

NFPA HAZARD RATING				U.S. TRANSPORT SUMMARY	
0	Least				Regulated in bulk packaging (119 gallons); see Section 14 for additional information.
1	Slight	1	Health		
2	Moderate	2	Flammability		
3	High	0	Reactivity		
4	Severe				

SECTION 1: IDENTIFICATION	
<b>Product Name:</b> Arctic® 3.2EC Insecticide <b>EPA Registration #:</b> 1381-187 <b>Product ID/Unity #:</b> 1414867, 10012820, 60319415 <b>Common Name:</b> Pyrethroid insecticide <b>Chemical Description:</b> Permethrin <b>Recommended Uses:</b> Agricultural insecticide – See product label for complete list of uses and use sites. <b>Restrictions for Use:</b> See product label for information regarding restrictions on the use of this product.	<b>MEDICAL EMERGENCY TELEPHONE NUMBER:</b> 1-877-424-7452 (24hrs)  <b>Non-Emergency Business Inquiries:</b> 1-855-494-6343 Mon – Fri 8am – 5pm (Central Standard Time)
<b>Manufactured For:</b> WINFIELD SOLUTIONS, LLC P. O. Box 64589 St. Paul, MN 55164-0589	
<b>FOR EMERGENCY, SPILL, LEAK, FIRE, EXPOSURE, OR ACCIDENT, CALL:</b> CHEMTREC 1-800-424-9300 (24 hours)	

SECTION 2: HAZARDS IDENTIFICATION	
<b>EMERGENCY OVERVIEW:</b> Amber liquid with slight odor. Harmful if swallowed or absorbed through the skin. Flammable liquid.	
<b>POTENTIAL HEALTH EFFECTS:</b> <b>Eyes:</b> May cause eye irritation. <b>Skin:</b> May cause mild skin irritation. Dermatitis and superficial skin damage can result from repeated or prolonged contact with very dilute solutions. May produce hypersensitivity to sound and touch, tremors and convulsions may result from prolonged exposure. <b>Inhalation:</b> May cause irritation of respiratory tract. <b>Ingestion:</b> Harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. <b>Preexisting Conditions:</b> Preexisting skin conditions may be aggravated by exposure to solution or spray. <b>Chronic Health Effects:</b> None known	
<b>Carcinogenicity</b>	NTP: Not listed      IARC: Permethrin – Group 3      OSHA: Not listed
<b>OSHA HCS 2012 CLASSIFICATION:</b> Acute Oral Toxicity Category 4; Acute Dermal Toxicity Category 4; Skin Sensitization Category 1; Flammable Liquids Category 3	
<b>SIGNAL WORD:</b> WARNING	
<b>HAZARD STATEMENTS:</b> Harmful if swallowed. Harmful in contact with skin. May cause an allergic skin reaction. Flammable liquid and vapor.	
<b>Percent of product with unknown toxicity:</b> 0%	

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**PRECAUTIONARY STATEMENTS:**

**Prevention:** Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves, eye protection, face protection and protective clothing (See Section 8). Do not breathe mist, vapors, spray. Contaminated work clothing must not be allowed out of the workplace. Keep away from heat, sparks, open flames, hot surfaces. - No Smoking. Keep container tightly closed. Ground/Bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

**Response:** **If Swallowed:** Immediately call a poison control center (1-877-424-7452) or doctor for treatment advice. Rinse mouth.  
**If on skin (or hair):** Rinse skin with water/shower. Immediately call a poison control center (1-877-424-7452) or doctor for treatment advice. Take off immediately all contaminated clothing and wash it before reuse.  
**If skin irritation or rash occurs:** Get medical attention. Wash contaminated clothing before reuse.  
**In case of fire:** Use Carbon dioxide (CO2), dry chemical, or foam to extinguish.

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

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

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

Ingredient	% (wt)	CAS Reg. #
Permethrin	36.8%	52645-53-1
Varsol	26.0%	8052-41-3
1,2,4-trimethyl benzene	<4.0%	95-63-6
*Ingredients not specifically listed are non-hazardous and are considered to be confidential business information under 29 CFR 1910.1200(j).		
See Section 8 for exposure limits.		

