



SAFETY DATA SHEET

SDS NUMBER: 001078-17-LPI

SDS REVISIONS: FORMAT

DATE OF ISSUE: 07/26/17

REAPER® CLEARFORM®

SUPERSEDES: 01/07/14

FOR CHEMICAL EMERGENCY, SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT, CALL CHEMTREC - DAY OR NIGHT 1-800-424-9300

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

- 1.1 **PRODUCT IDENTIFIER:** EPA REGISTRATION NO. 34704-1078
TRADE NAME: REAPER® CLEARFORM®
- 1.2 **RECOMMENDED USE:** GROUP 6 INSECTICIDE
- 1.3 **SUPPLIER DETAILS:**
LOVELAND PRODUCTS, INC.
P.O. Box 1286 • Greeley, CO 80632-1286
- 1.4 **24 Hour Emergency Phone:** 1-800-424-9300 - **Medical Emergencies:** 1-866-944-8565 – **Product Information:** 1-888-574-2878 (LPI-CUST)
U.S. Coast Guard National Response Center: 1-800-424-8802

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to 29 CFR 1910.1200

Acute Toxicity - Oral	Category 4	H302
Acute Toxicity – Dermal	Category 4	H312
Sensitization – Skin	Category 1	H317
Eye Damage/Irritation	Category 2B	H320
Acute Toxicity – Inhalation	Category 4	H332

2.2 Label elements



Signal word: WARNING

Hazard Statement:
H302 – Harmful if swallowed.
H312 – Harmful in contact with skin.
H317 – May cause an allergic skin reaction.
H320 – Causes eye irritation.
H332 – Harmful if inhaled.

Precautionary Statement: (Prevention):
P264 – Wash thoroughly after handling.
P270 – Do not eat, drink or smoke when using this product.
P280 – Wear protective gloves/protective clothing/eye protection/face protection.
P261 – Avoid breathing dust/fume/gas/mist/vapors/spray.
P272 – Contaminated work clothing must not be allowed out of the workplace.
P271 – Use only outdoors or in a well-ventilated area.

Precautionary Statement: (Response):
P301+P312 – IF SWALLOWED: Call a poison center/doctor/physician if you feel unwell.
P330 – Rinse mouth.
P302+P352: IF ON SKIN: Wash with plenty of soap and water.
P312 – Call a poison center/doctor/physician if you feel unwell.
P321 – Specific treatment (see Note to Physician on the product label).
P362 – Take off contaminated clothing and wash it before reuse.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P337+P313 – If eye irritation persists: Get medical advice/attention.
P304+P340 – IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312 – Call a poison center/doctor/physician if you feel unwell.

Precautionary Statement: (Storage):
Not applicable or required.

Precautionary Statement: (Disposal):
P501 – Dispose of contents/container in accordance with local, state and federal regulations.



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2.3 Other hazards

None known

3. COMPOSITION, INFORMATION ON INGREDIENTS

3.1 Substances

3.2 Mixtures

Classification according to 29 CFR 1910.1200

Chemical Name:	CAS No.	Concentration [%]
Abamectin	65195-56-4 and 65195-55-3	2.00
*Other ingredients, including		98.00
Butylated Hydroxytoluene	128-37-0	
N-Methyl-2-pyrrolidone	872-50-4	

*Ingredients not specifically listed are non-hazardous and are to be considered proprietary or confidential business information per 29 CFR 1910.1200(i)

4. FIRST AID MEASURES

4.1 Description of First Aid Measures

General Advice: Get medical attention if symptoms occur.

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 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 15-20 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.

4.2 Most Important Symptoms and Effects, Acute and Delayed

Symptoms: Eyes: Causes eye irritation.
Oral: Harmful if swallowed.

4.3 Immediate Medical Attention and Special Treatment

Treatment: Treat symptomatically. Symptoms may be delayed.

FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-866-944-8565

Take container, label or product name with you when seeking medical attention.

NOTES 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 absorbants (e.g., activated 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, avoid drugs that enhance GABA activity (barbiturates, benzodiazepines, valproic acid) in patients with potentially toxic abamectin exposure.

