1. IDENTIFICATION

Product name: Martin's Flea, Tick & Mange Dip

Product type: Insecticide EPA Registration No.: 53883-78

Chemical name of active ingredient(s): **Permethrin**: [3-(Phenoxyphenyl)methyl(±)cis-trans-3-(2,2

dichloroethenyl) 2,2-dimethylcyclopropanecarboxylate]

Manufacturer/Registrant: Control Solutions, Inc. 5903 Genoa-Red Bluff

Pasadena, TX 77507

Phone: 1-800-424-9300

Phone: 1-866-897-8050

For fire, spill, and/or leak emergencies,

contact Chemtrec:

For medical emergencies and health

and safety inquiries, contact Safety

Call:

Poison Control Center Phone: 1-800-222-1222

2. HAZARDS IDENTIFICATIONS

OSHA HCS CLASSIFICATION (29 CFR 1910.1200)

Acute Toxicity:

Exposure	Acute	Acute	Acute inhalation	Eye	Skin	Skin
Route	oral	dermal		irritation	irritation	Sensitization
Category	4	NC	4	2B	NC	NC

NC: Not classified

SIGNAL WORD: WARNING HAZARD STATEMENTS:

- Harmful if swallowed.
- Harmful if inhaled
- Cause eye irritation
- Suspected of causing cancer (Carcinogenicity- Category 2)

PICTOGRAMS:





PRECAUTIONARY STATEMENTS:

- Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. If swallowed: Call a poison center if you feel unwell. Rinse mouth.
- Avoid breathing mist, vapors and spray. Use only outdoors or in a well-ventilated area. If inhaled: remove a person to fresh air and keep comfortable for breathing. Call a poison center if you feel unwell.
- Wash hands thoroughly after handling. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: get medical advice.
- Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

Contact Safety Call® International for emergency medical treatment at (866) 897-8050.

PHYSICAL OR CHEMICAL HAZARDS: Do not use or store near heat or open flame. Do not use in undiluted form.

3. COMPOSITION/INFORMATION ON INGREDIENTS

COMMON NAME	CAS NO.	%	OSHA PEL	ACGIH TLV	OTHER	NTP/IARC/OSHA (Carcinogen)
Permethrin	52645-53-1	3.20	NE	NE	NA	IARC – 3*

NE= Not established; NA= Not applicable

*IARC Group 3: The agent (mixture or exposure circumstance) is unclassifiable as to carcinogenicity to humans.

4. FIRST AID MEASURES

FIRST AID • 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 the poison control center or doctor. • Do not give anything by mouth to an unconscious person.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. For information on this product, contact the National Pesticide Information Center, 1-800-858-7378, Monday-Friday, 7:30 AM-3:30 PM PST. You may also contact the National Poison Control Center, 1-800-222-1222, day or night, for emergency medical treatment information [or SafetyCall® at (866) 897-8050]. FOR CHEMICAL EMERGENCY: Spill, leak, fire, exposure, or accident call CHEMTREC 1-800-424-9300.

NOTE TO PHYSICIANS AND VETERINARIANS: Do not administer or instill milk, cream or other substances containing vegetable or animal fats which will enhance absorption of lipophilic substances.

5. FIRE FIGHTING MEASURES

FLASH POINT: Will not flash.

FLAMMABLE LIMITS: Not determined

EXTINGUISHING MEDIA: Water fog, CO₂, foam, dry chemical.

UNUSUAL FIRE & EXPLOSION HAZARDS: Pesticide fires have potential to emit hazardous decomposition products.

FIRE-FIGHTING PROCEDURES: Isolate fire area and evacuate downwind. DO NOT breathe gases, smoke or vapors generated. Wear self-contained breathing apparatus and full-protective clothing. Cool fire exposed areas and equipment.

HAZARDOUS DECOMPOSITION PRODUCTS: May release irritating and toxic gases due to thermal decomposition. Products of combustion include CO, and CO₂.

6. ACCIDENTAL RELEASE MEASURES

ABSORBENT MATERIALS AND CONTAINMENT: In case of spillage or leakage, soak up with an absorbent material such as sand, sawdust, earth, Fuller's earth, etc. Dispose of with chemical waste.

7. HANDLING AND STORAGE

Do not contaminate water, food, or feed by storage or disposal.

PRECAUTIONS TO BE TAKEN IN HANDLING: Avoid dermal contact. Take precautions to avoid damaging containers. Avoid cross contamination. Always wash hands thoroughly after handling pesticides and before eating, drinking, or smoking. Clean water should be available to rinse eyes and skin in case of chemical exposure. Keep out of the reach of children.

PRECAUTIONS TO BE TAKEN IN STORAGE: Store upright at room temperature. Avoid exposure to extreme temperatures. Store in a locked area out of reach of children and domestic animals.

STORAGE TEMPERATURE (MIN/MAX): Normal ambient temperatures.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION, PACKAGING AND USE OF THIS PRODUCT.

FOR COMMERCIAL APPLICATIONS AND/OR ON-FARM APPLICATIONS CONSULT THE PRODUCT LABEL.

EYE PROTECTION: Protective eyewear or chemical safety glasses with side shields or chemical goggles when working in non-ventilated spaces.

SKIN PROTECTION: Long-sleeve shirt, long pants, shoes plus socks.

HAND PROTECTION: Chemical-resistant gloves.

