

---

**1. PRODUCT AND COMPANY IDENTIFICATION**

---

Product Name: **Pim MSO Ultra™**  
Manufactured for: HEARTLAND AG, INC.  
P.O. Box 167  
407 W. Depot Road  
Farmer City, IL 61842  
Product Use: Methylated Soy Oil Plus Surfactant  
Emergency telephone number: (Chemtrec Information 24 hours) (800) 424-9300  
Customer Service, call: (800) 775-0333

---

**2. HAZARDS IDENTIFICATION**

---

**GHS Classification:**

Skin Irritation, Category 2, H315

Eye Irritation, Category 2A, H319

STOT SE, H335, H336



H315,H319,

H335,H336

**Signal Word:** Warning**Hazard Statements:**

H315: Causes skin irritation.

H319: Causes serious eye irritation.

H335: May cause respiratory irritation.

H336: May cause drowsiness or dizziness.

**Precautionary Statements:****Prevention**

P101: If medical advice is needed, have product container or label at hand.

P102: Keep out of reach of children.

P103: Read label before use.

P261: Avoid breathing dust/fume/gas/mist/vapors/spray.

P264: Wash protective equipment and work clothes thoroughly after handling.

P271: Use only outdoors or in a well-ventilated area.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

**Response**

P302+P352: IF ON SKIN: Wash with plenty of water.

P304+P340: If inhaled: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338: If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.  
Continue rinsing.

P312: Call a poison center/doctor or Chemtrec if person feels unwell.

P321: Treat Symptomatically.

P332+P313: If skin irritation occurs: Get medical advice or attention.

P362+P364: Take off contaminated clothing and wash it before reuse.

P337+P313: If eye irritation persists: Get medical advice/attention.

**Storage**

P403+P233: Store in a well-ventilated place. Keep container tightly closed.

P405: Store locked up.

**Disposal**

P501: Dispose of contents/container to disposal plant in accordance with federal, state and local regulations.

---

**3. COMPOSITION / INFORMATION ON INGREDIENTS**

---

<u>Component</u>	<u>CAS Number</u>	<u>Weight %</u>
Methyl ester, surfactant blend w/formulation aid	Proprietary	100%

---

**4. FIRST AID MEASURES**

---

IF SWALLOWED: Call a POISON CENTER/doctor or Chemtrec if person feels unwell. Rinse mouth. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to by a poison control center or doctor. Do not give anything to an unconscious person.

IF ON SKIN: Wash affected area with plenty of soap and water. Use tepid water if available. If skin irritation occurs: Get medical advice or attention. Treat Symptomatically. Take off contaminated clothing and wash it before reuse.

IF INHALED: Remove person to fresh air and keep comfortable for breathing. If person is having difficulty breathing, give oxygen. If not breathing, give artificial respiration. Call a POISON CENTER/doctor or Chemtrec if person feels unwell.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention.

Medical Conditions Aggravated by Overexposure: Repeated or prolonged exposure is not known to aggravate medical condition.

Other Effects: This product is not a carcinogen by NTP, OSHA and ACGIH.

---

**5. FIREFIGHTING MEASURES**

---

Suitable Extinguishing media: Water spray, foam, CO<sub>2</sub>, or dry chemicals may be used in areas where this product is stored. Use water spray to cool fire-exposed containers and to protect personnel.

Specific Hazards: None

PPE and Precautions: Firefighters should wear NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing. Heat may build pressure and rupture closed containers, spreading fire and increasing the risk of injury. Notify proper authorities if liquid material enters the sewer or public water.

---

**6. ACCIDENTAL RELEASE MEASURES**

---

In Case of Spill: Evacuate the spill area, except for cleanup personnel. Wear NIOSH/OSHA-approved respirator, splash goggles, full suit, boots and gloves. Control spill with adsorbent pads or booms. Recover free liquid. For recovery or disposal, add inert absorbent (sand, earth, sawdust, etc.) to spill area and shovel into containers for disposal. Product is slippery under foot; flush smooth surfaces thoroughly.

Disposal: Dispose of collected waste in accordance with federal, state and local regulations.

---

**7. HANDLING AND STORAGE**

---

Store in a well-ventilated place. Keep container tightly closed. Store locked up. Keep away from heat, sparks and flame. Keep container closed. Wear appropriate equipment and clothing to prevent eye contact and repeated or prolonged skin contact as referenced in Section 8 below. Use in areas with adequate mechanical exhaust ventilation, or wear respirator. **Protect product from freezing.** Keep containers sealed when not in use. Store in original container only.

---

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

---

Component Exposure Limits: N/D

Eye/Face Protections: Wear splash-proof chemical safety goggles. Contact lenses should not be worn when working with chemicals.

Skin Protection: Wear chemically impervious gloves, long-sleeved shirt, pants, shoes and socks to minimize skin contact. As precautions, wash hands and face with mild soap and water before eating, drinking, smoking or using restroom. After each shift, clean all protective equipment, wash work clothes, and shower.