5. FIRE FIGHTING MEASURES

5.1 EXTINGUISHING MEDIA:

Suitable Extinguishing Media: Use medium appropriate to surrounding fire. Dry chemical, carbon dioxide (CO₂), alcohol foam, foam, water spray or fog.

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE:

Specific Hazards During Firefighting: Oxides of carbon and other unknown materials may be formed in a fire situation.

5.3 SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIREFIGHTERS

Special Protective Equipment for Firefighters: Self-contained breathing apparatus and full protective gear should be worn in fighting large fires involving chemicals. Use water spray to keep fire exposed containers cool. Keep people away. Isolate fire and deny unnecessary entry.



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6. ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Personal Precautions: Avoid inhalation of vapors and spray mist and contact with skin and eyes. Ensure adequate ventilation. Wear suitable protective clothing.

6.2 ENVIRONMENTAL PRECAUTIONS

Environmental Precautions: **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 target areas. **DO NOT** contaminate water when disposing of equipment washwaters or rinsate. This product is highly toxic to bees exposed to direct treatment or residues on blooming crops or weeds if bees are visiting the treatment area.

6.3 METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN-UP

Methods for Clean-Up: Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. After removal flush contaminated area thoroughly with water. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to Remove residual contamination. Never return spills to original containers for re-use.

7. HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING:

Advice on Safe 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.

7.2 CONDITIONS FOR SAFE STORAGE:

Requirements for Storage Areas and Containers: Store in a in a tightly closed container in a cool, dry place. Do not contaminate water, food or feed by storage or disposal. Open dumping is prohibited.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 CONTROL PARAMETERS:

OCCUPATIONAL EXPOSURE LIMITS

U.S. Workplace Exposure Level (ACGIH) TLVs

Components	Type	Value
Butylated Hydroxytoluene	TWA	2 mg/m ³ IFV (Measured as Inhalable fraction and vapor)

U.S. Workplace Exposure Level (OSHA) PELs

Components	Type	Value
Not listed		

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Specimen
No listings		

8.2 EXPOSURE CONTROLS:

Engineering Measures

Provide adequate general and local exhaust ventilation. Observe Occupational Exposure Limits and minimize the risk of inhalation of vapors and spray mists. Provide eyewash station and safety shower.

Individual Protection Measures:

Eye / Face Protection: Goggles or shielded safety glasses are recommended. Chemical-resistant headgear for overhead exposure.
Skin Protection: Applicators and other handlers must wear: coveralls over short-sleeved shirt and short pants. Chemical-resistant gloves made out of barrier laminate or butyl rubber \geq 14 mils. Chemical-resistant footwear plus socks. Chemical-resistant apron when cleaning equipment, mixing, or loading.
Respiratory Protection: In case of inadequate ventilation or risk of inhalation of mists or vapors, use suitable respiratory equipment such as MSHA/NIOSH TC-84A with NIOSH equipped N, R, or P class filter media. Wear respiratory protection during operations where spraying or misting occurs. If respirators are used, a program should be in place to assure compliance with 29 CFR 1910.134, the OSHA Respiratory Protection standard. Wear air supplied respiratory protection if exposure concentrations are unknown.



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9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 APPEARANCE:	Liquid
ODOR:	Pungent, oil-like.
ODOR THRESHOLD:	No data available.
COLOR:	Clear amber.
pH:	5.05 (1% w/w).
MELTING POINT / FREEZING POINT:	No data available
BOILING POINT:	No data available
FLASH POINT:	> 100 °C (> 212 °F).
FLAMMABILITY (solid, gas):	No data available.
UPPER / LOWER FLAMMABILITY OR EXPLOSIVE LIMITS:	No data available.
VAPOR PRESSURE:	No data available.
SOLUBILITY:	Soluble.
PARTITION CO-EFFICIENT, n-OCTANOL / WATER:	No data available.
AUTO-IGNITION TEMPERATURE:	No data available.
DECOMPOSITION TEMPERATURE:	No data available.
VISCOSITY: (kinematic):	192.11 centistokes @ 20 °C 71.78 centistokes @ 40 °C
SPECIFIC GRAVITY (Water = 1):	1.042 g/ml
DENSITY:	8.70 lbs/gal / 1.04 kg/L

