

MATERIAL SAFETY DATA SHEET

COTTON DEFOLIANT CONCENTRATE

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: COTTON DEFOLIANT CONCENTRATE

CHEMICAL NAME: Sodium Chlorate + Urea (Fire Retardant)

CHEMICAL FAMILY: Defoliant

EPA REG. NO.: 34704-1022

MSDS Number: 001022-12-LPI

MSDS Revisions: Sections 1, 2, 4, 13, 15

Date of Issue: 07/11/12

Supersedes: 05/19/10

2. HAZARDS IDENTIFICATION SUMMARY

KEEP OUT OF REACH OF CHILDREN – CAUTION - Harmful if absorbed through skin. Avoid contact with skin and clothing.

This product is a clear, colorless liquid with a no odor. Primary routes of entry are 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>
Sodium Chlorate	18.00	7775-09-9	not established
Inert Ingredients	82.00		

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 the 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.

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: **1-866-944-8565**. Have the product label or container with you when calling a poison control center or doctor, or going for treatment.

NOTE TO PHYSICIAN: There is no specific antidote. Treat symptomatically.

5. FIRE FIGHTING MEASURES

FLASH POINT (°F/Test Method): Not flammable

FLAMMABLE LIMITS (LFL & UFL): Not applicable

EXTINGUISHING MEDIA: Considered non-combustible. Use medium appropriate to surrounding fire. Foam, dry chemical, carbon dioxide, water or fog.

HAZARDOUS COMBUSTION PRODUCTS: Sodium oxide, chlorine, and chlorine dioxide.

SPECIAL FIRE FIGHTING PROCEDURES: Wear protective clothing and self-contained breathing apparatus. Do not breathe smoke, gases or vapors. Keep non-essential personnel away from the immediate fire area, and out of any fall-out or run-off areas.

UNUSUAL FIRE AND EXPLOSION HAZARDS: None known.

6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

Small spill or leak: Avoid bodily contact. Confine spill by diking with suitable absorbent material and recover as much free liquid as possible. Pick up absorbed spill and place in a suitable container for proper disposal in accordance with all Federal, State and Local regulations.

Large spill or leak: Follow basic procedure as outlined in small spill or leak steps above. Follow this by washing with a strong soap and water solution. Absorb any excess liquid and add to the drums of waste collected. Repeat if necessary. Dispose in accordance with Federal, State and Local regulations.

CAUTION: Do not allow any spill clean up materials to enter waterways.

7. HANDLING AND STORAGE

HANDLING: Wash thoroughly with soap and water after 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. Do not use near heat or open flame.

STORAGE: Keep in original container. Do not reuse empty container. Store in a cool, dry place. Protect from excessive heat. Avoid storage near feed and food products. Do not store next to strong acids or emulsifiable concentrates of Parathion or Malathion. Do not contaminate water, food, or feed by storage or disposal.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: Applicators must use an enclosed cockpit or enclosed cab that meets with the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40CFR 170.240 (d)(6)].

RESPIRATORY PROTECTION: Wear a NIOSH approved pesticide respirator with organic vapor cartridge and pesticide prefilter.

EYE PROTECTION: Chemical goggles or shielded safety glasses.

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

OSHA PEL 8 hr TWA
Not listed

ACGIH TLV-TWA
not listed

Personal Protective Equipment (PPE): Applicators and other handlers must wear: long-sleeved shirt and long pants, chemical-resistant gloves made of any waterproof material, such as polyethylene or polyvinyl chloride, and shoes plus socks. 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: Clear, colorless liquid with no odor

SPECIFIC GRAVITY (Water = 1): 1.162 g/ml

VAPOR PRESSURE (mm Hg): 0 at 20°C

PERCENT VOLATILE (by volume): Not established

BULK DENSITY: 9.70 lbs/gal.

BOILING POINT: 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.

SOLUBILITY: Soluble

pH: Not established

10. STABILITY AND REACTIVITY

STABILITY: Stable

CONDITIONS TO AVOID: None known

INCOMPATIBILITY: Strong acids, organic substances, sulfur, metal powders, and ammonia compounds.

HAZARDOUS DECOMPOSITION PRODUCTS: Free oxygen and chlorine under fire conditions.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Oral LD₅₀ (rat): >5,000 mg/kg

Eye Irritation (rabbit): May cause mild eye irritation.

Inhalation LC₅₀ (rat): >5.59 mg/L (4 HR)

Carcinogenic Potential: No components listed in ACGIH, OSHA, NTP, or IARC as a carcinogen.

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

Skin Irritation (rabbit): May cause mild skin irritation.

Skin Sensitization (guinea pig): Not a sensitizer

12. ECOLOGICAL INFORMATION

Do not apply directly to water, or to areas where surface water is present, or to inter-tidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment washwater or rinsate.

13. DISPOSAL CONSIDERATIONS

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of 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. If not recycled, then 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. 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 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. **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 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. 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. **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: NOT REGULATED BY USDOT.

U.S. Surface Freight Classification: DESSICANTS OR DEFOLIANTS, PLANT (NMFC 50320; 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**

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

HMIS

2	Health
0	Flammability
0	Reactivity
G	PPE

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

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

CAUTION – 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 1, 2, 4, 13, 15 revised

PREPARED BY: Registrations and Regulatory Affairs

REVIEWED BY: Environmental/ Regulatory Services

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