

# SAFETY DATA SHEET

# FORFEIT® 280 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: 1-866-944-8565

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

PRODUCT NAME: FORFEIT® 280 HERBICIDE

CHEMICAL NAME: Glufosinate-ammonium: 2-amino-4-(hydroxymethylphosphinyl)butanoic acid monoammonium salt

CHEMICAL FAMILY: GROUP 10 HERBICIDE

EPA REG. NO.: 34704-1080

SDS Number: 001080-14b-LPI

SDS Revisions: Sections 1, 15

Date of Issue: 10/06/14

Supersedes: 01/24/13

## 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. Causes substantial but temporary eye injury. Harmful if swallowed. Do not get in eyes, on skin, or on clothing. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

This product is red liquid with no apparent odor.

## 3. COMPOSITION, INFORMATION ON INGREDIENTS

<u>Chemical Ingredients:</u>	<u>Percentage by Weight:</u>	<u>CAS No.</u>	<u>TLV (Units)</u>
Glufosinate-ammonium	24.50	77182-82-2	not listed
Other Ingredients, including	75.50		
Sodium alkyl ether sulfate		68585-34-2	not listed
1-Methoxy-2-propanol		107-98-2	369 mg/m <sup>3</sup>
Dipropylene glycol		25265-71-8	not listed
Alkyl polysaccharide		68515-73-1	not listed

## 4. FIRST AID MEASURES

**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.

**If on skin or clothing:** Take off contaminated clothing. Rinse skin 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.

**NOTE TO PHYSICIAN:** If this product is ingested, endotracheal intubation and gastric lavage should be performed as soon as possible, followed by charcoal and sodium sulfate administration.

**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):** 200.1°F / 93.4°C (TCC)

**FLAMMABLE LIMITS (LFL & UFL):** LFL: not data; UFL: no data

**EXTINGUISHING MEDIA:** Carbon dioxide (CO<sub>2</sub>), dry powder, foam, or water spray.

**HAZARDOUS COMBUSTION PRODUCTS:** May include but are not limited to: Oxides of carbon, sulfur oxides.

**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:** Do not use high volume water stream as this may spread fire. 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:

Keep unauthorized people away. Isolate spill area. Avoid contact with spilled product. For small spills, absorb with an absorbent material such as sand, vermiculite or other absorbent material. Place contaminated material in appropriate containers for proper disposal. For large spills: dike large spills using absorbent or impervious material such as clay or sand. Recover and contain as much free liquid as possible for reuse. Allow absorbed material to solidify, and scrape up for disposal. After removal, scrub the area with detergent and water and flush contaminated area thoroughly with water. Do not allow spilled material to contact vegetation. Use personal protective equipment.

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

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**7. HANDLING AND STORAGE**

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**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 use or store near heat or open flame. Keep container tightly closed and dry in a cool, well-ventilated area. Storage temperature should not exceed 125°F / 51.7°C. If storage temperature for bulk product is below 32°F / 0°C, it should not be pumped until its temperature exceeds 32°F / 0°C. Protect against direct sunlight. Do not contaminate water, food, or feed by storage or disposal.

**Personal Protective Equipment (PPE): Applicators and other handlers must wear:** coveralls worn over short sleeved shirt and short pants, chemical-resistant gloves made of any waterproof material such as barrier laminate, butyl rubber ≥ 14 mils, nitrile rubber ≥ 14 mils, neoprene rubber ≥ 14 mils, polyvinyl chloride (PVC) ≥ 14 mils, or Viton® ≥ 14 mils; chemical-resistant footwear plus socks, protective eyewear (goggles, face shield or safety glasses; 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 cleaning and maintaining PPE. If no instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry. Mixers/loaders supporting aerial applications must wear a dust/mist filtering respirator (MSHS/NIOSH approval number prefix (TC-21C), or NIOSH approved respirator with any N, R, P or HE filter.

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**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

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**ENGINEERING CONTROLS:** When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in 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 mists become excessive, wear a NIOSH approved pesticide respirator with cartridges for pesticide vapors.