**SECTION 4: FIRST AID MEASURES**

**Inhalation:** Remove person from contaminated area to fresh air and assist breathing as needed. Seek medical attention if irritation occurs.

**Ingestion:** Seek medical attention or call a poison control center immediately for treatment advice. Do not induce vomiting unless instructed to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

**Eyes:** Flush eyes with clean water for at least 15 minutes. Lift eyelids to facilitate irrigation. If present, remove contact lenses after 5 minutes and continue rinsing. Seek medical attention from a poison control center or doctor.

**Skin:** Remove contaminated clothing and wash before re-using. Flush skin with water and then wash with soap and water. Seek medical attention immediately.

**Notes to Physician:** Reversible skin sensations (paresthesia) may occur and ordinary skin salves have been found useful in reducing discomfort. Contains aromatic hydrocarbons that may produce a severe pneumonitis if aspirated during vomiting. Considerations should be given to gastric lavage with an endotracheal tube in place. Treatment is otherwise controlled by removal of exposure followed by symptomatic and supportive care.

**SECTION 5: FIRE FIGHTING MEASURES**

**Suitable Extinguishing Media:** Carbon dioxide (CO2), alcohol-resistant foam, water spray, dry chemical

**Special Fire Fighting Procedures:** Wear NIOSH/MSHA approved self-contained breathing apparatus and full bunker gear. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later. Avoid breathing vapors; keep upwind.

**Hazardous Combustion Products:** Irritating gases and vapors

**Unusual Fire and Explosion Hazards:** Combustible material. Vapors are heavier than air and may travel along the ground or be moved by ventilation and ignited by heat, pilot lights, and other flames and ignition sources at locations distant from material handling point.

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**Personal Precautions:** Refer to Section 8 for personal protective equipment to be worn during containment and clean-up of a spill involving this product.

**Environmental Precautions:** This product is toxic to fish and aquatic organisms. Do not allow spilled product to enter sewers or waterways.

**Methods for Containment:** Contain spilled product by diking area with sand or earth.

**Methods for Clean-up:** Remove all ignition sources. Use non-sparking tools. Cover spilled product with an inert absorbent material such as sand, vermiculite or other appropriate material. Vacuum, scoop or sweep up material and place in a container for disposal. Do not place spilled material back in original container.

**Other Information:** None known

**SECTION 7: HANDLING AND STORAGE**

**Handling:** RECOMMENDATIONS ARE FOR MANUFACTURING, COMMERCIAL BLENDING, AND PACKAGING WORKERS. PESTICIDE APPLICATORS AND WORKERS must refer to the pesticide 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. Ensure adequate ventilation. Immediately clean up spills that occur during handling. Keep containers closed when not in use. Practice good hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

**Storage:** Store in cool, dry areas away from children, feed and food products and sources of heat. Store in original container with lid tightly closed. Do not store near strong oxidizing agents. **See pesticide product label for additional storage information.**

**Minimum Storage Temperature:** 43°F

**Other Precautions:** Consult Federal, state and local laws and regulations pertaining to storage.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Exposure Guidelines**

Component:	OSHA PEL	ACGIH TLV	NIOSH REL
Varsol	2900 mg/m <sup>3</sup> 500 ppm	100 ppm	
1,2,4-trimethyl benzene	125 mg/m <sup>3</sup> 25 ppm	25 ppm	

**NOTE TO END USERS:** PERSONAL PROTECTIVE EQUIPMENT (PPE) AND CLOTHING LISTED IN THIS SECTION IS FOR MANUFACTURING, COMMERCIAL BLENDING AND PACKAGING WORKERS. APPLICATORS AND HANDLERS SHOULD REFER TO THE PESTICIDE PRODUCT LABEL FOR PROPER PERSONAL PROTECTIVE EQUIPMENT (PPE) AND CLOTHING.

