



# SAFETY DATA SHEET

## Permethrin CS

### SECTION 1: IDENTIFICATION

**Product Name:** Permethrin CS  
**EPA Registration No.:** 53883-388  
**Recommended Use:** Insecticide; See product label for a complete list of uses and use sites.  
**Restrictions on Use:** See product label for any restrictions on the use of this product.  
**Chemical Family:** Pyrethroid  
**Chemical Name of Active Ingredient(s):** Permethrin  
**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:** White liquid with no odor. Harmful if swallowed.

**OSHA HCS CLASSIFICATION (29 CFR 1910.1200)**

Acute Oral Toxicity	Category 4
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**Signal Word:** WARNING



**Hazard Statement(s):** Harmful if swallowed.

**Precautionary Statement(s):**

**Prevention:** Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product.

**Response:** **If swallowed:** Call a poison center/doctor if you feel unwell. Rinse mouth.

**Storage:** No statements required. See Section 7 for Storage Information.

**Disposal:** Dispose of contents/container in accordance with Federal, state and local laws and regulations.

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Weight %
Permethrin	52645-53-1	23.6%
Propylene glycol	57-55-6	14.0 – 20.0%

\*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: FIRST AID MEASURES	
<b>IF IN EYES:</b>	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.
<b>IF ON SKIN:</b>	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 20 minutes. Call a poison control center or doctor for treatment advice.
<b>IF INHALED:</b>	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.
<b>IF INGESTED:</b>	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:** None known

SECTION 5: FIRE-FIGHTING MEASURES	
<b>Suitable Extinguishing Media:</b>	Foam, dry chemical, carbon dioxide, sand or water spray
<b>Unsuitable Extinguishing Media:</b>	Water jet or heavy water stream
<b>Hazardous Combustion Products:</b>	Thermal decomposition may produce toxic carbon and nitrogen oxides.
<b>Special Protective Equipment &amp; Precautions:</b>	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).
<b>Unusual Fire &amp; Explosion Hazards:</b>	None known

SECTION 6: ACCIDENTAL RELEASE MEASURES	
<b>Personal Precautions:</b>	See Section 8 for personal protection equipment.
<b>Environmental Precautions:</b>	Keep spilled material and any rinsate from contaminating soil or from entering sewage and drainage systems and bodies of water.
<b>Methods for Containment:</b>	Isolate the spill area and remove all ignition sources. Keep unnecessary and unprotected personnel from entering. Ventilate the area. Absorb small spills with sand, vermiculite or other inert absorbent. Dike large spills using absorbent or impervious material such as clay or sand. Recover and contain as much free liquid as possible for reuse. Allow absorbed material to solidify and scrape up for disposal.
<b>Methods for Clean-up:</b>	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.
<b>Other Information:</b>	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.

**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. Keep away from ignition sources.

**Storage Temperature (Min/Max):** Not determined

**Product Incompatibilities:** Strong acids, bases and oxidizers

**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
No components listed			

**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 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**

<b>Appearance:</b>	White liquid	<b>Upper/Lower Flammability Limits:</b>	Not determined
<b>Odor:</b>	None	<b>Vapor Pressure:</b>	Not determined
<b>Odor Threshold:</b>	Not determined	<b>Vapor Density:</b>	Not determined
<b>pH (1% dispersion):</b>	6.91	<b>Relative Density (@20°C):</b>	1.05 (typical)
<b>Melting /Freezing Point:</b>	Not determined	<b>Solubility:</b>	Not determined
<b>Boiling Point/Range:</b>	Not determined	<b>Partition Coefficient:</b>	Not determined
<b>Flash Point:</b>	Not applicable	<b>Auto-ignition Temperature:</b>	Not determined
<b>Evaporation Rate:</b>	Not determined	<b>Decomposition Temperature:</b>	Not determined
<b>Flammability:</b>	Not applicable	<b>Viscosity:</b>	183.04 cSt @ 20°C

**SECTION 10: STABILITY AND REACTIVITY**

<b>Reactivity:</b>	No hazardous chemical reactions known.
<b>Chemical Stability:</b>	Stable under normal storage and handling conditions.
<b>Possibility of Hazardous Reactions:</b>	No potential for hazardous reactions known.
<b>Conditions to Avoid:</b>	Extreme temperatures
<b>Incompatible Materials:</b>	Strong acids, bases and oxidizers
<b>Hazardous Decomposition Products:</b>	Thermal decomposition may produce toxic carbon and nitrogen oxides. May release flammable gases in a fire.

