# Safety Data Sheet

Section 1 – Product Identification			
Product Name:	Vector-Ban™ Plus Multi Purpose Insecticide	EPA Registration #:	53883-257
Manufacturer:	Control Solutions Inc. 5903 Genoa- Red Bluff Pasadena, TX 77507 281-892-2500	EPA Establishment #:	53883-TX-002
Recommended Usage: Restrictions:	Apply only as directed by Refer to product label fo	•	

Section 2 – Hazard Identification		
Health:	Harmful if swallowed. Permethrin is a neurotoxin. Exposure may produce symptoms of neurotoxicity. Refer to <b>Section 11</b> .	
Environmental:	Permethrin is considered acutely toxic to aquatic life. Permethrin has low avian toxicity. Refer to <b>Section 12</b> .	
Physical:	None.	
Unclassified:	None.	
GHS Classification:	<ul> <li>Environmental toxicity: Acute Aquatic, Category 1 (severe).</li> </ul>	
	Carcinogenicity: Category 2 (suspected).	
	• Eye irritation: Category 2B (mild).	

Section 3 – Chemical Composition			
Material	CAS #	% by Weight	OSHA PEL
Permethrin	52645-53-1	10.0%	None established
Piperonyl Butoxide	51-03-6	10.0%	None established
Inert Ingredients	-	80.0%	None established

Section 4 – First Aid	
Eye Contact:	Flush eyes with water for 15 minutes. Seek medical attention if irritation persists.
Inhalation:	Move person to fresh air. If person is not breathing, give artificial respiration. Call a poison control center for further treatment advice.
Ingestion:	Call poison control center immediately for treatment advice. Do not induce vomiting unless directed to do so by a poison control center. Do not give anything by mouth to an unconscious person.
Dermal Contact:	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center for treatment advice if irritation persists.
Physician's Information:	You may also contact SafetyCall <sup>®</sup> International (866) 897-8050 for emergency medical treatment information.
Notes:	Refer to Section 11 for symptoms of overexposure.

Section 5 – Firefighting Measures		
Flash Point:	Will not flash. May burn in conditions of a fire.	
Extinguishing Media:	Water fog, CO <sub>2</sub> , foam, dry chemical.	
Procedures:	Use self-contained breathing apparatus. Cool fire exposed areas and equipment.	
Unusual Fire Hazards:	Pesticide fires have potential to emit hazardous decomposition products. Refer to <b>Section 10</b> for more information.	

Section 6 – Accidental Release Measures		
Absorbent Materials:	Universal absorbent pads, vermiculite, or clay granules.	
Containment:	Do not discharge into municipal wastewater or public storm drains.	
	Eliminate runoff as much as possible.	
Waste Disposal:	Vacuum or sweep contaminated absorbent material into suitable container.	
	Seal container and dispose of all contaminated waste material in municipal	
	land-fill or through licensed TSDF. Open dumping is prohibited. Not an RCRA	
	hazardous waste.	
Reporting:	Report all major spills and uncontrolled releases to proper local, state, and	
	federal agencies.	
Emergency Contact #:	Chemtrec: 1-800-424-9300	

## Section 7 – Handling and Storage Instructions

Storage Conditions:	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.
Special Handling	Avoid dermal contact. Take precautions to avoid damaging containers.
Considerations:	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.

## Section 8 – Engineering Controls and Protective Equipment

Engineering Controls:	Use only in adequately ventilated areas.
Eye Protection:	ANSI approved goggles or safety glasses with side shields are recommended.
<b>Respiratory Protection:</b>	None likely to be needed. NIOSH approved P class filtering face piece or
	respirator may be used to minimize inhalation of aerosols.
Dermal Protection:	Chemical resistant gloves, long sleeves, pants, shoes with socks.
Other Precautions:	Clean water should be available to rinse eyes and skin in case of chemical exposure. Wash thoroughly after handling. Remove and wash clothing
	before reuse.

## Section 9 – Physical and Chemical Properties

Odor:	Slight characteristic.	Melting Point:	Not available.
Physical State:	Viscous liquid.	Flash Point:	See Section 10.
Color:	Translucent yellow.	Specific Gravity:	0.92 g/ml
Bulk Density:	See specific gravity.	pH:	5.25
Vapor Pressure:	Not available.	Water Solubility:	Emulsifies.
Viscosity:	Not available.	Refractive Index:	Not available.