**Respiratory Protection:** Where airborne exposure to concentrations greater than the above listed exposure limits is likely, use a NIOSH approved respirator with cartridges/canisters approved for organic vapors.

**Engineering Controls:** **Local Exhaust:** Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs or other specified exposure limits. Local exhaust ventilation is preferred.

**Protective Gloves:** Wear chemical resistant gloves.

**Eye Protection:** Wear chemical goggles or safety glasses and full-face shield. Contact lenses are not eye protective devices. An emergency eyewash or water supply should be readily accessible to the work area.

**Other Protective Clothing or Equipment:** Wear long sleeve shirt, long pants and shoes plus socks to prevent skin exposure.

**Work/Hygienic Practices:** Never eat, drink, nor use tobacco in work areas. Practice good hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

<b>Physical State:</b>	Liquid	<b>Specific Gravity (H<sub>2</sub>O=1):</b>	1.039
<b>Vapor Pressure (mm Hg):</b>	Not determined	<b>Density (lbs/gallon):</b>	8.65 lbs/gallon
<b>Vapor Density (Air=1):</b>	Not determined	<b>Melting Point/Freezing Point:</b>	43°F (5.9°C)
<b>Solubility in Water (wt %):</b>	Emulsifies	<b>Boiling Point/Range:</b>	Not determined
<b>Viscosity:</b>	Not determined	<b>pH:</b>	4.9
<b>Appearance and odor:</b>	Amber liquid with slight odor	<b>Flash Point:</b>	111°F (44°C)

**SECTION 10: STABILITY AND REACTIVITY**

**Reactivity:** None known  
**Chemical Stability:** Product is stable at ambient temperature and pressure, under normal storage and handling conditions.  
**Possibility of Hazardous Reactions:** None known  
**Conditions to Avoid:** Keep away from open flames, hot surfaces and sources of ignition.  
**Incompatible Materials:** Strong oxidizing agents  
**Hazardous Decomposition Products:** Carbon oxides

**SECTION 11: TOXICOLOGICAL INFORMATION**

**ACUTE TOXICITY**

**Eye Effects:** Moderately irritating to the eye.  
**Skin Effects:** Moderately irritating to the skin. LD50 >2,000 mg/kg. Skin sensitizations are reversible and usually subside within 12 hours. Permethrin contact with skin has rarely produced skin sensitizations such as numbing, burning, and tingling. Large doses of permethrin to laboratory animals have produced symptoms such as diarrhea, salivation, tremors and intermittent convulsions.  
**Acute Inhalation Effects:** LC50 >25.7 mg/L (4 hour, rat); May cause respiratory irritation. Overexposure to animals of permethrin via inhalation has also produced hyperactivity and hypersensitivity.  
**Acute Oral Effects:** LD50 = 1,030 mg/kg (rat)  
**Specific Target Organ Toxicity:** None known

**CHRONIC TOXICITY**

**Chronic Effects:** None known  
**Carcinogenicity:** No component is anticipated to have a carcinogenic effect.  
**Mutagenicity:** No component is anticipated to have a mutagenic effect.  
**Teratogenicity:** No component is anticipated to have a teratogenic effect.  
**Reproductive Toxicity:** No component is anticipated to have an effect on the reproductive system.

**POTENTIAL HEALTH EFFECTS:**

**Eyes:** Causes eye irritation.  
**Skin:** May cause skin irritation. Dermatitis and superficial skin damage can result from repeated or prolonged contact with very dilute solutions. May produce hypersensitivity to sound and touch, tremors and convulsions may result from prolonged exposure.  
**Inhalation:** May cause irritation of respiratory tract.  
**Ingestion:** May be harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

**SECTION 12: ECOLOGICAL INFORMATION**

**ENVIRONMENTAL SUMMARY:** This product is extremely toxic to fish and aquatic organisms.

**ECOTOXICITY DATA:**

**Fish Acute and Prolonged Toxicity:** Data on the active ingredient, permethrin: LC50 = 0.05 ug/L to 315 ug/L  
**Aquatic Invertebrate Acute Toxicity:** Data on the active ingredient, permethrin: LC50 = 0.02 ug/L to 7.6 ug/L  
**Aquatic Plant Toxicity:** Not determined  
**Bird Acute and Prolonged Toxicity:** Data on the active ingredient, permethrin: Oral LD50 values greater than 3,600 mg/kg  
**Honeybee Toxicity:** Not determined

