

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: SWORD® HERBICIDE
CHEMICAL NAME: MCPA Ester; Isooctyl (2-ethylhexyl ester) of 2-methyl-4-chlorophenoxyacetic acid.
CHEMICAL FAMILY: Phenoxy Herbicide
EPA REG. NO.: 228-267-34704
MSDS Number: 228267-12-LPI

MSDS Revisions: Sections 8, 13, 15

Date of Issue: 07/05/12

Supersedes: 09/10/09

2. HAZARDS IDENTIFICATION SUMMARY

KEEP OUT OF REACH OF CHILDREN – WARNING - AVISO – 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.) May be fatal if absorbed through skin. Harmful if swallowed. Do not get in eyes, on skin or on clothing.

This product is amber colored liquid with aromatic odor. Primary routes of entry are Inhalation, eye contact and skin contact.

3. COMPOSITION, INFORMATION ON INGREDIENTS

<u>Chemical Ingredients:</u>	<u>Percentage by Weight:</u>	<u>CAS No.</u>	<u>TLV (Units)</u>
MCPA Ester*	91.00	26544-20-7	10 mg/m ³
Inert Ingredients	9.00	Mixture	

4. FIRST AID MEASURES

If on Skin or Clothing: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 to 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 in Eyes: Hold eye open and rinse slowly and gently with water for 15 to 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.

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

5. FIRE FIGHTING MEASURES

FLASH POINT (°F/Test Method): >200°F / >93.3°C (TCC)

FLAMMABLE LIMITS (LFL & UFL): None established

EXTINGUISHING MEDIA: Use medium appropriate to surrounding fire. Dry chemical, carbon dioxide, foam, water spray or fog. Chlorine-containing compounds, hydrogen chloride, oxides of nitrogen, oxides of carbon, and other unknown hazardous materials may be formed in a fire situation.

HAZARDOUS COMBUSTION PRODUCTS: Chlorine-containing compounds, hydrogen chloride, oxides of nitrogen, oxides of carbon, 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.

STORAGE: Always store pesticides in a secured warehouse or storage building. Containers should be opened in well-ventilated areas. Keep container tightly sealed when not in use. Do not stack cardboard cases more than two pallets high. Do not store near open containers of fertilizers, seed or other pesticides. Do not contaminate water, food or feed by storage or disposal.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: Pilots must use an enclosed cockpit that meets the requirement listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(6)]. 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 [40 CFR 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, chemical resistant footwear plus socks. Wear rubber or chemical-resistant gloves.

OSHA PEL 8 hr TWA	ACGIH TLV-TWA
Not established	Not established

Personal Protective Equipment: Mixers, loaders, applicators, flaggers, and other handlers must wear: long sleeved shirt and long pants, chemical-resistant shoes plus socks, and chemical-resistant gloves when mixing, loading, or using any hand-held equipment. Additional PPE for mixers and loaders supporting aerial application to rangelands, pasture lands, or non-crop land. These mixers/loaders also must wear: a chemical-resistant apron, a NIOSH-approved respirator with a dust/mist filter equipped with any N, R, P or HE class filter media. The respirator should have a NIOSH approval number prefix TC-84A. It is recommended that respirator wearer be fit tested, and trained in the use, maintenance, and limitations of the respirator. Follow manufacturer's instructions for cleaning and maintaining 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: Amber colored liquid with mild aromatic odor.	SOLUBILITY: Emulsifies
SPECIFIC GRAVITY (Water = 1): 1.0624 g/ml	BULK DENSITY: 8.87 lbs/gal.
VAPOR PRESSURE: 7.36 x 10 ⁻⁶ mm Hg (based on MCPA 2EHE)	BOILING POINT: 300°F/148.9°C
PERCENT VOLATILE (by volume): Not established	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 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 bases, acids, and oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS: Hydrogen chloride, oxides of nitrogen, oxides of carbon, chlorine-containing compounds and other unknown hazardous materials may be formed in a fire situation.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Oral LD₅₀ (rat): 1550 mg/kg [male]	Acute Dermal LD₅₀ (rabbit): >2000 mg/kg
Eye Irritation (rabbit): Mildly irritating	Skin Irritation (rabbit): Minimal irritant
Inhalation LC₅₀ (rat): >4.5 mg/L (24 HR)	Skin Sensitization (guinea pig): Not a sensitizer

Carcinogenic Potential: None listed in OSHA, NTP or ACGIH; IARC Group 2B (limited evidence for carcinogenicity in humans).

Target Organs: None known

12. ECOLOGICAL INFORMATION

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 water or rinsate. Drift and runoff may be hazardous to aquatic organisms in water adjacent to treated areas. Runoff of this product will be reduced by avoiding applications when rainfall is forecasted to occur within 48 hours. This chemical 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.

13. DISPOSAL CONSIDERATIONS

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. If container is damaged or if pesticide has leaked, contain all spillage. Absorb and clean up all spilled material with granules or sand. Place in a closed labeled container for proper disposal.

CONTAINER DISPOSAL: Nonrefillable Containers 5 Gallons or Less: Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available. Triple 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 1/4 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. 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 are also disposable by incineration, or, if allowed by State and local authorities, by burning. If burned stay out of smoke. **Nonrefillable containers larger than 5 gallons:** Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available. If recycling or reconditioning not available, puncture and dispose of in a sanitary landfill, or by other procedures approved by State and local authorities. Plastic containers are also disposable by 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. Fill the container ¼ 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. Turn the container over onto its other 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. **Refillable containers larger than 5 gallons:** Refillable container. 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 a mix tank. Fill the container about 10% full with water. Agitate vigorously or recirculate water with the pump for two minutes. Pour or pump rinsate into application equipment or rinsate collection system. Repeat this rinsing procedure two more times. Do not contaminate water, food, or feed by storage or disposal.

14. TRANSPORT INFORMATION

DOT Shipping Description: 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:	NFPA		HMIS
	2 Health	0 Least	2 Health
	1 Flammability	1 Slight	1 Flammability
	0 Instability	2 Moderate	0 Reactivity
		3 High	H PPE
		4 Severe	

SARA Hazard Notification/Reporting

SARA Title III Hazard Category:	Immediate <u>Y</u>	Fire <u>N</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.

WARNING – 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 8, 13 and 15 revised

PREPARED BY: Registrations and Regulatory Affairs

REVIEWED BY: Environmental/ Regulatory Services

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**MCPA Acid equivalent: 58.4%; 5.2 lbs/gal.*

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