**EYE PROTECTION:** Chemical goggles, face shield or safety glasses.

**SKIN PROTECTION:** Wear protective clothing: coveralls worn over short-sleeved shirts and short pants, shoes with socks. Wear chemical-resistant gloves.

	OSHA PEL 8 hr TWA	ACGIH TLV-TWA
1-Methoxy-2-propanol	not listed	369 mg/m <sup>3</sup>

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**9. PHYSICAL AND CHEMICAL PROPERTIES**

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<b>APPEARANCE AND ODOR:</b> Red liquid with no apparent odor	<b>BULK DENSITY:</b> 9.59 lbs/gal.	<b>SOLUBILITY:</b> Emulsifies
<b>SPECIFIC GRAVITY (Water = 1):</b> 1.15 g/ml	<b>BOILING POINT:</b> Not established	<b>pH:</b> 6.6 – 7.4
<b>VAPOR PRESSURE:</b> Not established	<b>EVAPORATION RATE:</b> Not established	
<b>PERCENT VOLATILE (by volume):</b> 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.

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**10. STABILITY AND REACTIVITY**

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**STABILITY:** Stable

**CONDITIONS TO AVOID:** Elevated temperatures can cause product decomposition.

**INCOMPATIBILITY:** Avoid contact with mild steel.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Carbon monoxide, hydrogen chloride, oxides of nitrogen may form in a fire situation.

**HAZARDOUS POLYMERIZATION:** Will not occur.

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**11. TOXICOLOGICAL INFORMATION**

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**Acute Oral LD<sub>50</sub> (female rat):** > 300 mg/kg - < 2,000 mg/kg.

**Acute Dermal LD<sub>50</sub> (male rat):** 1,400 mg/kg. **LD<sub>50</sub> (female rat):** 800 mg/kg

**Eye Irritation (rabbit):** Severe irritant.

**Skin Irritation (rabbit):** Slight irritant.

**Inhalation LC<sub>50</sub> (rat):** > 2.1 mg/L (4 hrs.)

**Skin Sensitization (guinea pig):** Sensitizer.

**Carcinogenic Potential:** Glufosinate-ammonium was not carcinogenic in lifetime feeding studies in rats and mice.

**Chronic Toxicity:** Glufosinate-ammonium caused kidney effects and/or mortality at high dose levels in chronic toxicity studies in rats, mice and dogs.

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**12. ECOLOGICAL INFORMATION**

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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 cleaning of equipment or when disposing of equipment wash waters. This pesticide is toxic to vascular plants and should be used in strict accordance with drift and run-off precautions on the product's label. Do not allow to get into surface water, drains and ground water. Drift or runoff from treated areas may adversely affect non-target plants. Do not apply when weather conditions favor runoff or drift.

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**13. DISPOSAL CONSIDERATIONS**

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**PESTICIDE DISPOSAL:** Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

**CONTAINER DISPOSAL: Nonrefillable 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](http://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 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. 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. Pesticide wastes are toxic. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Improper disposal of excess pesticide, spray mix, or rinsate is a violation of Federal law. Do not contaminate water, food, or feed by storage or disposal.

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**14. TRANSPORT INFORMATION**

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**DOT Shipping Description:** NON-BULK: NOT REGULATED

**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.

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**15. REGULATORY INFORMATION**

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**NFPA & HMIS Hazard Ratings:****NFPA**

2	Health	0	Least
1	Flammability	1	Slight
1	Instability	2	Moderate
		3	High
		4	Severe

**HMIS**

2	Health
1	Flammability
1	Reactivity
H	PPE

**SARA Hazard Notification/Reporting****SARA Title III Hazard Category:**

Immediate	<u>Y</u>
Delayed	<u>Y</u>

Fire	<u>N</u>
Reactive	<u>N</u>

Sudden Release of Pressure	<u>N</u>
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**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

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. Following is the hazard information as required on the pesticide label:

**WARNING**

May be fatal if absorbed through skin.

Causes substantial but temporary eye injury.

Harmful if swallowed.

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**16. OTHER INFORMATION**

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**SDS STATUS:** Sections 1 and 15 revised

**PREPARED BY:** Registrations and Regulatory Affairs

**REVIEWED BY:** Environmental Health and Safety

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