

**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.: 34704-1099  
**TRADE NAME:** DOUBLE HEADER™
- 1.2 **RECOMMENDED USE:** GROUP 15 | 27 HERBICIDES FOR CONTROL OF ANNUAL GRASSES AND BROADLEAF WEEDS IN CORN VARIETIES
- 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**

Sensitization – Skin	Category 1	H317
Eye Damage/Irritation	Category 2B	H320
Specific Target Organ Toxicity – Single Exposure	Category 3	H335

**2.2 Label elements**



Signal word: WARNING  
 Hazard Statement: H317 – May cause an allergic skin reaction.  
 H320 – Causes eye irritation.  
 H335 – May cause respiratory irritation.

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

Precautionary Statement: (Response): P302+P352: IF ON SKIN: Wash with plenty of soap and water.  
 P333+P313 – If skin irritation or rash occurs: Get medical advice/attention.  
 P321 – Specific treatment (see First Aid on the product label).  
 P363 – Wash contaminated clothing 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 or doctor/physician if you feel unwell.

Precautionary Statement: (Storage): P403+P233 – Store in a well-ventilated place. Keep container tightly closed.  
 P405 – Store locked up.

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



## SAFETY DATA SHEET

SDS NUMBER: 0001099-17-LPI

SDS REVISIONS: NEW

DATE OF ISSUE: 01/05/17

**DOUBLE HEADER™**  
SUPERSEDES: NEW

- 2.3 **Other hazards not otherwise classified**  
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 [%]
Acetochlor	34256-82-1	35.00
Mesotrione	104206-82-8	4.10
Propylene Glycol	57-55-6	3 – 5
*Other ingredients	Trade Secret	55.9 – 57.9

\*Ingredients not specifically listed are non-hazardous or 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.

- Eye contact:** 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.
- Skin contact:** Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
- Ingestion:** Call a poison control center or doctor immediately for treatment advice. Have a 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. Call a poison control center or doctor for treatment advice.
- Inhalation:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

#### 4.2 Most Important Symptoms and Effects, Acute and Delayed

Symptoms: Causes eye irritation. May cause an allergic skin reaction in some individuals.

#### 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.

**NOTE TO PHYSICIAN:** Treat symptomatically.

---

### 5. FIRE FIGHTING MEASURES

---

#### 5.1 EXTINGUISHING MEDIA:

Suitable Extinguishing Media: Dry chemical, carbon dioxide (CO<sub>2</sub>), alcohol foam, foam, water spray or fog. Do not use water jet as this will spread the fire.

#### 5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE:

Specific Hazards During Firefighting: During a fire, oxides of carbon, hydrocarbons, and phosphorus can be released.

#### 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.



**SAFETY DATA SHEET**

**DOUBLE HEADER™  
SUPERSEDES: NEW**

SDS NUMBER: 0001099-17-LPI

SDS REVISIONS: NEW

DATE OF ISSUE: 01/05/17

**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 contaminate water when disposing of equipment washwaters or rinsate.

**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: Refer to product labeling for additional information. Avoid inhalation of mists, vapors / spray and contact with eyes, skin and clothing. Do not breathe mists or vapor. Wear personal protective equipment. Do not use in areas without adequate ventilation. Avoid prolonged exposure. Wash thoroughly after handling. Do not empty into drains. Handle and open container with care. Use care in handling/storage. Wash before eating, drinking and/or smoking.

**7.2 CONDITIONS FOR SAFE STORAGE:**

Requirements for Storage Areas and Containers: Do not store in or around the home. Store product in a cool, ventilated, dry, locked area. Do not allow prolonged storage in areas where temperatures frequently exceed 115 °F (46 °C). NEVER TRANSFER THIS PRODUCT TO ANOTHER CONTAINER FOR STORAGE. Do not contaminate water, food, feed or seed by storage or disposal.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