**ENVIRONMENTAL EFFECTS:**

**Soil Absorption/Mobility:** The active ingredient permethrin has a high affinity for organic matter (Koc = 86,000). Due to this, there is little potential for movement in soil or entry into groundwater.  
**Persistence and degradability:** Not determined  
**Bioaccumulative Potential:** The active ingredient permethrin has a Log Pow of 6.1, but a low potential to bioconcentrate (BCF = 500) due to the ease of which it is metabolized.  
**Other adverse effects:** None known

**SECTION 13: DISPOSAL CONSIDERATIONS**

**Waste:** Dispose of in accordance with applicable Federal, state and local laws and regulations.  
**Container:** Triple rinse and recycle the container or dispose of in accordance with Federal, state and local laws and regulations.  
**See pesticide product label for full instructions on disposal.**  
**RCRA Characteristics:** It is the responsibility of the individual disposing of this product to determine the RCRA classification and hazard status of the waste. If disposed of as purchased, waste code D001 would apply due to flash point.

**SECTION 14: TRANSPORT INFORMATION**

**DOT:** This product is not regulated by the U.S. Department of Transportation in quantities less than 119 gallons.  
**(Ground)** For quantities of 119 gallons or greater:  
 UN1993, Flammable liquid, n.o.s. (hydrocarbon solvent, 1,2,4-trimethylbenzene), 3, PG III

**IMDG:** Not determined  
**(Sea)**

**IATA:** Not determined  
**(Air)**

**TDG:** Not determined  
**(Canada)**

**SECTION 15: REGULATORY INFORMATION**

**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 listed  
**Section 311/312 – Hazard Categories:** Immediate (Acute), Delayed (Chronic), Fire  
**Section 313 –** The following chemicals are subject to the reporting requirements of Section 313 of Title III, Superfund Amendments and Reauthorization Act of 1986 and 40 CFR 372:  
 Permethrin (CAS #52645-53-1); 1,2,4-trimethylbenzene (CAS # 95-63-6)

**CERCLA -** This product contains the following chemicals which have a reportable quantity (RQ) under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA):  
 None listed

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, inhaled or absorbed through the skin.  
 Avoid contact with skin, eyes or clothing.  
 Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco.  
 Remove and wash contaminated clothing before reuse.

**California Proposition 65: WARNING:** This product contains a chemical known to the state of California to cause cancer and/or reproductive harm.

**U.S. State Worker and Community Right-To-Know (RTK) Information (CT, IL, MA, MN, NH, NJ, PA, RI):**

Chemical Name	CAS #	State(s)
Permethrin	52645-53-1	IL, MA, NJ
Varsol	8052-41-3	MA, NJ, PA
1,2,4-trimethyl benzene	95-63-6	IL, MA, NJ, PA

**Canadian Domestic Substances List:** All components are listed on the DSL.

**WHMIS Classification:** This product is not approved for use in Canada. WHMIS classification is not determined.

**SECTION 16: OTHER**

**Disclaimer:** The information presented herein is based on available data from reliable sources and is correct to the best of WinField Solutions' knowledge. WinField Solutions, LLC makes no warranty, express nor implied, regarding the accuracy of the data or the results obtained from the use of this product. Nothing herein may be construed as recommending any practice or any product in violation of any law or regulations. The user is solely responsible for determining the suitability of any material or product for a specific purpose and for adopting any appropriate safety precautions. We disclaim all liability for injury or damage stemming from any improper use of the material or product described herein.

**Revision Date:** May 15, 2015

**Supersedes document dated:** July 16, 2013

**Sections Revised:** 2,3,4,5,7,8,9,10,11,15