



Safety Data Sheet

NFPA HAZARD RATING				U.S. TRANSPORT SUMMARY	
0	Least				Regulated in quantities greater than 12 gallons; see Section 14 for additional information.
1	Slight	2	Health		
2	Moderate	1	Flammability		
3	High	0	Reactivity		
4	Severe				

SECTION 1: IDENTIFICATION	
Product Name: 2,4-D LV6 EPA Registration #: 1381-250 Product ID/Unity #: 1664644 Common Name: Phenoxy herbicide Chemical Description: 2-ethylhexyl ester of 2,4-Dichlorophenoxyacetic acid Recommended Uses: Agricultural herbicide – See product label for complete list of uses and use sites. Restrictions for Use: See product label for any potential restrictions on use.	
Manufactured For: WINFIELD SOLUTIONS, LLC P. O. Box 64589 St. Paul, MN 55164-0589	MEDICAL EMERGENCY TELEPHONE NUMBER: 1-877-424-7452 (24hrs) Non-Emergency Business Inquiries: 1-855-494-6343 Mon – Fri 8am – 5pm (Central Standard Time)
FOR EMERGENCY, SPILL, LEAK, FIRE, EXPOSURE, OR ACCIDENT, CALL: CHEMTREC 1-800-424-9300 (24 hours)	

SECTION 2: HAZARDS IDENTIFICATION	
EMERGENCY OVERVIEW: Amber liquid with phenolic odor. Harmful if swallowed. Material is toxic to fish and aquatic organisms.	
POTENTIAL HEALTH EFFECTS: Eyes: May cause mild eye irritation. Skin: May cause mild skin irritation. Inhalation: May cause mild irritation of the upper respiratory tract. Ingestion: Harmful if swallowed. May cause nausea, gastric upset and diarrhea. Preexisting Conditions: None known Chronic Health Effects: Excessive oral exposure may cause liver, kidney, gastrointestinal and muscular effects. Signs and symptoms of excessive exposure may be nausea and/or vomiting and abdominal cramps and/or diarrhea.	
Carcinogenicity	NTP: Not listed IARC: Not listed OSHA: Not listed
OSHA HCS 2012 CLASSIFICATION: Acute Oral Toxicity Category 4	
SIGNAL WORD: WARNING	
HAZARD STATEMENTS: Harmful if swallowed	
Percent of product with unknown toxicity: 0%	
PRECAUTIONARY STATEMENTS: Prevention: Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Response: If Swallowed: Immediately call a poison control center (1-877-424-7452) or doctor for treatment advice. Rinse mouth. Storage: See Section 7 for storage information. Disposal: Dispose of contents/container in accordance with Federal, state and local regulations.	

2,4-D LV6

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	% (wt)	CAS Reg. #
2,4-Dichlorophenoxyacetic acid, iso-octyl ester	88.8%	1928-43-4
2-ethyl hexanol	<0.35%	104-76-7

*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. See medical attention if irritation occurs.
Ingestion:	Seek medical attention or call a poison control center 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 if irritation persists.
Skin:	Remove contaminated clothing and wash before re-using. Flush skin with water and then wash with soap and water. Seek medical attention if irritation persists.

SECTION 5: FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Alcohol-resistant foam, carbon dioxide, dry powder or water fog
Unsuitable Extinguishing Media: Water jet. Use of water jet will spread material.
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: Hydrogen chloride and carbon oxides under fire conditions.
Unusual Fire and Explosion Hazards: Closed containers may explode from vapor expansion in high heat.

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: Do not allow spilled product or washings to enter sewers or waterways.
Methods for Containment: Contain spilled product by diking area with sand or earth.
Methods for Clean-up: 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: Spills of this product may require reporting under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) as the product contains 2,4-Dichlorophenoxyacetic acid (2,4-D) with a reportable quantity (RQ) of 100 lbs. See Section 15 for additional information.

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 in direct sunlight. See pesticide product label for additional storage information.
Minimum Storage Temperature: Not determined
Other Precautions: Consult Federal, state and local laws and regulations pertaining to storage.

