MATERIAL SAFETY DATA SHEET

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. **24-Hour Emergency Phone:** 1-800-424-9300

P.O. Box 1286 • Greeley, CO 80632-1286 **Medical Emergencies**: 1-866-944-8565

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

PRODUCT NAME: CHASER® 2 AMINE

CHEMICAL NAME: 2,4-Dichlorophenoxyacetic acid, dimethylamine and Triclopyr: 3,5,6-trichloro-2-pyridinyloxyacetic acid, trimethylamine salt

CHEMICAL FAMILY: Phenoxy Herbicide **EPA REG. NO.:** 34704-930

MSDS Number: 000930-12-LPI **MSDS Revisions:** Sections 14, 15 **Date of Issue:** 12/12/12 **Supersedes:** 09/13/10

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 detaile (If you do not understand the label, find someone to explain it to you in detail.) Corrosive. Causes irreversible eye damage. Wear appropriate eyewear such as goggles, face shield, or safety glasses. Harmful if swallowed or inhaled. May be fatal if absorbed through skin. Do not get in eyes, on skin, or in clothing.

This product is a clear dark to amber-colored liquid with mild amine odor.

3. COMPOSITION, INFORMATION ON INGREDIENTS

Chemical Ingredients:	Percentage by Weight:	CAS No.	TLV (Units)
2,4-D DMA*	34.20	2008-39-1	10 mg/m ³
Triclopyr, trimethylamine salt**	15.20	57213-69-1	none established
Inert Ingredients	50.60		

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 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 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.

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

FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-866-944-8565. 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): Aqueous formulation; not applicable

FLAMMABLE LIMITS (LFL & UFL): Not established

EXTINGUISHING MEDIA: Use medium appropriate to surrounding fire. Dry chemical, CO₂ (carbon dioxide), foam, water spray or

fog.

HAZARDOUS COMBUSTION PRODUCTS: May include but are not limited to hydrogen chloride and oxides of nitrogen.

SPECIAL FIRE FIGHTING PROCEDURES: Use water spray to cool containers exposed to fire. Remain upwind. Avoid breathing smoke. Wear self-

contained breathing apparatus and full protective gear.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Containers will burst from steam pressure under prolonged fire conditions.

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. Treat contaminated area with detergent and water. 2,4-D spills are subject to CERCLA reporting (see section 15). Check local, state and federal regulations for proper disposal.

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

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7. HANDLING AND STORAGE

HANDLING: Wash hands after handling, and 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. See section 8 for PPE. Keep away from children.

STORAGE: Store above 28°F/-2.2°C or agitate before use. Do not contaminate water, food, or feed by storage or disposal.

Personal Protective Equipment: Applicators and other handlers must wear: Coveralls over short-sleeved shirt and short pants, chemical-resistant footwear plus socks, goggles or faceshield, chemical-resistant gloves, chemical-resistant apron when mixing, loading, cleaning equipment, and chemical-resistant headgear for overhead exposure. For containers of over 1 gallon, but less than 5 gallons: Mixers and loaders who do not use a mechanical system (such as probe and pump) to transfer the contents of this container must wear coveralls or a chemical resistant apron in addition to other required PPE. 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/maintaining PPE. If no such 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 has been cleaned.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: Enclosed Cockpits: Pilots must use an enclosed cockpit that meets the requirements listed in the WPS for

agricultural pesticides [40 CFR 170.240(d)(6)].

When handlers use 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 MSHA/NIOSH approved pesticide respirator.

Chemical goggles or shielded safety glasses.

EYE PROTECTION: SKIN PROTECTION:

Wear protective clothing: long-sleeved shirts and pants, hat, rubber boots with socks. Wear rubber or chemical-

resistant gloves.