**8.1 CONTROL PARAMETERS:**

**OCCUPATIONAL EXPOSURE LIMITS**

**U.S. Workplace Exposure Level (ACGIH) TLVs**

Components	Type	Value
No listings	TWA	

**U.S. Workplace Exposure Level (OSHA) PELs**

Components	Type	Value
No listings	TWA	

**U.S. Workplace Exposure Level (AHLA) WEELs**

Components	Type	Value
Propylene Glycol	TWA	10 mg/m <sup>3</sup>

**Biological limit values**

**ACGIH Biological Exposure Indices**

Components	Value	Specimen
No listings		



# SAFETY DATA SHEET

SDS NUMBER: 0001099-17-LPI

SDS REVISIONS: NEW

DATE OF ISSUE: 01/05/17

**DOUBLE HEADER™**  
SUPERSEDES: NEW

## 8.2 EXPOSURE CONTROLS:

### Engineering Measures

When handlers use closed systems in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticide [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

### Individual Protection Measures:

Eye / Face Protection: Goggles or shielded safety glasses are recommended.  
Skin Protection: Long-sleeved shirt and long pants. Chemical-resistant gloves made of any waterproof material: barrier laminate, nitrile rubber, neoprene rubber, polyvinyl chloride (PVC), or Viton®. Shoes plus socks.  
Respiratory Protection: Not normally required. 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.

---

## 9. PHYSICAL AND CHEMICAL PROPERTIES

---

9.1 APPEARANCE : Liquid  
ODOR: Aromatic-like.  
ODOR THRESHOLD: No data available.  
COLOR: Light green.  
pH: 4 (1% w/w).  
MELTING POINT / FREEZING POINT: No data available.  
BOILING POINT: No data available.  
FLASH POINT: > 212 °F / > 100 °C.  
FLAMMABILITY (solid, gas): No data available.  
UPPER / LOWER FLAMMABILITY OR EXPLOSIVE LIMITS: No data available.  
VAPOR PRESSURE: No data available.  
SOLUBILITY: Emulsifies  
PARTITION CO-EFFICIENT, n-OCTANOL / WATER: No data available.  
AUTO-IGNITION TEMPERATURE: No data available.  
DECOMPOSITION TEMPERATURE: No data available  
VISCOSITY: (Kinematic): 897.7 Centistokes @ 20 °C / 68 °F | 444.2 Centistokes @ 40 °C / 104 °F  
SPECIFIC GRAVITY (Water = 1): 1.083 g/ml  
DENSITY: 9.04 lbs/gal / 1.08 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 and use conditions

### 10.3 POSSIBILITY OF HAZARDOUS REACTIONS

Do not mix or allow to come into contact with an oxidizing agent; a hazardous chemical reaction may occur. Will not polymerize.

### 10.4 CONDITIONS TO AVOID

Avoid prolonged storage at temperatures above 115 °F.

### 10.5 INCOMPATIBLE MATERIALS

Strong oxidizing agents.

### 10.6 HAZARDOUS DECOMPOSITION PRODUCTS

No data available.



# SAFETY DATA SHEET

SDS NUMBER: 0001099-17-LPI

SDS REVISIONS: NEW

DATE OF ISSUE: 01/05/17

DOUBLE HEADER™

SUPERSEDES: NEW

---

## 11 TOXICOLOGICAL INFORMATION

---

### 11.3 LIKELY ROUTES OF EXPOSURE

Eye contact.  
**LC<sub>50</sub> (rat):** > 5.22 mg/L (4 HR)  
**LD<sub>50</sub> Oral (female rat):** > 5000 mg/kg  
**LD<sub>50</sub> Dermal (rat):** > 5000 mg/kg  
**Acute Toxicity Estimates:** No data available  
**Skin Irritation (rabbit):** Slight irritation.  
**Eye Irritation (rabbit):** Causes moderate eye irritation.  
**Specific Target Organ Toxicity:** Single Exposure – May cause respiratory irritation.  
**Aspiration:** No data available  
**Skin Sensitization (guinea pig):** Sensitizer  
**Carcinogenicity:** No data available  
**Reproductive Toxicity:** No data available for end-use product  
**Germ Cell Mutagenicity:** No data available  
**Interactive Effects:** None known

---

## 12 ECOLOGICAL INFORMATION

---

### 12.3 ECOTOXICITY

The product is toxic to fish. 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 when disposing of equipment washwaters. Acetochlor demonstrates the properties and characteristics associated with chemicals detected in groundwater. The use of this product in areas where soils are permeable, particularly where the groundwater is shallow, may result in groundwater contamination.

