

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: REAPER® CLEARFORM™

CHEMICAL NAME: Abamectin: A mixture of avermectins containing primarily Avermectin B1a and Avermectin B1b

CHEMICAL FAMILY: Glycoside Insecticide – GROUP 6 INSECTICIDE

EPA REG. NO.: 34704-1078

MSDS Number: 001078-13-LPI

MSDS Revisions: New

Date of Issue: 08/20/13

Supersedes: New

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 swallowed. Causes substantial but temporary eye injury. Do not get in eyes or on clothing. Harmful if inhaled or absorbed through the skin. Avoid breathing spray mist. Avoid contact with skin. Prolonged or frequently repeated exposure may cause allergic skin reactions in some individuals.

This product is a clear amber-colored liquid with slightly pungent oil-like 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>
Abamectin	2.00	65195-56-4 and 65195-55-3	Not listed
Other Ingredients, including Butylated Hydroxytoluene (BHT)	98.00		
N-Methyl-2-pyrrolidone		128-37-0 872-50-4	2 mg/m ³ IFV Not listed

4. FIRST AID MEASURES

If swallowed:	Call a poison control center or doctor immediately for treatment advice. Do not give any liquid to the person. 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.
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 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.

NOTE TO PHYSICIAN: Early signs of intoxication include dilation of pupils, muscular incoordination, and muscular tremors. Toxicity following accidental ingestion of this product can be minimized by early administration of chemical absorbents (e.g. activate charcoal). If toxicity from exposure has progressed to cause severe vomiting, the extent of resultant fluid and electrolyte imbalance should be gauged. Appropriate supportive parenteral fluid replacement therapy should be given, along with other required supportive measures (such as maintenance of blood pressure levels and proper respiratory functionality) as indicated by clinical signs, symptoms, and measurements. In severe cases, observations should continue for at least several days until clinical condition is stable and normal. Since abamectin is believed to enhance GABA activity in animals, it is probably wise to avoid drugs that enhance GABA activity (barbiturates, benzodiazepines, valproic acid) in patients with potentially toxic abamectin exposure.

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):	204.4°F (95.8°C) / CC
FLAMMABLE LIMITS (LFL & UFL):	Not established
EXTINGUISHING MEDIA:	Dry chemical, foam, or carbon dioxide (CO ₂)
HAZARDOUS COMBUSTION PRODUCTS:	Carbon monoxide and carbon 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:	Class IIIA combustible liquid. When heated above the flashpoint, this material releases vapors which, when mixed with air, can burn or be explosive.

6. ACCIDENTAL RELEASE MEASURES**STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:**

Spill or leak: Wear chemical goggles or a full-face shield, rubber gloves, rubber boots, long-sleeved shirt, long pants, head covering, and a NIOSH-approved chemical cartridge respirator with organic vapor cartridges and pesticide pre-filters, or a self-contained breathing apparatus (SCBA). Cover with an absorbent material such as pet litter. Sweep up and place in an approved chemical container. Wash the spill area with water containing strong detergent, absorb with pet litter or other absorbent material, sweep up and place in a chemical container. Seal the container and handle in an approved manner. Flush the area to remove any residue.

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

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: Store in a tightly closed container in a cool, dry place. Do not contaminate water, food, or feed by storage or disposal. Combustible. Do not use or store near heat or open flame.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: Not normally required.

RESPIRATORY PROTECTION: As required.

EYE PROTECTION: Chemical goggles or shielded safety glasses.

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

Wear rubber or chemical-resistant gloves.

OSHA PEL 8 hr TWA

ACGIH TLV-TWA

Butylated Hydroxytoluene Not listed

2 mg/m³ IFV*

Personal Protective Equipment (PPE): Applicators and other handlers must wear: Coveralls over short-sleeved shirt and short pants, chemical-resistant gloves – EPA chemical-resistance category B (e.g. barrier laminate or butyl rubber ≥ 14 mils, chemical-resistant footwear plus socks, protective eyewear, and chemical-resistant headgear for overhead exposure. 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 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 amber-colored liquid with slightly pungent oil-like odor.

SPECIFIC GRAVITY (Water= 1): 0.989 g/ml @ 20°C

BULK DENSITY: 8.25 lbs/gal / 0.99 kg/L

VAPOR PRESSURE (mmHg): Not established

BOILING POINT: Not established

PERCENT VOLATILE (by volume): Not established

EVAPORATION RATE: Not established

VISCOSITY: 28.3 centistokes @ 20°C – 15.1 centistokes @ 40°C

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: 6.52 (1% solution)

10. STABILITY AND REACTIVITY

STABILITY: Stable

CONDITIONS TO AVOID: None known.

INCOMPATIBILITY: None known.

HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide and carbon dioxide in a fire situation.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Oral LD₅₀ (female rat): 310.2 mg/kg

Eye Irritation (rabbit): Moderate eye irritant.

Inhalation LC₅₀ (rat) : >2.02 mg/L (4 HR)

Carcinogenic Potential: No components listed in ACGIH, OSHA, or NTP as a carcinogen. IARC lists Butylated Hydroxytoluene (BHT) in Group 3: Unclassifiable as to Carcinogenicity in Humans.

Acute Dermal LD₅₀ (rat) : > 5,000 mg/kg

Skin Irritation (rabbit): Moderate skin irritant.

Local Lymph Node Assay [LLNA] (mice): Not a sensitizer

12. ECOLOGICAL INFORMATION

This product is toxic to fish and wildlife. 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 apply when weather conditions favor drift from treated area. Drift and runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment wash waters or rinsate. This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds. Do not apply product or allow it to drift to blooming crops or weeds if bees are visiting the treatment area.

13. DISPOSAL CONSIDERATIONS

PESTICIDE DISPOSAL: Pesticide spray mixture or rinsate that cannot be used should be disposed of in a landfill approved for pesticides. Improper disposal of excess pesticide spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instruction, contact your State Pesticide or Environmental Agency or Hazardous Waste representative at the nearest EPA regional office for guidance.

CONTAINER DISPOSAL: Nonrefillable container. Do not reuse or refill container. 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 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.

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 a 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. Do not contaminate water, food, or feed by storage or disposal.

14. TRANSPORT INFORMATION

DOT Shipping Description: UN2902 PESTICIDE, LIQUID, TOXIC, 6.1, III (ABAMECTIN) ERG GUIDE 151

U.S. Surface Freight Classification: INSECTICIDES OR FUNGICIDES, INSECT OR ANIMAL REPELLENTS, NOI, OR VERMIN EXTERMINATORS, ANIMAL OR POULTRY, NOI; POISON (NMFC 102100; CLASS: 77.5)

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
2	Flammability	1	Slight	2	Flammability
0	Instability	2	Moderate	0	Reactivity
		3	High	C	PPE
		4	Severe		

SARA Hazard Notification/Reporting

SARA Title III Hazard Category:	Immediate	<u>Y</u>	Fire	<u>Y</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: N-methyl-2-pyrrolidone (CAS: 872-50-4)

RCRA Waste Code: Not listed

CA Proposition 65: WARNING: This product contains chemicals known to the State of California to cause cancer or birth defects or other reproductive harm.

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: New

PREPARED BY: Registrations and Regulatory Affairs

REVIEWED BY: Environmental Health and Safety

®Reaper is a registered trademark and Clearform is a trademark of Loveland Products Inc.

*®Viton is a registered trademark of DuPont Performance Elastomers L.L.C. *IFV: Measured as inhalable fraction and vapor.*

This product is a Restricted Use Pesticide

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