



# Safety Data Sheet

United Phosphorus, Inc.

Preparation Date 29-Apr-2015

Revision date 15-Feb-2016

Revision Number: 4

## 1. Identification of the Substance/Preparation and of the Company/Undertaking

### Product identifier

**Product Description:** Lifeline Herbicide

### Other means of identification

**Item#:** 12U-901  
**Synonyms** Not Available  
**Registration number(s)** 70506-310

### Recommended use of the chemical and restrictions on use

**Recommended use** Herbicide.  
**Uses advised against** Activities contrary to label recommendation

### Details of the Supplier of the Safety Data Sheet

#### **Supplier Address**

United Phosphorus Inc.  
630 Freedom Business Center  
Suite 402  
King of Prussia, PA 19406

#### **Emergency telephone number**

**Company Phone Number** 1-800-438-6071  
**Emergency telephone number** Chemtrec: (800) 424-9300 (24hrs) or (703) 527-3887  
Medical: Rocky Mountain Poison Control Center  
(866) 673-6671 (24hrs)

## 2. Hazards Identification

### Classification

#### **OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Dermal	Category 4
Acute toxicity - Inhalation (Vapors)	Category 4
Reproductive Toxicity	Category 1B
Specific target organ toxicity (repeated exposure)	Category 2

### Label elements

#### **EMERGENCY OVERVIEW**

**DANGER**

#### **hazard statements**

Harmful in contact with skin  
HARMFUL IF INHALED  
May damage fertility or the unborn child  
May cause damage to organs through prolonged or repeated exposure



**appearance** Red

**Physical state** liquid

**Odor** No information available

**Precautionary Statements - Prevention**

Do not handle until all safety precautions have been read and understood  
 Do not handle until all safety precautions have been read and understood  
 Wear cold insulating gloves/face shield/eye protection  
 Use only outdoors or in a well-ventilated area  
 Do not breathe dust/fume/gas/mist/vapors/spray

**Precautionary Statements - Response**

IF exposed or concerned: Get medical advice/attention  
 IF ON SKIN: Wash with plenty of soap and water  
 Call a POISON CENTER or doctor if you feel unwell  
 Wash contaminated clothing before reuse  
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

**Precautionary Statements - Storage**

Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards Not Otherwise Classified (HNOC)**

**OTHER INFORMATION**

- Harmful to aquatic life with long lasting effects
- May be harmful in contact with skin

**3. Composition/information on Ingredients**

Chemical name	CAS-No	Weight %	Trade secret
Glufosinate ammonium	Proprietary	20 - 30%	
Propylene glycol monomethyl ether	107-98-2	8.93	

If CAS number is "proprietary", the specific chemical identity and percentage of composition has been withheld as a trade secret.

**4. First aid measures**

**FIRST AID MEASURES**

**Eye contact** Hold eye open and rinse slowly and gently with water for 15 - 20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

**Skin contact** Wash off immediately with plenty of water for at least 15 minutes. Call 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 physician or poison control center immediately.

**Ingestion** Never give anything by mouth to an unconscious person. Do not induce vomiting without

medical advice. Call a physician or poison control center immediately.

**Protection of First-aiders** Use personal protective equipment.

**Most Important Symptoms and Effects, Both Acute and Delayed**

**Most Important Symptoms and Effects** No information available.

**Indication of Any Immediate Medical Attention and Special Treatment Needed**

**Notes to physician** Treat symptomatically.

## 5. Fire-fighting measures

**Suitable extinguishing media**

Use: Dry chemical. Carbon dioxide (CO<sub>2</sub>). Water spray. alcohol-resistant foam.

**Unsuitable extinguishing media** No information available.

**Specific hazards arising from the chemical**

In the event of fire and/or explosion do not breathe fumes. Risk of ignition. Combustible material.

**Hazardous combustion products** Carbon oxides. Carbon monoxide. Sulfur oxides.

**Explosion data**

**Protective equipment and precautions for firefighters**

Use personal protective equipment. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**

**Personal Precautions** Provide adequate ventilation. Avoid contact with skin, eyes and inhalation of vapors. Use personal protective equipment. Remove all sources of ignition. Take precautionary measures against static discharges. Wash thoroughly after handling.

**Environmental Precautions**

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

**Methods and material for containment and cleaning up**

**Methods for Clean-Up** Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labelled containers.

## 7. Handling and Storage

**Precautions for safe handling**

**Handling** Wear personal protective equipment. Do not breathe vapours or spray mist. Avoid contact with skin and eyes. Remove all sources of ignition. To avoid ignition of vapours by static electricity discharge, all metal parts of the equipment must be grounded. Do not eat, drink or smoke when using this product.

**Conditions for safe storage, including any incompatibilities**

**Storage** Keep containers tightly closed in a cool, well-ventilated place. Keep away from heat. Protect from light. Keep in properly labelled containers. Keep away from heat and sources of ignition. Keep out of the reach of children. Do not store near combustible materials. Store in

an area where cross-contamination with pesticides, fertilizers, food or feed could not occur.