#### Ecotoxicological Data

	Species	Test Results
Acetochlor technical	Rainbow Trout	0.45 mg/L – 96-hour LC <sub>50</sub>
	Bluegill sunfish	1.30 mg/L – 96-hour LC <sub>50</sub>
	Daphnia Magna	9 -16 mg/L – 48-hour EC <sub>50</sub>
	Apis mellifera	> 200 µ/bee – Contact LD <sub>50</sub> > 100 µ/bee - Oral LD <sub>50</sub>
Mesotrione	Rainbow Trout	> 114 ppm – 96-hour LC <sub>50</sub>
	Daphnia Magna	> 840 ppm - 48-hour EC <sub>50</sub>

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: Not readily biodegradable.

### 12.3 BIOACCUMULATIVE POTENTIAL

Bioaccumulation: No data available.

### 12.4 MOBILITY IN SOIL

Mesotrione: Moderately mobile in soil.

Acetochlor: Medium mobility in soil.

### 12.5 OTHER ADVERSE EFFECTS

Assessment: No data available.

---

## 13 DISPOSAL CONSIDERATIONS

---

### 13.1 WASTE TREATMENT METHODS

Contamination with this product will render water, food or feed unfit for human or animal consumption. Wastes may be disposed of on site or at an approved waste disposal facility. Do not reuse or refill this container. Triple rinse (or equivalent) promptly after emptying Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Refer to product label for additional Contain Handling instructions. 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.



**SAFETY DATA SHEET**

SDS NUMBER: 0001099-17-LPI

SDS REVISIONS: NEW

DATE OF ISSUE: 01/05/17

**DOUBLE HEADER™**  
SUPERSEDES: NEW

**14 TRANSPORT INFORMATION**

**14.3 LAND TRANSPORT**

**DOT Shipping Description:** NOT REGULATED BY USDOT

**U.S. Surface Freight Classification:** COMPOUND, TREE OR WEED KILLING, NOI (NMFC 50320, SUB 2: CLASS: 60)

**15 REGULATORY INFORMATION**

**15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS**

**NFPA & HMIS Hazard Ratings:**

NFPA		HMIS	
2	Health	0	Least
0	Flammability	1	Slight
0	Instability	2	Moderate
		3	High
		4	Severe
		2	Health
		0	Flammability
		0	Reactivity
		C	PPE

**SARA Hazard Notification/Reporting**

<b>SARA Title III Hazard Category:</b>	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: WARNING:** This product contains chemicals known to the State of California to cause cancer or birth defects or other reproductive harm.

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**

- Causes moderate eye irritation.
- Wear protective eyewear (goggles, face shield)
- Avoid contact with eyes, skin or clothing.
- Wash thoroughly with soap and water after handling and before eating drinking, chewing gum, using tobacco, or using the toilet.
- Remove and wash contaminated clothing before reuse.
- Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.
- Keep out of reach of children and domestic animals.

**16 OTHER INFORMATION**

**SDS STATUS:** New.

**PREPARED BY:** Registrations and Regulatory Affairs

**REVIEWED BY:** Environmental Health and Safety

*™DOUBLE HEADER is a trademark of Loveland Products, Inc.*

**EPA REG. NO.:** 34704-1099

**Disclaimer and Limitation of Liability:** This data sheet was developed from information on the constituent materials identified herein and does not relate to the use of such materials in combination with any other material or process. No warranty is expressed or implied with respect to the completeness or ongoing accuracy of the information contained in this data sheet, and LOVELAND PRODUCTS, INC. disclaims all liability for reliance on such information. This data sheet is not a guarantee of safety. Users are responsible for ensuring that they have all current information necessary to safely use the product described by this data sheet for their specific purpose.