

MATERIAL SAFETY DATA SHEET

TAILSPIN™ HERBICIDE

FOR CHEMICAL EMERGENCY, SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT, CALL CHEMTREC - DAY OR NIGHT 1-800-424-9300

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

FORMULATED FOR:

LOVELAND PRODUCTS, INC.
P.O. Box 1286 • Greeley, CO 80632-1286

24-Hour Emergency Phone: 1-800-424-9300
Medical Emergencies: 1-800-301-7976
U.S. Coast Guard National Response Center: 1-800-424-8802

PRODUCT NAME: TAILSPIN™ HERBICIDE

CHEMICAL NAME: Fluroxypyr 1-methylheptyl ester: ((4-amino-3,5-dichloro-6-fluoro-2-pyridinyl)oxy) acetic acid, 1-methylheptyl ester; Triclopyr: 3,5,6-trichloro-2-pyridinyloxyacetic acid, triethylamine acid

CHEMICAL FAMILY: Herbicide

EPA REG. NO.: 34704-958

MSDS Number: 000958-08-LPI

MSDS Revisions: Section 14

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2. HAZARDS IDENTIFICATION SUMMARY

KEEP OUT OF REACH OF CHILDREN – WARNING – AVISO - Si usted entiende la etiqueta, busque a alguien para que se la explique a usted en detalle. (If you do not understand this label, find someone to explain it to you in detail.) – Causes substantial but temporary eye injury. Harmful if swallowed. Do not get in eyes or on clothing.

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

This product is amber liquid with aromatic odor.

3. COMPOSITION, INFORMATION ON INGREDIENTS

<u>Chemical Ingredients:</u>	<u>Percentage by Weight:</u>	<u>CAS No.</u>	<u>TLV (Units)</u>
Fluroxypyr 1methylheptyl ester*	5.60	81406-37-3	not listed
Triclopyr**, contains	16.10	64700-56-7	not listed
Triethylamine		121-44-8	25 ppm
Inert Ingredients, contains	78.30		
Petroleum Solvent, contains		64742-94-5	
Naphthalene		91-20-3	50 mg/m ³

4. FIRST AID MEASURES

If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 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 swallowed: Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.

FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-800-301-7976. Have the product label or container with you when calling a poison control center or doctor, or going for treatment.

Note to Physician: Contains aromatic petroleum distillate. Vomiting and aspiration may cause chemical pneumonitis.

5. FIRE FIGHTING MEASURES

FLASH POINT (°F/Test Method): >134°F / >56.7°C (PMCC)

FLAMMABLE LIMITS (LFL & UFL): None established

EXTINGUISHING MEDIA: Foam, Carbon dioxide (CO₂), dry chemical, water spray or fog.

HAZARDOUS COMBUSTION PRODUCTS: Oxides of nitrogen, hydrogen chloride, and hydrogen fluoride may be produced.

SPECIAL FIRE FIGHTING PROCEDURES: Wear self-contained breathing apparatus with full protective clothing. Fight fire from upwind and keep all non-essential personnel out of area.

UNUSUAL FIRE AND EXPLOSION HAZARDS: If water is used to fight fire and cool the containers, contain run-off by diking to prevent contamination of water supplies. Containers in fire may burst or explode from excessive heat.

6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

Control the spill at its source. Contain the spill to prevent it from spreading, contaminating soil, or entering sewage and drainage systems or any body of water. Clean up spills immediately. Cover entire spill with absorbent material such as sand, silica gel, acid binder, universal binder, or sawdust, scrape up and place into compatible disposal containers. Scrub the spill area with water and detergent. Pick up wash liquid with additional absorbent and place into disposal container. Once all material is cleaned up and placed in a disposal container, seal the container(s) and handle in an approved manner. Check local, state and federal regulations for proper disposal.

CAUTION: Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

7. HANDLING AND STORAGE

HANDLING: 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.

STORAGE: Store above 32°F. Shake well before use. Protect from freezing. Do not contaminate water, food or feed by storage or disposal.

Personal Protective Equipment: Applicators and other handlers must wear: coveralls, chemical-resistant gloves, such as barrier laminate or Viton®, shoes plus socks, and protective eyewear. Follow manufacturer's instructions for cleaning and maintaining PPE. If no instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets with requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40CFR 170.240 (d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

RESPIRATORY PROTECTION: Not normally required, if vapors or mists exceed acceptable levels, wear a NIOSH approved respirator.

EYE PROTECTION: Chemical splash goggles or protective eyewear.

SKIN PROTECTION: Wear protective clothing: Coveralls and shoes plus socks. Wear chemical-resistant gloves.

