

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: 1-800-301-7976

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

PRODUCT NAME: CURBIT® EC HERBICIDE

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

CHEMICAL FAMILY: Dinitroaniline Herbicide

EPA REG. NO.: 34704-610

MSDS Number: 000610-04b-LPI

MSDS Revisions: See section 16

Date Of Issue: 07/06/04

Supersedes: 05/25/04

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 orange-red liquid with aromatic solvent odor.

3. COMPOSITION, INFORMATION ON INGREDIENTS

| <u>Chemical Ingredients:</u> | <u>Percentage by Weight:</u> | <u>CAS No.</u> | <u>TLV (Units)</u> |
|---|------------------------------|----------------|--------------------|
| Ethalfuralin | 31.50 | 55283-68-6 | none established |
| Other Ingredients (contains Monochlorotoluene) | 68.50 | 25168-05-2 | none 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: Call a poison control center or doctor or doctor immediately for treatment advice. Have a person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

NOTE TO PHYSICIAN: Probable mucosal damage may contraindicate the use of gastric lavage.

FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-800-301-7976. 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 (TCC)

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: 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
not listed

ACGIH TLV-TWA
not listed

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-red liquid with aromatic solvent odor.

SPECIFIC GRAVITY (Water = 1): 1.152 g/ml

VAPOR PRESSURE: 8.2 mm/Hg @ 77°F/25°C

PERCENT VOLATILE (by volume): Not established

BULK DENSITY: 9.61 lbs/gal

BOILING POINT: Not established

EVAPORATION RATE: Not established

SOLUBILITY: Emulsifies

pH: 5.5 (50% solution)

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

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.

CONDITIONS TO AVOID: Excessive heat or extreme cold.

11. TOXICOLOGICAL INFORMATION

Acute Oral LD₅₀ (rat): 3,000 mg/kg

Eye Irritation (rabbit): Causes irreversible eye damage

Acute Inhalation LC₅₀ (rat): >7.5 mg/L.

Carcinogenic Potential: None listed in OSHA, NTP, ACGIH, or IARC.

Acute Dermal LD₅₀ (rabbit): >5,000 mg/kg

Skin Irritation (rabbit): Causes slight irritation

Skin Sensitization (guinea pig): Not established

12. ECOLOGICAL INFORMATION

This product is toxic to fish and aquatic invertebrates. 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 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

Do not reuse containers. **Container Disposal:** 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, if allowed by state and local authorities, by burning. If burned, stay out of smoke. **Metal Container Disposal:** Triple rinse (or equivalent), then offer for recycling or reconditioning, or puncture and dispose in a sanitary landfill, or by other procedures approved by state and local authorities. 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)

Consult appropriate ICAO/IATA and IMDG regulations for shipment requirements in the Air and Maritime shipping modes. Packaging and classification for these modes of transportation are more stringent.

15. REGULATORY INFORMATION

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

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: Not listed

SARA, Title III, Section 313: Not listed

RCRA Waste Code: Not listed

CA Proposition 65: Not listed.

16. OTHER INFORMATION

MSDS STATUS: Format modified to address changes in ANSI Standard Z400.1-2004

PREPARED BY: Registrations and Regulatory Affairs

REVIEWED BY: Environmental/ Regulatory Services

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