

MATERIAL SAFETY DATA SHEET

CURBIT® EC 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: 1-866-944-8565

U.S. Coast Guard National Response Center: 1-800-424-8802

PRODUCT NAME: CURBIT® EC HERBICIDE

CHEMICAL NAME: Ethalfluralin: N-ethyl-N- (2-methyl-2-propenyl)-2,6-dinitro-4- (trifluoromethyl) benzeneamine

CHEMICAL FAMILY: Dinitroaniline Herbicide

EPA REG. NO.: 34704-610

MSDS Number: 000610-09-LPI

MSDS Revisions: Sections 1 and 4

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2. HAZARDS IDENTIFICATION SUMMARY

KEEP OUT OF REACH OF CHILDREN – DANGER - PELIGRO – Si usted no entiende la etiqueta, busque a alguien para que se la explique a usted en detalle (If you do not understand the label, find someone to explain it to you in detail.) Corrosive. Causes irreversible eye damage and skin burns. Harmful if swallowed or inhaled. This product may cause skin sensitization reactions in certain individuals. Do not get in eyes, on skin or on clothing. Avoid breathing vapor or spray mist.

This product is an orange liquid with aromatic odor.

3. COMPOSITION, INFORMATION ON INGREDIENTS

Chemical Ingredients:	Percentage by Weight:	CAS No.	TLV (Units)
Ethalfluralin	35.40	55283-68-6	not established
Inert Ingredients, including	64.60		
Cyclohexanone		108-94-1	20 ppm (Skin)
Light Aromatic Solvent		64742-95-6	not established

This product is hazardous according to the OSHA Hazard Communication Standard (29 CFR 1910.1200)

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 on skin or clothing:	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 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 by mouth-to-mouth, if possible. Call a poison control center or doctor for further 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.
NOTE TO PHYSICIAN:	Probable mucosal damage may contraindicate the use of gastric lavage. Contains petroleum distillate. Vomiting may cause aspiration pneumonia.

FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-866-944-8565. Have the product container or label with you when calling a poison control center or doctor, or going for treatment.

5. FIRE FIGHTING MEASURES

FLASH POINT (°F/Test Method):	119°F / 48.3°C (SCC)
FLAMMABLE LIMITS (LFL & UFL):	LFL: 1.5% at 212°F/100°C; UFL: 8.5% at 248°F/120°C
EXTINGUISHING MEDIA:	Dry chemical, carbon dioxide, foam, water spray or fog.
HAZARDOUS COMBUSTION PRODUCTS:	Oxides of nitrogen. Hydrogen chloride, Fluorine containing compounds and other unknown hazardous materials may be formed in a fire situation. Incomplete combustion may lead to formation of oxides of carbon.
SPECIAL FIRE FIGHTING PROCEDURES:	Formulation emits toxic fumes as it burns. Wear self-contained breathing apparatus and full protective gear. Fight fire from upwind and keep all non-essential personnel out of area of intense smoke.
UNUSUAL FIRE AND EXPLOSION HAZARDS:	If water is used to fight fire, contain run-off, using dikes to prevent contamination of water supplies.

6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

Avoid breathing vapors. Absorb and sweep up spills immediately and transfer to suitable containers for possible land application according to label use or for disposal. 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: Flammable. Do not use or store near heat or open flame. 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. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

STORAGE: Avoid freezing. Store above 40°F/4.5°C. If frozen, poor weed control may result. Flammable. Do not use or store near heat or open flame. Store in original container only. Do not contaminate water, food or feed by storage or disposal.

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 dusts exceed acceptable levels, wear a NIOSH approved pesticide respirator.

EYE PROTECTION: Chemical goggles or shielded safety glasses.

SKIN PROTECTION: Wear protective clothing: coveralls, long-sleeved shirt and long pants, chemical-resistant footwear plus socks. Wear chemical-resistant gloves.

	OSHA PEL 8 hr TWA	ACGIH TLV-TWA
Cyclohexanone	200 mg/m ³	20 ppm (skin)
Xylene	435 mg/m ³	434 mg/m ³

Personal Protective Equipment: Applicators and other handlers must wear: Coveralls over long-sleeved shirt and long pants, chemical-resistant gloves, such as barrier laminate or Viton®, chemical-resistant footwear plus socks, protective eyewear, chemical resistant headgear for overhead exposure and chemical-resistant apron when cleaning equipment, mixing or loading. 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 PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: Orange liquid with aromatic odor.	BULK DENSITY: 8.51 lbs/gal	SOLUBILITY: Emulsifies
SPECIFIC GRAVITY (Water = 1): 1.02 g/ml	BOILING POINT: ~313°F / 156°C (solvent)	pH: 4.5 - 5.5 (1% solution)
VAPOR PRESSURE: Not established	EVAPORATION RATE: 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.

