1. IDENTIFICATION

Product name:	Viper Insecticide Concentrate
Product type:	Insecticide
EPA Registration No.:	53883-27
Chemical name of active ingredient(s):	Cypermethrin : (±) α-cyano-(3-phenoxyphenyl)methyl (±) <i>cis, trans</i> -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: For medical emergencies and health and	Phone: 1-800-424-9300
safety inquiries, contact Safety Call: Poison Control Center	Phone: 1-866-897-8050 Phone: 1-800-222-1222

2. HAZARDS IDENTIFICATIONS

OSHA HCS CLASSIFICATION (29 CFR 1910.1200)

Acute Toxicity:

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

NC: Not classified

SIGNAL WORD: WARNING

HAZARD STATEMENTS:

- Harmful is swallowed.
- Harmful if inhaled
- Cause eye irritation
- Cause skin irritation
- May cause an allergic skin reaction
- Suspected of causing cancer (Carcinogenicity- Category 2)
- May be fatal if swallowed and enters airways (Aspiration Category 1)
- Aquatic toxicity

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. Do not induce vomiting.

- 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.
- 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.

PHYSICAL AND CHEMICAL HAZARDS: Do not use or store near heat or open flame.

STORAGE AND DISPOSAL: See Section 7 and 13.

2 COMPOSITION/INFORMATION ON INCREDIENTS

OTHER HAZARDS: See Section 11 and 12.

3. COMPOSITION/INFORMATION ON INGREDIENTS						
COMMON NAME	CAS NO.	%	OSHA PEL	ACGIH TLV	OTHER	NTP/IARC/OSHA (Carcinogen)
Cypermethrin	52315-07-8	25.4	NE	NE	NA	NA
Petroleum solvent containing : Naphthalene	91-20-3	<0.9%	10 ppm 50mg/m ³ (TWA)	10 ppm 50mg/m ³ (TWA)	NA	IARC – 2B*
				(skin)		

NE= Not established; NA= Not applicable *IARC Group 2B: Possible Human Carcinogen.

4. FIRST AID MEASURES

	FIRST AID						
IF SWALLOWED:	VALLOWED: • Immediately call a poison control center or doctor.						
	 Do not induce vomiting unless told to do so by the poison control center or doctor. 						
	 Do not give any liquid to the person. 						
	 Do not give anything by mouth to an unconscious person. 						
IF ON SKIN OR	F ON SKIN OR • Take off contaminated clothing.						
CLOTHING:	 Rinse skin immediately with plenty of water for 15-20 minutes. 						
	Call a poison control center or doctor for treatment advice.						
IF IN EYES:	• 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 INHALED:	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 						
	 Call a poison control center or doctor for further treatment advice. 						

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.

NOTE TO PHYSICIANS AND VETERINARIANS: Contains Petroleum Distillates – Vomiting may cause aspiration pneumonia.

5. FIRE FIGHTING MEASURES

FLASH POINT: 164°F (73.3°C) FLAMMABLE LIMITS: Not determined

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

UNUSUAL FIRE & EXPLOSION HAZARDS: Combustible liquid. During a fire, irritating and possibly toxic gasses may be generated by thermal decomposition or combustion.

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.

6. ACCIDENTAL RELEASE MEASURES

In case of spillage or leakages, soak up with an absorbent material such as sand, sawdust, earth, Fuller's earth, etc. Dispose of with chemical waste. Do not discharge into municipal wastewater or public storm drains. Eliminate runoff as much as possible. Dispose of contaminated material through municipal landfill or licensed TSDF.

7. HANDLING AND STORAGE

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

PRECAUTIONS TO BE TAKEN IN HANDLING: Avoid skin 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 upright at room temperature. Avoid exposure to extreme temperatures.

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.

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

HAND PROTECTION: Chemical-resistant gloves.