**incompatible materials**

Strong acids. Strong oxidizing agents. Bases.

## 8. Exposure Controls/Personal Protection

**Exposure guidelines**

Chemical name	ACGIH TLV	OSHA PEL
Propylene glycol monomethyl ether	STEL: 100 ppm TWA: 50 ppm	(vacated) TWA: 100 ppm (vacated) TWA: 360 mg/m <sup>3</sup> (vacated) STEL: 150 ppm (vacated) STEL: 540 mg/m <sup>3</sup>

**Engineering controls**

Investigate engineering techniques to reduce exposures. Local mechanical exhaust ventilation is preferred. Consult ACGIH ventilation manual or NFPA Standard 91 for design of exhaust systems.

**Personal protective equipment****Eye/Face Protection**

Use eye protection to avoid eye contact. Where there is potential for eye contact have eye flushing equipment available. Safety glasses with side-shields.

**Skin protection**

Wear protective gloves/clothing. Socks and footwear.

**Respiratory protection**

Where airborne exposure is likely, use NIOSH approved respiratory protection equipment appropriate to the material and/or its components. Full facepiece equipment is recommended and, if used, replaces need for face shield and/or chemical goggles. If exposures cannot be kept at a minimum with engineering controls, consult respirator manufacturer to determine appropriate type equipment for given application. Observe respirator use limitations specified by NIOSH or the manufacturer. For emergency and other conditions where there may be a potential for significant exposure, use an approved full face positive-pressure, self-contained breathing apparatus. Respiratory protection programs must comply with 29 CFR 1910.134. For emergency and other conditions where exposure limit may be significantly exceeded, use an approved full face positive-pressure, self-contained breathing apparatus or positive pressure airline with auxiliary self-contained air supply. Respiratory protection programs must comply with 29 CFR 1910.134.

**General hygiene considerations**

When using, do not eat, drink or smoke. Remove and wash contaminated clothing before re-use. Wash hands and face before breaks and immediately after handling the product. Wear suitable gloves and eye/face protection.

## 9. Physical and Chemical Properties

**Information on basic physical and chemical properties**

<b>Physical state</b>	liquid	<b>Odor</b>	No information available
<b>appearance</b>	Red		
<b>color</b>	No information available		
<b>Property</b>	<b>VALUES</b>	<b>Remarks/ • Method</b>	
<b>pH</b>	7		
<b>Melting point/freezing point</b>	No information available		
<b>Boiling Point/Range</b>	No information available		
<b>Flash Point</b>	156 F / 69 C		
<b>Evaporation Rate</b>	No information available		
<b>flammability (solid, gas)</b>	No information available		
<b>Flammability limit in air</b>			
<b>Upper Flammability Limit</b>	No information available		
<b>Lower Flammability Limit</b>	No information available		
<b>vapor pressure</b>	No information available		
<b>Vapor Density</b>	No information available		
<b>Specific gravity</b>	1.15 @20 C		
<b>Water solubility</b>	No information available		
<b>Solubility in Other Solvents</b>	No information available		
<b>Partition coefficient: n-octanol/water</b>	No information available		
<b>Autoignition temperature</b>	No information available		
<b>decomposition temperature</b>	No information available		

<b>Viscosity, kinematic</b>	No information available
<b>Dynamic viscosity</b>	No information available
<b>Explosive properties</b>	No information available
<b>Oxidizing properties</b>	No information available

**OTHER INFORMATION**

<b>Softening point</b>	No information available
<b>molecular weight</b>	No information available
<b>VOC Content</b>	No information available
<b>density</b>	No information available
<b>Bulk density</b>	No information available

## 10. Stability and Reactivity

**Reactivity**

no data available

**Chemical stability**

Stable under normal conditions. Hazardous polymerisation does not occur.

**Possibility of hazardous reactions**

None under normal processing.

**Conditions to avoid**

Keep away from open flames, hot surfaces and sources of ignition.

**incompatible materials**

Strong acids. Strong oxidizing agents. Bases.

**Hazardous decomposition products**

Carbon oxides. Carbon monoxide. Oxides of sulfur.

## 11. Toxicological Information

**Information on Likely Routes of Exposure**

<b>Product information</b>	Lifeline/Interline : Acute oral LD50 (rat) - >5,000 mg/kg Acute dermal LD50(rat/rabbit) = >2,000 mg/kg Acute inhalation LC50 (rat) 4 hr = >3.133 mg/L [ $>12.5$ mg/L 1 hr] Primary eye irritation (rabbit) = Not an irritant Primary dermal irritation (rabbit)= Not an irritant Dermal sensitization = Not a sensitizer
<b>Inhalation</b>	May cause irritation of respiratory tract. May be harmful if inhaled.
<b>Eye contact</b>	May cause temporary eye irritation.
<b>Skin contact</b>	May cause irritation.
<b>Ingestion</b>	HARMFUL IF SWALLOWED.