Respiratory Protection: Not required under normal use conditions with good ventilation. Protect against spray mists. Respirator recommended in areas of poor ventilation.

General Protection: Avoid contact with skin, eyes and clothing. Avoid breathing vapors. Wash thoroughly after handling product. Eye wash fountains and drench showers should be located within a 10 second

walk from the work area per ANSI Z358.1-2009. Keep vapor concentration below 50 ppm.  
General dilution recommended.

Note: When selecting personal protective equipment and clothing, follow all of the manufacturer specifications and recommendations that apply to your specific operation and processing conditions. Take into consideration all working conditions and all chemicals to be handled or processed.

---

## 9. PHYSICAL AND CHEMICAL PROPERTIES

---

Appearance:	Clear, straw-colored liquid	UEL:	N/D
Odor:	Fatty ester/alcohol odor	LEL:	N/D
Odor Threshold:	N/D	Vapor Pressure:	N/D
pH:	5.5 - 6.5	Vapor Density:	N/D
Melting Point:	N/A	Relative Density:	7.37 lbs/gallon
Freezing Point:	N/D	Solubility:	Dispersible in water
Boiling Point:	>200°F	Partition Coefficient:	N/D
Flash Point:	N/D	Autoignition Temperature:	N/D
Evaporation Rate:	N/D	Decomposition Temperature:	N/D
Flammability:	N/A		

---

## 10. STABILITY AND REACTIVITY

---

Stability:	Stable
Possibility of Hazardous Reactions:	Hazardous polymerization will not occur
Condition to Avoid:	N/A
Incompatible Materials:	Strong oxidizing agents. Isolate from open flame and heat. Keep material away from aluminum metal, oleum and nitroform.
Hazardous Decomposition Products:	Incomplete combustion may yield carbon monoxide, carbon dioxide and other hazardous gas.

---

## 11. TOXICOLOGICAL INFORMATION

---

Acute Oral Toxicity:	LD50 > 5,000 mg/kg
Acute Eye Irritation:	Corneal involvement or other eye irritation clearing in 7 days or less
Acute Dermal Irritation:	Moderately irritating
Acute Dermal Toxicity:	LD50 > 2,000 mg/kg
Acute Inhalation:	N/D
Component Carcinogenicity:	None of this product's components are listed by ACGIH, IARC, OSHA, NIOSH, or NTP.

---

## 12. ECOLOGICAL INFORMATION

---

DAPHNIA MAGNA  
 24 hours EC50 >100 mg/L  
 48 hours EC50 92 mg/L 95% confidence limit 54-156 mg/L  
 Highest test concentration resulting in 0% immobilization 2.2 mg/L  
 Lowest test concentration resulting in 100% immobilization >100 mg/L

RAINBOW TROUT  
 96 hour LC50 is 24 mg/L  
 The "no observed effect level" is 4.6 mg/L

**13. DISPOSAL CONSIDERATIONS**

Component Waste Numbers:	No EPA Waste Numbers are applicable for this product's components.
Disposal Instructions:	Dispose of material in compliance with applicable federal, state and local environmental regulations. Recycle or rework material if at all possible. Incinerate material at an approved facility, or treat at an acceptable waste treatment facility or municipal waste treatment plant after proper testing and approval of waste samples.
Container Reuse:	An empty container can contain product residue, and should not be reused. If not professionally cleaned and reconditioned, crushing or other means is recommended to prevent unauthorized reuse. Discarded product is not an RCRA hazardous waste under 40 CFR 261. Dispose of container to disposal plant in accordance with federal, state and local regulations.

**14. TRANSPORT INFORMATION**

DOT Status (Highway and rail):	Not Regulated
IATA Status (Air):	Not Regulated
Marine Pollutant:	No

**15. REGULATORY INFORMATION**

TSCA: All components of this product are listed under the regulation of the Toxic Substance Control Act.  
 SARA HAZARD: No

**16. OTHER INFORMATION**

HMIS Hazard Rating		NFPA
Health:	1	
Flammability:	1	
Reactivity:	0	
Personal Protection:	X	

Date Prepared: February 18, 2014  
 Last Updated: March 28, 2016

**WHILE INFORMATION AND RECOMMENDATIONS SET FORTH HEREIN ARE BELIEVED TO BE ACCURATE AS OF THE DATE HEREON, HEARTLAND AG. INC. MAKES NO WARRANTY WITH RESPECT THERETO AND DISCLAIMS ALL LIABILITY FROM RELIANCE THEREON.**

N/R—Not Rated  
 N/D—Not Determined  
 N/A—Not Applicable  
 N/E—Not Established

EPA = Environmental Protection Agency; TSCA = Toxic Substance Control Act; ACGIH = American Conference of Governmental Industrial Hygienists; IARC = International Agency for Research on Cancer; NIOSH = National Institute for Occupational Safety and Health; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration., NJTSR = New Jersey Trade Secret Registry.