## Section 10 – Stability and Reactivity

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Flash Point:	Will not flash.
Lower Flammability Limit:	Not applicable.
Upper Flammability Limit:	Not applicable.
Hazardous Polymerization:	Will not occur.
Decomposition Products:	May release irritating and toxic gases due to thermal decomposition.
	Products of combustion include cyanide, CO, and CO <sub>2</sub> .
Conditions to Avoid:	Stable under normal storage conditions. Avoid exposure to extreme
	temperatures.
Incompatible Materials:	Strong oxidizers, acids and alkalis.

#### Section 11 – Toxicity and Symptoms of Overexposure

Routes of Exposure:	Dermal, eye, inhalation, ingestion.
Skin Contact:	Slightly irritating. Permethrin may cause tingling sensation known as
	parasthesia. Symptoms for permethrin are reversible within 48 hrs.
Eye Contact:	Slightly irritating. May cause redness and tearing. Symptoms for permethrin
	reversible within 72 hrs.
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.
Oral LD <sub>50</sub> :	>500 mg/kg
Dermal LD <sub>50</sub> :	>1000 mg/kg
Inhalation LC <sub>50</sub> :	>10 mg/L
Carcinogenicity:	IARC: Group 3 (not carcinogenic)
	GHS: Category 2 (suspected)
Teratogenicity:	Not a teratogen.
Embryo toxicity:	None.
Reproductive Effects:	None.
Mutagenicity:	None.
Other Chronic Effects:	None.

#### Section 12 – Ecological Data\*

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Aquatic:	LC <sub>50</sub> (96h) for rainbow trout: 2.5 ug/L
(Permethrin)	LC <sub>50</sub> (96h) for Bluegill: 1.8 ug/L
Avian:	LD <sub>50</sub> Bobwhite quail- >10,000 mg/kg
(Permethrin)	
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.
Summary:	This product is extremely toxic to fish. Do not apply directly to water. Drifts
	and runoff from treated areas may be hazardous to aquatic organisms in
	treated areas.

Section 13 – Disposal Considerations*		
Pesticide Disposal:	Pesticide, spray mixture or rinse water that cannot be used according to	
	label instructions must be disposed of at or by an approved waste disposal	
	facility.2	
Container Disposal:	<b>For Containers equal to or less than 5 Gallons</b> : Nonrefillable container. Do not reuse or refill this container. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Offer for recycling if available. If recycling is not available: then dispose of container in a sanitary landfill or, if allowed by State and local authorities, by burning. If burned, stay out of smoke.	

For Containers greater than 5 Gallons: Nonrefillable container. Do not reuse or refill this container. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Offer for recycling if available. If recycling is not available: then dispose of container in a sanitary landfill or, if allowed by State and local authorities, by burning. If burned, stay out of smoke. For Bulk containers: (Refillable Container) Refill this container with pesticides only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the re-filler. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or re-circulate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this procedure two more times.

Section 14 – Transportation*		
DOT:	Not regulated.	
IATA:	UN3082, Environmentally hazardous substance, liquid, n.o.s. (10% permethrin), Class 9, PG III	
IMDG:	UN3082, Environmentally hazardous substance, liquid, n.o.s. (10% permethrin), Class 9, PG III, marine pollutant	
Federal Motor Carrier Classification	Insecticide, Liquid, Other Than Agriculture N.O.I.B.N.	

Section 15 – Regulatory*			
Section 302/TPQ:	Contains no components listed under section 302.		
(emergency planning)			
Section 304/EHS RQ:	Contains no components listed under section 304.		
(release notification)			
CERCLA RQ:	Not regulated by CERCLA.		
(release notification)			
Section 311/Tier II:	Acute health hazard, delayed health hazard.		
(MSDS submission)			
Section 313/TRI	permethrin, CAS - 52645-53-1.		
Chemicals:			
RCRA Haz-Waste Code(s):	Not a hazardous waste.		
CAA TQ:			
(air emissions)			
EPA/FIFRA Toxicity			
Category:	III		
EPA Signal Word:			
State Specific			
Regulations:	N/E		
International Regulations:	N/E		

Section 16 – Other		
HMIS/NFPA Classification:	Fire - 0	Health - 1
	Reactivity - 0	Special - none
Date of Last Revision:	August 11, 2011	
Hazcom Training	Yes.	
Necessary:		

NFPA and HMIS ratings assigned to this product are based on the hazards of its ingredient (s). Because the customer is most aware of the application of the product, he must ensure that the proper personal protective equipment (PPE) is provided consistent with information contained in the product MSDS.

#### **DISCLAIMER**

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\*Section is not required by 29 CFR 1910.1200 the Hazcom standard, but is provided for compliance with United Nations Globally Harmonized System (GHS).