 – Extremely hazardous substances: None

Section 311/312 – Hazard Categories: Chronic (Delayed)

Section 313 – 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 Number	Weight %
Permethrin	52645-53-1	36.8%

CERCLA – This product contains the following chemicals which have a reportable quantity (RQ) under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA):

Chemical Name	CAS Number	RQ	Quantity of Finished Product
None listed			

CALIFORNIA PROPOSITION 65:

Chemical Name	CAS Number	Prop 65 Category(ies)
None listed		

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U.S. STATE RIGHT-TO-KNOW REGULATIONS:

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Permethrin	X	X	
Hydrocarbon solvent	X	X	Χ

SECTION 16: OTHER INFORMATION

NFPA	Health Hazards 3	Flammability 2	Instability 1	Special Hazards – None

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Revision Date: March 6, 2017 **Document Superseded:** May 8, 2015

Revision Note: Update to match supplier SDS dated February 9, 2016