

# MATERIAL SAFETY DATA SHEET

MEC AMINE-D®

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:** MEC AMINE-D®  
**CHEMICAL NAME:** Dimethylamine Salt of 2,4-Dichlorophenoxyacetic acid; Dimethylamine Salt of (+)-R-2-(2-methyl-4-chlorophenoxy) propionic acid; Dimethylamine Salt of Dicamba (3,6-dichloro-o-anisic acid)  
**CHEMICAL FAMILY:** Phenoxy Herbicide  
**EPA REG. NO.:** 34704-239  
**MSDS Number:** 000239-07-LPI      **MSDS Revisions:** Sections 8, 16      **Date of Issue:** 01/03/07      **Supersedes:** 07/06/04

## 2. HAZARDS IDENTIFICATION SUMMARY

**KEEP OUT OF REACH OF CHILDREN – DANGER** Corrosive. Causes irreversible eye damage. Do not get in eyes, on skin or on clothing. Wear face shield or goggles, long pants, long-sleeved shirt, shoes, socks and chemical resistant gloves when mixing, loading or applying this product. Harmful or fatal if swallowed. After using this product, rinse gloves before removing, remove clothing and launder separately before reuse, and promptly and thoroughly wash hands and exposed skin with soap and water. Remove saturated clothing as soon as possible and shower.

This product is clear, light amber liquid with typical phenoxy herbicide odor.

## 3. COMPOSITION, INFORMATION ON INGREDIENTS

<u>Chemical Ingredients:</u>	<u>Percentage by Weight:</u>	<u>CAS No.</u>	<u>TLV (Units)</u>
Dimethylamine salt of 2,4-D*	30.56	2008-39-1	10 mg/m <sup>3</sup>
Dimethylamine salt of Mecoprop-P**	8.17	16484-77-8	not established
Dimethylamine salt of Dicamba***	2.77	2300-66-5	not established
Inert Ingredients	58.50		

## 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 with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

**If swallowed:** Call a poison control center 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.

**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.

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.

## 5. FIRE FIGHTING MEASURES

**FLASH POINT (°F/Test Method):** Does not flash  
**FLAMMABLE LIMITS (LFL & UFL):** None established  
**EXTINGUISHING MEDIA:** Use medium appropriate to surrounding fire. Dry chemical, carbon dioxide, foam, water spray or fog.  
**HAZARDOUS COMBUSTION PRODUCTS:** Ammonia, oxides of nitrogen, chlorine-containing compounds and other unknown hazardous materials may be formed in a fire situation.  
**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 of intense smoke.  
**UNUSUAL FIRE AND EXPLOSION HAZARDS:** If water is used to fight fire and/or cool containers, contain runoff, using dikes to prevent contamination of water supplies.

## 6. ACCIDENTAL RELEASE MEASURES

### STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

Contain spill and absorb with suitable absorbent, sweep up material and transfer to containers for possible land application according to label use or for proper disposal. Wash spill area with water containing strong detergent, absorb and sweep up as above. 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:** KEEP FROM FREEZING. Store in a safe manner. Store in original container only. Keep container tightly closed when not in use. Do not contaminate water, food, or feed by storage or disposal.

**Personal Protective Equipment:** Wear face shield or goggles, long pants, long sleeved shirt, shoes, socks, and chemical-resistant gloves when mixing, loading or applying this product. After using this product, rinse gloves before removing, remove clothing and launder separately before reuse, and promptly and thoroughly wash hands and exposed skin with soap and water. Remove saturated clothing as soon as possible and shower.

**For containers over 1 gallon and less than 5 gallons in capacity:** Persons engaged in open pouring of this product must also wear coveralls or a chemical-resistant apron.

**For containers of 5 gallons or more in capacity:** A mechanical system (probe and pump) must be used for transferring the contents of this container. If the contents of a non-refillable pesticide container are emptied, the probe must be rinsed before removal.

**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 MSHA/NIOSH approved pesticide respirator.

**EYE PROTECTION:** Chemical goggles or shielded safety glasses.

**SKIN PROTECTION:** Wear protective clothing: long-sleeved shirts and pants, hat, rubber boots with socks. Wear rubber or chemical-resistant gloves.