2,4-D LV6

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION			
Exposure Guidelines			
Component:	OSHA PEL	ACGIH TLV	NIOSH REL
2,4-D Dichlorophenoxy acetic acid	10 mg/m ³ (TWA)	10 mg/m ³ (TWA)	
<p>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.</p>			
<p>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 pesticides.</p>			
<p>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.</p>			
<p>Protective Gloves: Wear chemical resistant gloves.</p>			
<p>Eye Protection: Wear chemical goggles or safety glasses and full-face shield. Contact lenses are not eye protective devices.</p>			
<p>Other Protective Clothing or Equipment: Wear long sleeve shirt, long pants and shoes plus socks to prevent skin exposure.</p>			
<p>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.</p>			

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES			
Physical State:	Liquid	Specific Gravity (H ₂ O=1):	1.135 – 1.136 (typical)
Vapor Pressure (mm Hg):	Not determined	Density (lbs/gallon):	9.47 – 9.48 lbs/gallon
Vapor Density (Air=1):	Not determined	Melting Point/Freezing Point:	Not determined
Solubility in Water (wt %):	Soluble	Boiling Point/Range:	Not determined
Viscosity:	Not determined	pH:	4.7 – 5.9
Appearance and odor:	Amber colored liquid with slight phenolic odor	Flash Point:	>200°F (93°C)

SECTION 10: STABILITY AND REACTIVITY
<p>Reactivity: None known</p> <p>Chemical Stability: Product is stable at ambient temperature and pressure, under normal storage and handling conditions.</p> <p>Possibility of Hazardous Reactions: Will not occur</p> <p>Conditions to Avoid: Avoid excessive heat.</p> <p>Incompatible Materials: Strong bases, acids and oxidizing materials.</p> <p>Hazardous Decomposition Products: Hydrogen chloride and carbon oxides under fire conditions.</p>

SECTION 11: TOXICOLOGICAL INFORMATION	
ACUTE TOXICITY	
Eye Effects:	May cause mild but reversible eye irritation. Animal tests show product to be non-irritating.
Skin Effects:	May cause mild but reversible skin irritation. LD50 >5,050 mg/kg
Acute Inhalation Effects:	LC50 for the active ingredient (2,4-Dichlorophenoxyacetic acid, iso-octyl ester) is >5.4 mg/L; Additional components are not anticipated to lower the inhalation toxicity of the end product.
Acute Oral Effects:	LD50 = 1,750 mg/kg
Specific Target Organ Toxicity:	None known
CHRONIC TOXICITY	
Chronic Effects:	Excessive oral exposure may cause liver, kidney, gastrointestinal and muscular effects. Signs and symptoms of excessive exposure may be nausea and/or vomiting and abdominal cramps and/or diarrhea.
Carcinogenicity:	None known
Mutagenicity:	None known

Continued on next page

2,4-D LV6

Teratogenicity:	None known
Reproductive Toxicity:	None known
POTENTIAL HEALTH EFFECTS:	
Eyes: May cause mild eye irritation.	
Skin: May cause mild skin irritation.	
Inhalation: May cause mild irritation of the upper respiratory tract.	
Ingestion: Harmful if swallowed. May cause nausea, gastric upset and diarrhea.	

SECTION 12: ECOLOGICAL INFORMATION

ENVIRONMENTAL SUMMARY: This product is toxic to fish and aquatic invertebrates.	
ECOTOXICITY DATA:	
Fish Acute and Prolonged Toxicity:	Not determined
Aquatic Invertebrate Acute Toxicity:	Not determined
Aquatic Plant Toxicity:	Not determined
Bird Acute and Prolonged Toxicity:	Not determined
Honeybee Toxicity:	Not determined
ENVIRONMENTAL EFFECTS:	
Soil Absorption/Mobility:	Not determined
Persistence and degradability:	Not determined
Bioaccumulative Potential:	Not determined
Other adverse effects:	Not determined

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 product is disposed of as purchased, the following RCRA code applies: U240 - Acetic acid, (2,4-dichlorophenoxy)-, salts & esters

SECTION 14: TRANSPORT INFORMATION

DOT: (Ground)	This product is not regulated by the U.S. Department of Transportation as a hazardous material for ground shipment in quantities less than 12 gallons. For quantities greater than or equal to 12 gallons: UN3082, Environmental Hazardous Substance, Liquid, N.O.S (2,4-D), 9, PG III, RQ
IMDG: (Sea)	Not determined
IATA: (Air)	Not determined
TDG: (Canada)	Not determined

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)
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:	
2,4-Dichlorophenoxyacetic acid, iso-octyl ester (CAS # 1928-43-4) 88.8%	

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2,4-D LV6

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

2,4-D Acid has an RQ of 100 lbs (RQ reached with 12 gallons of product)

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, using tobacco or using the toilet.

California Proposition 65: This product does not contain any chemicals 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)
2,4-Dichlorophenoxyacetic acid, iso-octyl ester	1928-43-4	NJ
2-ethyl hexanol	104-76-7	MA, PA

Canadian Domestic Substances List: Not determined

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.

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