	OSHA PEL 8 hr TWA	ACGIH TLV-TWA
Naphthalene	50 mg/m ³	52 mg/m ³
Triethylamine	100 mg/m ³	4.1 mg/m ³

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: Amber liquid with aromatic odor

SPECIFIC GRAVITY (Water = 1): 1.033 g/ml (20°C)

VAPOR PRESSURE: Not established

PERCENT VOLATILE (by volume): Not established

Note: These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items.

BULK DENSITY: 8.62 lbs/gal.

BOILING POINT: Not established

EVAPORATION RATE: Not established

SOLUBILITY: Not known

pH: 8.83

10. STABILITY AND REACTIVITY

STABILITY: Stable under normal conditions.

INCOMPATIBILITY: Strong bases, acids, and oxidizing materials.

HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of nitrogen, hydrogen chloride, and hydrogen fluoride may be produced in a fire situation.

HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: Avoid extremes of temperature.

11. TOXICOLOGICAL INFORMATION

Acute Oral LD₅₀ (rat): 3,351 - >3,500 mg/kg

Eye Irritation (rabbit): Substantial irritant

Inhalation LC₅₀ (rat): Not established.

Carcinogenic Potential: Nothing listed in OSHA or IARC. NTP classifies Naphthalene as R (Reasonably Anticipated to Be a Human Carcinogen). ACGIH classifies Naphthalene A4 (Not Classifiable as a Human Carcinogen). EPA classifies Naphthalene as CBD (Cannot Be Determined). ACGIH classifies Triethylamine A4 (Not Classifiable as a Human Carcinogen)

Target Organs: Kidney and liver

Acute Dermal LD₅₀ (rat): >5,000 mg/kg

Skin Irritation (rabbit): Slight irritant

Skin Sensitization (guinea pig): Not a sensitizer

12. ECOLOGICAL INFORMATION

This product is toxic to fish. Drift or runoff from treated areas may be hazardous to aquatic organisms and non-target plants. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash waters. Triclopyr has properties and characteristics associated with chemical detected in groundwater. The use of this product in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination.

13. DISPOSAL CONSIDERATIONS

Do not reuse empty containers. **Plastic:** Triple rinse (or equivalent), then offer for recycling at an ACRC site (go to <http://www.acrecycle.org/> for locations) or by reconditioning, or puncture and dispose of in a sanitary landfill or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke. **Metal:** Do not reuse container. Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by other procedures approved by state and local authorities. Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. Do not contaminate water, food or feed by storage or disposal.

14. TRANSPORT INFORMATION

DOT Shipping Description Non-bulk: NOT REGULATED
DOT Shipping Description Bulk: FLAMMABLE LIQUID, N.O.S. (PETROLEUM DISTILLATES), 3, UN1993, III ERG GUIDE 128
U.S. Surface Freight Classification: COMPOUND, TREE OR WEED KILLING, NOI (NMFC 50320, SUB 2: CLASS: 60)

Consult appropriate ICAO/IATA and IMDG regulations for shipment requirements in the Air and Maritime shipping modes.

15. REGULATORY INFORMATION

NFPA & HMIS Hazard Ratings:	NFPA		HMIS
	3 Health	0 Least	3 Health
	2 Flammability	1 Slight	2 Flammability
	0 Instability	2 Moderate	0 Reactivity
		3 High	H PPE
		4 Severe	

SARA Hazard Notification/Reporting
SARA Title III Hazard Category: Immediate Y Fire N Sudden Release of Pressure N
 Delayed Y Reactive N

Reportable Quantity (RQ) under U.S. CERCLA: Naphthalene (CAS: 91-20-3) 100 lbs. 1.57%; Triethylamine (CAS: 121-44-8) 5000 lbs. 1.09%
SARA, Title III, Section 313: Naphthalene (CAS: 91-20-3); Triethylamine (CAS: 121-44-8); Triclopyr, triethylammonium salt (CAS: 57213-69-1); 1,2,4-Trimethylbenzene (CAS: 95-63-6).

RCRA Waste Code: Naphthalene (CAS: 91-20-3): U165; Triethylamine (CAS: 121-44-8): U404

CA Proposition 65: WARNING: This product contains chemicals known to the State of California to cause cancer or birth defects or other reproductive harm.

16. OTHER INFORMATION

MSDS STATUS: Section 14 revised

PREPARED BY: Registrations and Regulatory Affairs

REVIEWED BY: Environmental/ Regulatory Services

*Acid equivalent - Fluroxypyr: 3.87% = 0.33 lb/gal.

**Acid equivalent - Triclopyr: 11.62% = 1.0 lb/gal.

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