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

- 10.1 REACTIVITY
Stable
- 10.2 CHEMICAL STABILITY
Stable under normal temperature conditions
- 10.3 POSSIBILITY OF HAZARDOUS REACTIONS
No data available. Will not polymerize.
- 10.4 CONDITIONS TO AVOID
Excessive heat and moisture.
- 10.5 INCOMPATIBLE MATERIALS
Strong acids.
- 10.6 HAZARDOUS DECOMPOSITION PRODUCTS
Oxides of carbon and/or other asphyxiants may be formed from incomplete combustion.

11 TOXICOLOGICAL INFORMATION

- 11.3 LIKELY ROUTES OF EXPOSURE
Eye contact. Ingestion. Inhalation.
LC₅₀ (rat): >5.16 mg/L (4 HR)
LD₅₀ Oral (rat): 550 mg/kg
LD₅₀ Dermal (rat): > 5,000 mg/kg
Acute Toxicity Estimates: No data available
Skin Irritation (rabbit): Slightly irritating.
Eye Irritation (rabbit): Moderately irritating.
Specific Target Organ Toxicity: No data available
Aspiration: No data available
Skin Sensitization (guinea pig): Not a sensitizer
Carcinogenicity: IARC Group 3 (Unclassifiable as to Carcinogenicity in Humans); TLV-A4 (Not Classifiable as a Human Carcinogen).
Germ Cell Mutagenicity: No data available
Interactive Effects: None known



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12 ECOLOGICAL INFORMATION

12.3 ECOTOXICITY

The product is toxic to fish and wildlife.

Ecotoxicological Data

Species	Test Results
No data available	

Drift or runoff may adversely affect non-target plants.

Do not apply directly to water.

Do not contaminate water when disposing of equipment wash water.

Do not apply when weather conditions favor drift from target area.

12.2 PERSISTENCE AND DEGRADABILITY

Biodegradability: No data available.

12.3 BIOACCUMULATIVE POTENTIAL

Bioaccumulation: No data available.

12.4 MOBILITY IN SOIL

No data available.

12.5 OTHER ADVERSE EFFECTS

Assessment: No data available.

13 DISPOSAL CONSIDERATIONS

13.1 WASTE TREATMENT METHODS

Wastes may be disposed of on site or at an approved waste disposal facility. Triple rinse (or equivalent), adding rinse water to spray tank. Offer container for recycling or dispose of in a sanitary landfill or by other procedures approved by appropriate authorities. Recycling decontaminated containers is the best option of container disposal. The Agricultural Container Recycling Council (ACRC) operates the national recycling program. To contact your state and local ACRC recycler visit the ACRC web page at <http://www.acrecycle.org/>. Do not contaminate water, food or feed by storage or disposal.

14 TRANSPORT INFORMATION

14.3 LAND TRANSPORT

DOT Shipping Description: NOT REGULATED BY DOT

U.S. Surface Freight Classification: INSECTICIDES OR FUNGICIDES, INSECT OR ANIMAL REPELLENTS, NOI, OTHER THAN POISON (NMFC 102120; CLASS: 60)

15 REGULATORY INFORMATION

15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS

NFPA & HMIS Hazard Ratings:

NFPA

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

HMIS

2	Health
1	Flammability
0	Reactivity
H	PPE

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>		



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Reportable Quantity (RQ) under U.S. CERCLA: Not listed.

SARA, Title III, Section 313: N-Methyl-2pyrrolidone (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 harms.

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:

CAUTION

Harmful if swallowed.

Causes moderate eye irritation.

Do not get in eyes or on clothing.

Harmful if inhaled or absorbed through skin.

Avoid breathing spray mist.

Avoid contact with skin.

Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

16 OTHER INFORMATION

SDS STATUS: Format revised.

PREPARED BY: Registrations and Regulatory Affairs

REVIEWED BY: Environmental Health and Safety

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