	<b>OSHA PEL 8 hr TWA</b>	<b>ACGIH TLV-TWA</b>
2,4-D Acid	10 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>
Dimethylamine	75 mg/m <sup>3</sup>	15 mg/m <sup>3</sup>

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**APPEARANCE AND ODOR:** Clear, light amber liquid with typical phenoxy herbicide odor. **SOLUBILITY:** Miscible

**SPECIFIC GRAVITY (Water = 1):** 1.13 g/ml

**BULK DENSITY:** 9.43 lbs/gal.

**pH:** 8.5-9.0 (neat)

**VAPOR PRESSURE:** 0.021 mm Hg

**BOILING POINT:** 212°F/100°C

**PERCENT VOLATILE (by volume):** <50% (water)

**EVAPORATION RATE (Butyl Acetate = 1):** Lower than Butyl Acetate

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:** Extreme heat or extreme cold.

**INCOMPATIBILITY:** Strong oxidizers and acids.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Hydrogen chloride, other chlorine containing compounds, oxides of nitrogen, and other unknown hazardous materials may be formed in a fire situation. Incomplete combustion may lead to formation of carbon monoxide and/or other asphyxiants.

**HAZARDOUS POLYMERIZATION:** Will not occur.

**11. TOXICOLOGICAL INFORMATION**

**Acute Oral LD<sub>50</sub> (rat):** 375 mg/kg (2,4-D Acid)

**Acute Dermal LD<sub>50</sub> (rabbit):** 1400 mg/kg (2,4-D Acid)

**Eye Irritation (rabbit):** Corrosive; causes irreversible eye damage

**Skin Irritation (rabbit):** Non-irritating

**Inhalation LC<sub>50</sub> (rat):** >5.28 mg/L (24 HR)

**Skin Sensitization (guinea pig):** Not a sensitizer.

**Carcinogenic Potential:** None listed in OSHA or NTP. ACGIH (TLV-A4: Not Classifiable as a Human Carcinogen); IARC (Group 2B: limited evidence for carcinogenicity in humans).

**Target Organs:** 2,4-D: Skin, CNS, liver, kidneys

**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 when disposing of equipment wash waters. Do not apply when weather conditions favor drift from target area. Do not contaminate domestic or irrigation waters.

**13. DISPOSAL CONSIDERATIONS**

Do not reuse empty containers. **Metal:** 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. **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. Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal law and may contaminate groundwater. Do not contaminate water, food, or feed by storage or disposal.

**14. TRANSPORT INFORMATION**

**DOT Shipping Description:** For containers **less** than 40.98 gallons: NOT REGULATED BY USDOT  
 For containers **greater** than 40.98 gallons: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., 9, UN3082, III (2,4-D) MARINE POLLUTANT, ERG GUIDE 171  
**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**

<b>NFPA &amp; HMIS Hazard Ratings:</b>		NFPA		HMIS		
	3	Health	0	Least	3	Health
	0	Flammability	1	Slight	0	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 N Reactive N

**Reportable Quantity (RQ) under U.S. CERCLA:** 2,4-D Acid (CAS: 94-75-7) 100 pounds.  
**SARA, Title III, Section 313:** 2,4-D Acid (CAS: 94-75-7) 25.38% acid equivalent; Dimethylamine Dicamba (CAS: 2300-66-5) 2.30% acid equivalent.  
**RCRA Waste Code:** Not listed  
**CA Proposition 65:** Not listed.

**16. OTHER INFORMATION**

**MSDS STATUS:** Sections 8 and 16 revised  
**PREPARED BY:** Registrations and Regulatory Affairs **REVIEWED BY:** Environmental/ Regulatory Services  
 \*2.44 lbs./gal or 25.38% 2,4-D Acid Equivalent  
 \*\*0.65 lbs./gal or 6.75% Mecoprop-P Acid Equivalent  
 \*\*\*0.22 lbs./gal or 2.30% Dicamba Acid Equivalent  
 ®Mec Amine-D is a registered trademark of Loveland Products, Inc.

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