OSHA PEL 8 hr TWA

ACGIH TLV-TWA

2,4-D Acid

10 mg/m³ 10 mg/m³

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: Clear dark amber-colored liquid with mild amine odor

SOLUBILITY: Soluble

SPECIFIC GRAVITY (Water = 1): 1.160 g/ml

VAPOR PRESSURE: Not established

BULK DENSITY: 9.68 lbs/gal

BOILING POINT: 178°F/81.1°C

PERCENT VOLATILE (by volume): Not established

Note: EVAPORATION RATE: 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 quaranteed analysis of any specific lot or as specification items.

10. STABILITY AND REACTIVITY

STABILITY: Stable

CONDITIONS TO AVOID: Excessive heat. Do not store near heat or flame.

INCOMPATIBILITY: Strong oxidizing agents: bases and acids.

HAZARDOUS DECOMPOSITION PRODUCTS: If burned, toxic, noxious fumes, oxides of carbon and nitrogen and hydrogen chloride may be formed under

fire conditions.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Oral LD₅₀ (rat): 1,660 mg/kg
Eye Irritation (rabbit): Severe irritation with possibly permanent corneal injury

Acute Inhalation LC₅₀ (rat): >2.0 mg/L.

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

Acute Dermal LD₅₀ (rabbit): 1,818 mg/kg Skin Irritation (rabbit): Severe irritation Skin Sensitization (guinea pig): Not a sensitizer

12. ECOLOGICAL INFORMATION

This product may be 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. Drift or runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water when disposing of disposing of equipment washwaters or rinsate. Triclopyr has properties and characteristics associated with chemicals detected in groundwater. The use of this chemical in areas where soils are permeable, particularly where the water table is shallow, may result in groundwater contamination. **Mixing and Loading:** Most cases of groundwater contamination involving phenoxy herbicides such as 2,4-D have been associated with mixing/loading and disposal sites. Caution should be exercised when handling 2,4-D pesticides at such sites to prevent contamination of groundwater supplies. Use of closed systems for mixing or transferring this pesticide will reduce the probability of spills. Placement of the mixing/loading equipment on an impervious pad to contain spills will help prevent groundwater contamination.

13. DISPOSAL CONSIDERATIONS

Non-refillable 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. Triple rinse or pressure rinse container (or equivalent) promptly after emptying. For packages up to 5 gallons: 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. For packages greater than 5 gallons and less than 56 gallons: Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. 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. For packages greater than 56 gallons: To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. For refillable containers: Refill this container with pesticide only. Do not reuse this container for any other purpose. Cleaning the container before final disposal is the responsibility of the person disposing of the container. Cleaning before refilling is the responsibility of the refiller. To clean the container before final disposal, empty the remaining contents from this container into application equipment or mix tank. Fill the container about 10 percent full with water. Agitate vigorously or recirculate water with the pump for 2 minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times.

14. TRANSPORT INFORMATION

DOT Shipping Description: LESS THAN 36 GALLONS: NOT REGULATED BY DOT.

DOT Shipping Description: 36 GALLONS AND GREATER: RQ UN3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2,4-D), 9,

III ERG GUIDE 171

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 HMIS

Health Health 3 0 3 Least Flammability Slight Flammability Instability 2 Moderate Reactivity 3 High PPE

4 Severe

SARA Hazard Notification/Reporting

SARA Title III Hazard Category: Immediate Y Fire N Sudden Release of Pressure N Reactive N

Reportable Quantity (RQ) under U.S. CERCLA: 2,4-D Acid (CAS: 94-75-7) 100 lbs. (± 36 gallons of this product)

SARA, Title III, Section 313: 2,4-D Acid (CAS: 94-75-7) 28.4%

RCRA Waste Code: U240 CA Proposition 65: Not listed

DANGER – This chemical is a pesticide product registered by the United States Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals.

16. OTHER INFORMATION

MSDS STATUS: Sections 14 and 15 revised.

PREPARED BY: Registrations and Regulatory Affairs

REVIEWED BY: Environmental Health and Safety

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