**SECTION 11: TOXICOLOGICAL INFORMATION**

<b>Likely Routes of Exposure:</b>	Eye contact, Skin contact, Inhalation, Ingestion
<b>Symptoms of Exposure:</b>	No overt symptoms.
<b>Oral LD<sub>50</sub>:</b>	550 mg/kg (rat)
<b>Dermal LD<sub>50</sub>:</b>	>5,050 mg/kg (rat)
<b>Inhalation LC<sub>50</sub>:</b>	>2.09 mg/L (4-hour)(rat) No mortality observed at this level.
<b>Eye Irritation/Damage:</b>	No positive effects seen in test with rabbits.
<b>Skin Corrosion/Irritation:</b>	No irritation seen in test with rabbits.
<b>Skin Sensitization:</b>	Non-sensitizer (guinea pig)
<b>Chronic/Subchronic Toxicity:</b>	No data available
<b>Mutagenicity:</b>	No data available
<b>Reproductive Toxicity:</b>	No data available
<b>Neurotoxicity:</b>	No data available
<b>Target Organs:</b>	No data available
<b>Aspiration Hazard:</b>	Not anticipated to be an aspiration hazard.
<b>Carcinogenicity:</b>	See below.

Chemical Name	ACGIH	IARC	NTP	OSHA
Permethrin		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. 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.

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.

Under some conditions, it may also have a potential for transport into surface water in runoff (primarily absorbed to suspended soil particles), for several months or more after application. These include poorly drained or wet soils with readily visible slopes toward adjacent surface waters, frequently flooded areas, and areas overlying extremely shallow groundwater, areas with in-field canals or ditches that drain to surface water, areas not separated from adjacent surface waters with vegetated filter strips, and areas over-lying tile drainage systems that drain to surface waters.

This pesticide 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 foraging the treatment area.

**ECOTOXICITY DATA:**

<b>Fish Toxicity:</b>	No data available
<b>Aquatic Invertebrate Toxicity:</b>	No data available
<b>Aquatic Plant Toxicity:</b>	No data available
<b>Avian Toxicity:</b>	No data available
<b>Honeybee Toxicity:</b>	No data available

**ENVIRONMENTAL EFFECTS:**

<b>Persistence and Degradability:</b>	No data available
<b>Bioaccumulation:</b>	No data available
<b>Mobility:</b>	No data available
<b>Other Adverse Effects:</b>	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.

**SECTION 14: TRANSPORTATION INFORMATION**

**DOT (Ground):** Not regulated  
**IMDG (Sea):** UN3082, Environmentally hazardous substance, liquid, n.o.s. (Permethrin), 9, PGIII, Marine Pollutant  
**IATA (Air):** UN3082, Environmentally hazardous substance, liquid, n.o.s. (Permethrin), 9, PGIII

**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. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco, or using the toilet. Wear long-sleeved shirt and long pants, shoes, socks and chemical-resistant gloves made of barrier laminate, nitrile rubber, neoprene rubber or Viton®. Remove and wash contaminated clothing 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:** Immediate (Acute)  
**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	23.6%

**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		

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

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Permethrin	X	X	
Propylene glycol	X		X

**SECTION 16: OTHER INFORMATION**

<b>NFPA</b>	<b>Health Hazards</b> 1	<b>Flammability</b> 1	<b>Instability</b> 0	<b>Special Hazards</b> – None
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