SECTION 1: IDENTIFICATION

Product Name: Permethrin 13.3%
EPA Registration No.: 4-350-53883
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: Yellow to brown liquid with a mild solvent odor. Flammable liquid.

OSHA HCS CLASSIFICATION (29 CFR 1910.1200)

<table>
<thead>
<tr>
<th>Classification</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammable Liquid</td>
<td>2</td>
</tr>
<tr>
<td>Mutagenicity</td>
<td>1B</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>1B</td>
</tr>
</tbody>
</table>

Signal Word: DANGER

Hazard Statement(s): Highly flammable liquid and vapor.
May cause genetic defects.
May cause cancer.

Precautionary Statement(s):

Prevention:
- Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- Keep container tightly closed.
- Ground/bond container and receiving equipment.
- Use only non-sparking tools.
- Take precautionary measures against static discharge.
- Wear protective gloves/protective clothing/eye protection.

Response:
- **IF ON SKIN (or hair):** Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
- **IF EXPOSED OR CONCERNED:** Get medical advice/attention.
- **IN CASE OF FIRE:** Use water fog, foam for extinction.

Storage:
- Store in a well-ventilated place. Keep cool. Store locked up.

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

The following percentage of the mixture consists of components with unknown hazards regarding the acute toxicity:
SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solvent naphtha (petroleum), light aromatic</td>
<td>64742-95-6</td>
<td>79.2%</td>
</tr>
<tr>
<td>Permethrin</td>
<td>52645-53-1</td>
<td>13.3%</td>
</tr>
<tr>
<td>Naphtha, heavy aromatic</td>
<td>64742-94-5</td>
<td>6.0%</td>
</tr>
</tbody>
</table>

*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

**IF IN EYES:** 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.

**IF ON SKIN:** 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.

**IF INHALED:** 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.

**IF INGESTED:** 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:** May cause genetic effects. May cause cancer.

**Note to Physician:** Contains petroleum distillate - vomiting may cause aspiration pneumonia.

SECTION 5: FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media:** Foam, dry chemical, carbon dioxide, sand or water spray

**Unsuitable Extinguishing Media:** Water jet or heavy water stream

**Hazardous Combustion Products:** Thermal decomposition may produce toxic carbon and nitrogen oxides.

**Special Protective Equipment & Precautions:** 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).

**Unusual Fire & Explosion Hazards:** May form flammable/explosive vapor-air mixture.
SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: See Section 8 for personal protection equipment.

Environmental Precautions: Keep spilled material and any rinsate from contaminating soil or from entering sewage and drainage systems and bodies of water.

Methods for Containment: 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.

Methods for Clean-up: 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.

Other Information: 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): Avoid high temperatures.

Product Incompatibilities: Strong acids and bases.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Users of a pesticide product must refer to the product label for personal protective equipment requirements.

Exposure Guidelines:

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
<th>NIOSH REL</th>
</tr>
</thead>
<tbody>
<tr>
<td>No components listed</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Yellow to brown liquid</td>
</tr>
<tr>
<td>Odor:</td>
<td>Mild solvent odor</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not determined</td>
</tr>
<tr>
<td>pH (1% dispersion)</td>
<td>5.0 – 6.0</td>
</tr>
<tr>
<td>Melting /Freezing Point</td>
<td>Not determined</td>
</tr>
<tr>
<td>Boiling Point/Range</td>
<td>198 - 200°F</td>
</tr>
<tr>
<td>Flash Point</td>
<td>105°F</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not determined</td>
</tr>
<tr>
<td>Flammability</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Upper/Lower Flammability Limits</td>
<td>Not determined</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not determined</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>Not determined</td>
</tr>
<tr>
<td>Relative Density (@24°C)</td>
<td>0.91 (typical)</td>
</tr>
<tr>
<td>Solubility</td>
<td>Not determined</td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>Not determined</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>Not determined</td>
</tr>
<tr>
<td>Auto-ignition Temperature</td>
<td>Not determined</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not determined</td>
</tr>
</tbody>
</table>

SECTION 10: STABILITY AND REACTIVITY

Reactivity: No hazardous chemical reactions known.
Chemical Stability: Stable under normal storage and handling conditions.
Possibility of Hazardous Reactions: No potential for hazardous reactions known.
Conditions to Avoid: Excessive heat, sources of ignition. Open flame.
Incompatible Materials: Strong acids and bases
Hazardous Decomposition Products: Thermal decomposition may produce toxic carbon and nitrogen oxides. May release flammable gases in a fire.

SECTION 11: TOXICOLOGICAL INFORMATION

Likely Routes of Exposure: Eye contact, Skin contact, Inhalation, Ingestion
Symptoms of Exposure: No overt symptoms.
Oral LD₅₀: >2,000 mg/kg (Estimated based upon component data)
Dermal LD₅₀: >2000 mg/kg (Estimated based upon component data)
Inhalation LC₅₀: >5.0 mg/L (4-hour)(Estimated based upon component data)
Eye Irritation/Damage: Not anticipated to cause eye irritation based upon component data.
Skin Corrosion/Irritation: Not anticipated to cause skin irritation based upon component data.
Skin Sensitization: Not anticipated to cause skin sensitization based upon component data.
Chronic/Subchronic Toxicity: No data available
Mutagenicity: May cause genetic defects.
Reproductive Toxicity: No data available
Permethrin 13.3%

Neurotoxicity: No data available
Target Organs: No data available
Aspiration Hazard: Not anticipated to be an aspiration hazard.
Carcinogenicity: See below.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permethrin</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SECTION 12: ECOLOGICAL INFORMATION**

Environmental Hazards Statement from FIFRA Regulated Pesticide Label:
This product is extremely toxic to aquatic organisms, including fish and invertebrates. 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. 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 actively visiting the treatment area. [When packaged in containers >/= 5 gallons: Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance contact your State Water Board or Regional Office of the EPA.]

**ECOTOXICITY DATA:**
- Fish Toxicity: No data available
- Aquatic Invertebrate Toxicity: No data available
- Aquatic Plant Toxicity: No data available
- Avian Toxicity: No data available
- Honeybee Toxicity: No data available

**ENVIRONMENTAL EFFECTS:**
- Persistence and Degradability: No data available
- Bioaccumulation: No data available
- Mobility: No data available
- Other Adverse Effects: 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.
Permethrin 13.3%

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**

<table>
<thead>
<tr>
<th></th>
<th>DOT (Ground)</th>
<th>IMDG (Sea)</th>
<th>IATA (Air)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not regulated</td>
<td>Not determined</td>
<td>Not determined</td>
</tr>
</tbody>
</table>

**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:

**WARNING**
Causes substantial but temporary eye injury. Do not get in eyes. Avoid contact with skin or clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals. Harmful if swallowed. Avoid breathing vapor. Wash thoroughly after handling.

**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:** Chronic (Delayed), Fire

**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:**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permethrin</td>
<td>52645-53-1</td>
<td>13.3%</td>
</tr>
</tbody>
</table>

**CERCLA – This product contains the following chemicals which have a reportable quantity (RQ) under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA):**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>RQ</th>
<th>Quantity of Finished Product</th>
</tr>
</thead>
<tbody>
<tr>
<td>None listed</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**CALIFORNIA PROPOSITION 65:**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>Prop 65 Category(ies)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None listed</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permethrin</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>
**SECTION 16: OTHER INFORMATION**

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health Hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Special Hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>– None</td>
</tr>
</tbody>
</table>

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**Revision Date:** December 11, 2015

**Document Superseded:** April 14, 2011

**Revision Note:** Update to SDS format