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

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: dark amber liquid ODOR: Aromatic hydrocarbon pH: 3.98 FLASH POINT: 164°F (73.3°C) SPECIFIC DENSITY: 0.945 g/cc@25°C; 0.936 g/cc@39°C BULK DENSITY: 7.88 lbs/gal@25°C; 7.811 lbs/gal@39°C SOLUBILITY IN WATER: Emulsifies VISCOSITY: 11.3 cps@25°C; 4.6 cps @39°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.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY/IRRITATION STUDIES:

ROUTES OF EXPOSURE: Ingestion, inhalation, skin and eye contact

OTHER TOXICOLOGICAL INFORMATION: (Based on Cypermethrin Technical)

CHRONIC/SUBCHRONIC TOXICITY: NOEL (2-y) for dogs 5 mg/kg, rats 7.5 mg/kg. Nervous system effects typical of pyrethroids (motor incoordination, gait abnormalities) in a range of repeated dose studies (dog and rat). Possible nerve fiber degeneration in 14-day study in rats.

REPRODUCTIVE/DEVELOPMENT TOXICITY: There were no cypermethrin-induced effects in fertility in two separate two- litter three (filial) generation studies in the rat.

CARCINOGENICITY: Two separate 2-year feeding studies in the rat revealed no evidence of carcinogenicity that could be attributable to cypermethrin.

OTHER TOXICITY INFORMATION: Large doses of cypermethrin ingested by laboratory animals produced signs of toxicity including loss of motor control, tremors, decreased activity, and urinary incontinence, incoordination, increases in sensitivity to sound and convulsions.

TARGET ORGANS: CNS, eye, liver, skin

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL HAZARDS: This product is extremely toxic to fish and aquatic invertebrates. To protect the environment, do not allow pesticide to enter or run off into storm drains, drainage ditches, gutters and surface waters. Applying this product in calm weather when rain is not predicted within 24 hours will help ensure that wind or rain does not blow or wash pesticide off 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 of blooming crops or weeks. Do not apply product or allow it to drift to blooming crops or weeks while bees are actively visiting the treatment area.

ENVIRONMENTAL FATE (CYPERMETHRIN TECHNICAL): Rapidly degraded in soil with a half life of 2-4 weeks. It is readily hydrolyzed under basic conditions; hydrolysis half-life period can be 20-29 days. Cypermethrin has a high affinity for organic matter and a Log P_{ow} of 5.0; yet, because of the ease with which the material undergoes degradation, it has very low potential for bioconcentration (BCF= 17), and it is not mobile in soil.

ECOTOXICOLOGICAL INFORMATION:

Rain trout LC_{50} : 0.92 µg/L Bluegill LC_{50} : 1.8 µg/L Bobwhite quail LC_{50} (8-day dietary): > 20,000 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)

Non-bulk : Not Regulated

Bulk : NA 1993, Combustible Liquid (contains petroleum distillates), PG III, marine pollutant

IMO (vessel): UN3082, Environmentally hazardous substance, liquid, n.o.s. (cypermethrin), 9, PG III, marine pollutant

IATA (air): UN3082, Environmentally hazardous substance, liquid, n.o.s. (cypermethrin), 9, PG III

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. Harmful if inhaled. Do not breathe vapor or spray mist. Causes moderate eye irritation Avoid contact with eyes, skin, or clothing. Wear protective clothing and impermeable gloves when spraying, handling, or missing concentrate. Wash thoroughly with soap and

water after handling and before eating, drinking or using tobacco. Remove and wash contaminated clothing before reuse.

SARA TITLE III CLASSIFICATION:

Section 302: Not applicable. Section 311/312: Acute health hazard (immediate) Chronic health hazard (delayed) Section 313: Not applicable

CA PROPOSITION 65: Not applicable

CERCLA RQ: Naphthalene (CAS No. 91-20-3) RQ = 100 lbs.

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:	2	0	1	SLIGHT	
REACTIVITY:	0	0	2 3 4	MODERATE HIGH SEVERE	

SDS DATE: 11-20-2014. Supersedes version dated 2-19-2013 and 8-1-2011. Changes made to sections 2, 15 and 16.

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.