10. STABILITY AND REACTIVITY

STABILITY: Stable

CONDITIONS TO AVOID: Excessive heat or extreme cold; avoid freezing.

INCOMPATIBILITY: Strong bases and oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of nitrogen. Hydrogen chloride, Fluorine containing compounds and other unknown hazardous materials may be formed in a fire situation. Incomplete combustion may lead to formation of oxides of carbon.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Oral LD₅₀ (rat): 3,267 mg/kg	Acute Dermal LD₅₀ (rabbit): >5 mL/kg
Eye Irritation (rabbit): Causes irreversible eye damage	Skin Irritation (rabbit): Causes slight irritation
Acute Inhalation LC₅₀ (rat): 5.0 mg/L.	Skin Sensitization (guinea pig): Not established
Carcinogenic Potential: None listed in OSHA, NTP, ACGIH, or IARC.	

12. ECOLOGICAL INFORMATION

This pesticide is toxic to fish and aquatic invertebrates. Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash waters or rinsate. Runoff or erosion from treated areas may be hazardous to fish in neighboring areas. Due to risk to plants and animals in aquatic habitats that receive runoff containing this product, use of controls such as a vegetative buffer strip to filter such water flow from recently treated fields is recommended. Do not apply when weather conditions favor drift from target area.

13. DISPOSAL CONSIDERATIONS

Pesticide, spray mixture, or rinse water that cannot be used according to label instructions must be disposed of according to applicable federal, state or local procedures. Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use 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.

Nonrefillable container. Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in the container. Contact your state regulatory agency to determine allowable practices in your state. Once cleaned, some agricultural plastic pesticide containers can be taken to a container collection site or picked up for recycling. To find the nearest site, contact your chemical dealer or manufacturer, or contact The Agricultural Container Recycling Council (ACRC) at www.acrecycle.org. If not recycled, then 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. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Pressure rinse as follows: Empty the remaining contents into application equipment or a mix tank and continue to drain for 10 seconds after the flow begins to drip. Hold container upside down over application equipment or mix tank or collect rinsate for later use or disposal. Insert pressure rinsing nozzle in the side of the container, and rinse at about 40 PSI for at least 30 seconds. Drain for 10 seconds after the flow begins to drip. Do not contaminate water, food or feed by storage or disposal.

14. TRANSPORT INFORMATION

DOT Shipping Description: LESS THAN 119 GALLONS NOT REGULATED BY USDOT FOR SURFACE (GROUND) TRANSPORTATION

U.S. Surface Freight Classification: COMPOUND, TREE OR WEED KILLING, NOI (NMFC 50320, SUB 2: CLASS: 60

15. REGULATORY INFORMATION**NFPA & HMIS Hazard Ratings:****NFPA**

2	Health	0	Least
2	Flammability	1	Slight
1	Instability	2	Moderate
		3	High
		4	Severe

HMIS

2	Health
2	Flammability
1	Reactivity
H	PPE

SARA Hazard Notification/Reporting

SARA Title III Hazard Category:	Immediate	<u>Y</u>	Fire	<u>Y</u>	Sudden Release of Pressure	<u>N</u>
	Delayed	<u>Y</u>	Reactive	<u>N</u>		

Reportable Quantity (RQ) under U.S. CERCLA: Cyclohexanone (CAS: 108-94-1) 5000 lbs. (14.8% in product); Xylene (CAS: 1330-20-7) 100 lbs. (1.3% in product)

SARA, Title III, Section 313: Xylene (CAS: 1330-20-7); 1,2,4-Trimethylbenzene (CAS: 95-63-6)

RCRA Waste Code: U057 (Cyclohexanone); U239 (Xylene)

CA Proposition 65: Not listed.

16. OTHER INFORMATION

MSDS STATUS: Sections 1 and 4 revised

PREPARED BY: Registrations and Regulatory Affairs

REVIEWED BY: Environmental/ Regulatory Services

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