

SAFETY DATA SHEET

VECTOR BAN

1. IDENTIFICATION

Product name: **VECTOR BAN**
Product type: Insecticide
EPA Registration No.: 53883-72
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
For fire, spill, and/or leak emergencies, contact Chemtrec: Phone: 1-800-424-9300
For medical emergencies and health and safety inquiries, contact Safety Call: Phone: 1-866-897-8050
Poison Control Center Phone: 1-800-222-1222

2. HAZARDS IDENTIFICATIONS

OSHA HCS CLASSIFICATION (29 CFR 1910.1200)

Acute Toxicity:

Exposure Route	Acute oral	Acute dermal	Acute inhalation	Eye irritation	Skin irritation	Skin Sensitization
Category	4	NC	4	2B	2	1

NC: Not classified

SIGNAL WORD: WARNING

HAZARD STATEMENTS:

- Harmful if swallowed.
- Harmful if inhaled
- Cause eye irritation
- Cause skin irritation
- May cause an allergic skin reaction
- 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.

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- 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.
- Wash hand thoroughly after handling. Wear protective gloves. If no skin: Wash with plenty of water. If skin irritation occurs: Get medical advice. Take off contaminated clothing and was it before reuse.
- Avoid breathing mist, vapors and spray. Contaminated work clothing must not be allowed out of the workplace. Wear protective gloves. If on skin: Wash with plenty of water. If irritation or rash occurs: Get medical advice. Wash contaminated clothing before reuse.
- 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.

3. COMPOSITION/INFORMATION ON INGREDIENTS

COMMON NAME	CAS NO.	%	OSHA PEL	ACGIH TLV	OTHER	NTP/IARC/OSHA (Carcinogen)
Permethrin	52645-53-1	10.0	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	
IF SWALLOWED:	<ul style="list-style-type: none"> • 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.
IF INHALED:	<ul style="list-style-type: none"> • 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.
IF IN EYES:	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continuing rinsing eye. • Call a poison control center or doctor for treatment advice.
IF ON SKIN OR CLOTHING:	<ul style="list-style-type: none"> • 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.
<p>Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact SafetyCall[®] (866) 897-8050 for emergency medical treatment information.</p>	
<p>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.</p>	

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.

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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: Universal absorbent pads, vermiculite, or clay granules. Do not discharge into municipal wastewater or public storm drains. Eliminate runoff as much as possible.

WASTE DISPOSAL: Vacuum or sweep absorbent material into waste recovery drum. Dispose of contaminated materials in municipal land-fill or through licensed TSDF. Open dumping is prohibited. Not an RCRA hazardous 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.

PRECAUTIONS TO BE TAKEN IN STORAGE: Store in a well-ventilated place. Keep cool. Store upright at room temperature. Avoid exposure to extreme temperatures. Do not store near heat or open flame. Store away from foodstuffs, feed, and children.

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.

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- 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/orange viscous liquid

ODOR: Slight characteristic

pH: 5.54 @ 25°C

FLASH POINT: Will not flash

SPECIFIC DENSITY: 1.0158 g/cm³

BULK DENSITY: 8.477 lb/gal

SOLUBILITY IN WATER: Emulsifies

VISCOSITY: 846.0 mPa*s @22°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): 500 – 2,000 mg/kg

Acute Dermal LD₅₀ (Rabbit): >5,000 mg/kg

Acute Inhalation LC₅₀ (Rat): >2.08 mg/L

Eye Irritation: Mildly irritating

Skin Irritation: Moderately irritating

Dermal Sensitization: Contact sensitizer

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

POTENTIAL HEALTH EFFECTS:

SKIN CONTACT: Moderately 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 highly toxic to fish. Do not apply directly to water. Avoid contamination of ornamental fish ponds. Drifts and runoff from treated areas may be hazardous

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to aquatic organisms in treated areas. Do not contaminate water when cleaning equipment or disposing of equipment washwaters. This product is highly toxic 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 µg/L

Bluegill LC₅₀ (48h): 0.79 µg/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 different 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, inhaled or absorbed through skin. Causes moderate eye irritation. Avoid breathing spray mist. Avoid contact with skin, eyes or clothing. Remove contaminated clothing and wash before reuse. Wash thoroughly with soap and water after handling. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

SARA TITLE III CLASSIFICATION:

Section 302: Not applicable.

Section 311/312: Acute health hazard (immediate)

Chronic health hazard (delayed)

Section 313: Permethrin (10%) CAS #:52645-53-1

CA PROPOSITION 65: Not applicable

CERCLA RQ: Not applicable

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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: 11-26-2012. Supersedes version dated 11-16-2011. 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.