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Glufosinate ammonium	1514 mg/kg (rat)	> 2000 mg/kg (rat)	2.164 mg/l (rat)
Propylene glycol monomethyl ether 107-98-2	= 5200 mg/kg ( Rat )	= 13 g/kg ( Rabbit )	= 54.6 mg/L ( Rat ) 4 h > 24 mg/L ( Rat ) 1 h

**Information on Toxicological Effects**

**Symptoms** No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**sensitization** No information available.  
**Mutagenic effects** No information available.

<b>Carcinogenicity</b>	The information below indicates whether any agency has listed any ingredient as a carcinogen.
<b>Reproductive effects</b>	Not Available.
<b>STOT - Single Exposure</b>	No information available.
<b>STOT - repeated exposure</b>	No information available.
<b>Chronic toxicity</b>	Avoid repeated exposure.
<b>Target organ effects</b>	Respiratory System, EYES, skin, Central Nervous System (CNS).
<b>Aspiration hazard</b>	No information available.

**Numerical Measures of Toxicity - Product information**

<b>LD50 Oral</b>	> 5000 mg/kg (rat)
<b>LD50 Dermal</b>	> 2000 mg/kg (rat)
<b>LC50 Inhalation:</b>	LC50/inhalation/4h/rat = > 12.5 mg/l

**12. Ecological Information****ecotoxicity**

Do not apply directly to water to areas where surface water is present or to intertidal areas below the mean high water mark. Do not clean equipment or dispose of equipment washwater in a manner that will contaminate water resources or areable land. Do not apply when weather conditions favor drift from treated areas.

**Persistence/Degradability**

No information available.

**Bioaccumulation/ Accumulation**

Bioaccumulative potential.

Chemical name	Log Pow
Propylene glycol monomethyl ether 107-98-2	-0.437

**Other Adverse Effects**

No information available

**13. Disposal Considerations****Waste Treatment Methods****Waste Disposal Method**

Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide or rinsate is a violation of Federal law. If the wastes cannot be disposed of by use or according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**Contaminated packaging**

Refer to product label.

**14. Transport Information****DOT**

When shipped domestically (US) in bulk containers (>119 gallon capacity) this product is classified as a Combustible liquid as per 49 CFR 173.150(f). As such the documentation will be noted as Combustible Liquid, n.o.s. (Propylene glycol monomethyl ether), Comb Liq, NA1993, PG III. When shipped domestically by highway in non-bulk containers this product can be shipped as not regulated.

This is a US transportation regulation only; as US only recognizes combustible liquids, and this material is not regulated for international transportation.

**TDG** NOT REGULATED

**IATA** NOT REGULATED

**IMDG/IMO** NOT REGULATED

## 15. Regulatory Information

This chemical is a pesticide product registered by the 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, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

**signal word** CAUTION

**Ventilation Control** PESTICIDE APPLICATORS & WORKERS THESE WORKERS MUST REFER TO PRODUCT LABELING AND DIRECTIONS FOR USE IN ACCORDANCE WITH EPA WORKER PROTECTION STANDARD 40 CFR PART 170.

**Harmful if absorbed through the skin. Keep out of Reach of Children.**

### **International Inventories**

<b>USINV</b>	Not determined
<b>DSL/NDSL</b>	Not determined
<b>EINECS/ ELINCS</b>	Complies
<b>ENCS</b>	Does not comply
<b>China</b>	Does not comply
<b>KECL</b>	Does not comply
<b>PICCS</b>	Does not comply
<b>AICS</b>	Does not comply
<b>TSCA</b>	Does not comply

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

**AICS** - Australian Inventory of Chemical Substances

### **Federal Regulations**

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and and Title 40n of the Code of Federal Regulations, Part 372:

#### **SARA 311/312 Hazardous**

##### **Categorization**

<b>Acute health hazard</b>	yes
<b>Chronic health hazard</b>	yes
<b>Fire hazard</b>	No
<b>Sudden release of pressure hazard</b>	No
<b>Reactive Hazard</b>	No

**CERCLA**  
**SARA Product RQ** 0

**RCRA**  
**Pesticide Information**

Component	FIFRA - Restricted Use	FIFRA - Pesticide Product Other Ingredients	FIFRA - Listing of Pesticide Chemicals	California Pesticides - Restricted Materials
Propylene glycol monomethyl ether 107-98-2 ( 8.93 )			X	

**State Regulations**

**State Right-to-Know**

Chemical name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Propylene glycol monomethyl ether	X	X	X		

**International regulations**

**U.S. EPA Label information**

EPA Pesticide registration number 70506-310

**16. Other Information**

**NFPA** HEALTH 1 flammability 2 Instability 0 Physical hazard -

Preparation Date 29-Apr-2015  
 Revision date 15-Feb-2016

Revision Summary  
 Update section 14

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**End of MSDS**