RESPIRATOR REQUIREMENTS: None likely to be needed. NIOSH approved P class filtering face piece or respirator may be used to minimize inhalation of aerosols.

WORK HYGIENIC PRACTICES:

Clean water should be available to rinse eyes and skin in case of chemical exposure. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco.

ADDITIONAL PROTECTIVE MEASURES:

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

USER SAFETY RECOMMENDATIONS:

Users Should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

EXPOSURE GUIDELINES: Refer to Section 3.

ENGINEERING CONTROLS: Use only in adequately ventilated areas.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Light yellow, milky liquid

ODOR: Slight characteristic

pH: 5.29

FLASH POINT: Will not flash
SPECIFIC DENSITY: 1.00 g/cm³
BULK DENSITY: 8.345 lb/gal

SOLUBILITY IN WATER: Emulsifies **VISCOSITY:** 2.8418 cPs @ 20°C

10. STABILITY AND REACTIVITY

STABILITY: Stable under normal conditions.

CONDITIONS AND MATERIALS TO AVOID: Avoid exposure to extreme temperatures. Strong oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS: May release irritating and toxic gases due to thermal decomposition. Products of combustion include CO, and CO₂.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY/IRRITATION STUDIES:

Acute Oral LD₅₀ (Rat): 2,000 - 5,000 mg/kg Acute Dermal LD₅₀ (Rabbit): >5,000 mg/kg Acute Inhalation LC₅₀ (Rat): >2.03 mg/L

Eye Irritation: Mildly irritating Skin Irritation: Slightly irritating Dermal Sensitization: Not a sensitizer

ROUTES OF EXPOSURE: Skin, eye, inhalation, ingestion.

POTENTIAL HEALTH EFFECTS:

SKIN CONTACT: Slightly irritating. Permethrin may cause tingling sensation known as parasthesia at point

of contact.

EYE CONTACT: Mildly irritating. May cause redness and tearing.

INGESTION: Permethrin is a neurotoxin. Ingestion may induce neurotoxic symptoms including diarrhea,

salivation, tremors, convulsions, hyperactivity and hypersensitivity to touch or sound.

INHALATION: May cause nasal or respiratory irritation.

OTHER TOXICOLOGICAL INFORMATION: (Based on Permethrin Technical)

CARCINOGENICITY: EPA classified permethrin as "Likely to be Carcinogenic to Humans" by the oral route. This classification was based on two reproducible benign tumor types (lung and liver) in the mouse, equivocal evidence of carcinogenicity in Long-Evans rats, and supporting structural activity relationships (SAR) information. (EPA 2009 Permethrin RED)

TERATOGENICITY: Not a teratogen.

EMBRYO TOXICITY: None MUTAGENICITY: None.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL HAZARDS: This pesticide is extremely toxic to aquatic organisms, including fish and invertebrates. Do not apply directly to water or areas where surface water is present or to intertidal areas below the mean high water mark. Do not apply when weather conditions favor drift from treated areas. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment washwaters. 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.

BIOACCUMULATION: Unlikely to bioaccumulate due to acute toxicity.

ENVIRONMENTAL FATE: The average half-life of permethrin in aerobic soils is 39.5 days, with a range from 11.6 to 113 days. Permethrin binds tightly to soil and is broken down primarily by microorganisms, but also by photolysis.

ECOTOXICOLOGICAL INFORMATION: (EPA Ecotox Database)

Rain trout LC₅₀ (24h): 0.62 μ g/L Bluegill LC₅₀ (48h): 0.79 μ g/L

Bobwhite quail LD₅₀ (8-day): 5,200 ppm

13. DISPOSAL CONSIDERATIONS

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Do not contaminate water, food, or feed by storage or disposal. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. Dispose of excess or waste pesticide by use according to label directions, or contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER DISPOSAL: Dispose of product containers, waste containers, and residues according to label instructions and local, state, and federal health and environmental regulations.

14. TRANSPORT INFORMATION

DOT (ground)

Not regulated

IMO (vessel): UN3082, Environmentally hazardous substance, liquid, N.O.S. (permethrin),

9, PG III, marine pollutant

IATA (air): UN3082, Environmentally hazardous substance, liquid, N.O.S. (permethrin),

9, PG III, marine pollutant

15. REGULATORY INFORMATION

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 for safety data sheet, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label.

CAUTION: Harmful if swallowed. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco.

SARA TITLE III CLASSIFICATION:

Section 302: Not applicable.

Section 311/312: Acute health hazard (immediate)

Chronic health hazard (delayed)

Section 313: Permethrin (3.2%) CAS #:52645-53-1

CA PROPOSITION 65: Not applicable

CERCLA RQ: Not applicable

RCRA CLASSIFICATION: Under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

TSCA STATUS: The ingredients of this product are listed on the TSCA inventory or are exempt.

16. OTHER INFORMATION

HAZARD RATINGS	NFPA	HMIS		
HEALTH:	1	1	0	MINIMAL
FLAMMABILITY:	0	0	1	SLIGHT
REACTIVITY:	0	0	2	MODERATE
			3	HIGH
			4	SEVERE

MSDS DATE: 6-26-2013. Supersedes version dated 11-15-2011. Changes made to all sections.

The information and recommendations contained herein are based upon data believed to be correct. However, no warranty of any kind, expressed or implied, is made with respect to the information contained herein.