MATERIAL SAFETY DATA SHEET

RIFLE®-D 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

PRODUCT NAME: RIFLE®-D HERBICIDE
CHEMICAL NAME: Dimethylamine salt of Dicamba: (3,6-dichloro-o-anisic acid); Dimethylamine salt of 2,4-D: (2,4-Dichlorophenoxyacetic acid)
CHEMICAL FAMILY: Phenoxy Herbicide - Benzoic Acid Herbicide
EPA REG. NO.: 34704-869
MSDS Number: 000869-08-LPI
MSDS Revisions: All sections reviewed
Date Of Issue: 01/11/08
Supersedes: 01/26/05

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. Do not get in eyes or on clothing. Wear goggles. Harmful if swallowed, inhaled, or absorbed through skin. Avoid contact with skin. Avoid breathing spray mist. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash clothing before reuse.
This product is clear, amber liquid with amine odor.

3. COMPOSITION, INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Ingredients</th>
<th>Percentage by Weight</th>
<th>CAS No.</th>
<th>TLV (Units)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimethylamine salt of Dicamba+</td>
<td>12.40</td>
<td>2300-66-5</td>
<td>none established</td>
</tr>
<tr>
<td>Dimethylamine salt of 2,4-D*</td>
<td>35.70</td>
<td>2008-39-1</td>
<td>10 mg/m³</td>
</tr>
<tr>
<td>Other Ingredients</td>
<td>51.90</td>
<td></td>
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</tr>
</tbody>
</table>

4. FIRST AID MEASURES

If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contacts, if present, after the first 5 minutes, and then continue rinsing eye. Call a poison control center or doctor for treatment advice.
If swallowed: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.
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 mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

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

5. FIRE FIGHTING MEASURES

FLASH POINT (°F/Test Method): Not combustible.
FLAMMABLE LIMITS (LFL & UFL): Not established
EXTINGUISHING MEDIA: Water fog, foam, CO₂ or dry chemical.
HAZARDOUS COMBUSTION PRODUCTS: Dicamba amine salt, 2,4-D amine salt, oxides of nitrogen, hydrogen chloride, organochloride products, and oxides of carbon. May also yield steam.
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.

6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:
For small spills, absorb with an absorbent material such as pet litter. Sweep up and transfer to containers for possible land application according to label use or for proper disposal. Wash the spill with water containing a strong detergent, absorb with pet litter or other absorbent material, sweep up and place in a chemical container and handle in an approved manner. Check local, state and federal regulations for proper disposal. Flush the area with water to remove any residue. For large spills: contain liquid by diking the area, keep product out of water supplies. Any recovered spilled liquid should be similarly collected and disposed of.
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: Do not store below 32°F / 0°C or above 100°F / 37.8°C. Store in original container in a well-ventilated area separately from fertilizer, feed, and foodstuffs. Avoid cross-contamination with other pesticides. Do not contaminate water, food, or feed by storage or disposal.

Personal Protective Equipment: All mixers, loaders, applicators, flaggers, and other handlers must wear: long sleeved shirt and long pants, chemical-resistant gloves made of any waterproof material such as polyethylene or PVC, shoes plus socks, and protective eyewear. Mixers and loaders who do not use a mechanical system (probe and pump) must wear: Coveralls and chemical-resistant apron. 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 cleaning and maintaining PPE. If no instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry. After each day of use, clothing or PPE must not be reused until it had been cleaned.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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

RESPIRATORY PROTECTION: Not normally required; if vapors or mists become excessive, wear a NIOSH approved pesticide respirator with cartridges for pesticide vapors.

EYE PROTECTION: Chemical goggles or shielded safety glasses.

SKIN PROTECTION: Wear protective clothing: long-sleeved shirts and pants, shoes plus socks. Wear rubber or chemical-resistant gloves.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: Clear, amber liquid with amine odor.

SPECIFIC GRAVITY (Water = 1): 1.17 g/ml

BULK DENSITY: 9.76 lbs/gal.

VAPOR PRESSURE: 18 mm Hg @ 68°F/20°C (as water)

BOILING POINT: 215°F/101.6°C

PERCENT VOLATILE (by volume): Not established

PH: 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

INCOMPATIBILITY: Strong acids or bases.

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition may release hydrogen chloride, oxides of nitrogen or other toxic gases.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Oral LD₅₀ (rat): 1,150 mg/kg

Eye Irritation (rabbit): Corrosive

Inhalation LC₅₀ (rat): >20.3 mg/L (4 hr).

Carcinogenic Potential: Nothing listed in ACGIH, NTP, OSHA, or IARC.

Acute Dermal LD₅₀ (rabbit): >2,000 mg/kg

Skin Irritation (rabbit): Minimally irritating.

Skin Sensitization (guinea pig): Not a sensitizer

12. ECOLOGICAL INFORMATION

This product is toxic to aquatic invertebrates. Drift or runoff may adversely affect aquatic invertebrates and non-target plants. For terrestrial uses, 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 by disposing of equipment wash waters or rinsate.
13. DISPOSAL CONSIDERATIONS

Metal containers: Triple rinse (or equivalent), adding rinsate to spray tank. 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. Plastic Containers: Triple rinse (or equivalent), adding rinsate to spray tank, 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 by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke. Bulk/Mini-bulk Containers: Refillable containers should be returned to the point of purchase. Wastes, which cannot be used according to label instructions, may be disposed of on site or at an approved waste disposal facility. Do not contaminate water, food, or feed by storage or disposal.

14. TRANSPORT INFORMATION

DOT Shipping Description: For 28 gallons and greater: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, UN3082, III, RQ, (CONTAINS 2,4-D, DICAMBA), MARINE POLLUTANT ERG GUIDE 171
DOT Shipping Description: Less than 28 gallons: NOT REGULATED BY USDOT
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:

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<tr>
<th>NFPA</th>
<th>HMIS</th>
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<tbody>
<tr>
<td>3 Health</td>
<td>3 Health</td>
</tr>
<tr>
<td>0 Flammability</td>
<td>0 Flammability</td>
</tr>
<tr>
<td>0 Instability</td>
<td>0 Reactivity</td>
</tr>
<tr>
<td>2 Moderate</td>
<td>H PPE</td>
</tr>
<tr>
<td>3 High</td>
<td></td>
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<tr>
<td>4 Severe</td>
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SARA Hazard Notification/Reporting
SARA Title III Hazard Category:
- Immediate Y
- Delayed N
- Fire N
- Reactive N
- Sudden Release of Pressure N

Reportable Quantity (RQ) under U.S. CERCLA: 2,4-D Acid (CAS: 94-75-7) 100 pounds; Dicamba (CAS: 1918-00-9) 1000 pounds
SARA, Title III, Section 313: 2,4-D Acid (CAS: 94-75-7) 29.60%; Dimethylamine Dicamba (CAS: 2300-66-5) 12.40%
RCRA Waste Code: D016
CA Proposition 65: Not listed.

16. OTHER INFORMATION

MSDS STATUS: All sections reviewed and/or revised
PREPARED BY: Registrations and Regulatory Affairs
REVIEWED BY: Environmental/ Regulatory Services

®Rifle is a registered trademark of Loveland Products, Inc.

*Equivalent to 29.60% or 2.87 lbs/gallon 2,4-D
+Equivalent to 10.30% or 1 lb/gallon Dicamba

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