



Safety Data Sheet

United Phosphorus, Inc.

Preparation Date 01-Sep-2016

Revision date 06-Feb-2017

Revision Number: 2

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

Product identifier

Product Description: Shutdown Herbicide

Other means of identification

Item#: 12U-326
Registration number(s) 70506-326

Recommended use of the chemical and restrictions on use

Recommended use Herbicide.
Uses advised against Activities contrary to label recommendation
Non labeled activities

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 215-715-2174
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 - Oral	Category 4
Acute toxicity - Dermal	Category 4
Acute toxicity - Inhalation (Vapors)	Category 1
Skin sensitization	Category 1

Label elements

EMERGENCY OVERVIEW

DANGER

Hazard Statements

Fatal if inhaled
May cause an allergic skin reaction



Appearance Opaque**Physical state** Liquid**Odor** Characteristic**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling
 Do not eat, drink or smoke when using this product
 Wear protective gloves/protective clothing/eye protection/face protection
 Do not breathe dust/fume/gas/mist/vapors/spray
 Use only outdoors or in a well-ventilated area
 In case of inadequate ventilation wear respiratory protection
 Contaminated work clothing should not be allowed out of the workplace

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 skin irritation or rash occurs: Get medical advice/attention

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Immediately call a POISON CENTER or doctor/physician

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

Precautionary Statements - Storage

Store in a well-ventilated place. Keep container tightly closed

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards Not Otherwise Classified (HNOC)**OTHER INFORMATION****3. Composition/information on Ingredients**

Chemical name	CAS-No	Weight %	Trade secret
Sulfentrazone	122836-35-5	40.7	
Ethylene glycol	107-21-1	5.1	

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	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. 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 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.
Ingestion	Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice.

Most Important Symptoms and Effects, Both Acute and Delayed

Most Important Symptoms and No information available.

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

Notes to physician Treat symptomatically.

5. Fire-fighting measures

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media No information available.

Specific hazards arising from the chemical

No information available.

Hazardous combustion products Carbon monoxide. Carbon dioxide (CO₂). Oxides of nitrogen. Sulfur oxides. Hydrogen chloride. Hydrogen fluoride.

Explosion data**Protective equipment and precautions for firefighters**

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 Do not breathe vapours or spray mist. Use personal protective equipment. Avoid contact with skin and eyes. Wash thoroughly after handling.

Environmental Precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.

Methods and material for containment and cleaning up

Methods for Clean-Up Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Sweep up and shovel into suitable containers for disposal.

7. Handling and Storage

Precautions for safe handling

Handling Do not eat, drink or smoke when using this product. Avoid contact with skin and eyes. Wear personal protective equipment. Wash thoroughly after handling. Keep out of reach of children.

Conditions for safe storage, including any incompatibilities

Storage Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat and sources of ignition.

incompatible materials No materials to be especially mentioned.

8. Exposure Controls/Personal Protection

Exposure guidelines

Chemical name	ACGIH TLV	OSHA PEL
Ethylene glycol	Ceiling: 100 mg/m ³ aerosol	(vacated) Ceiling: 50 ppm (vacated) Ceiling: 125 mg/m ³

	only	
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. If splashes are likely to occur, wear: Goggles.	
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.	

General hygiene considerations

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

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical state	Liquid	Odor	Characteristic
Appearance	Opaque		
color	Tan		

<u>Property</u>	<u>VALUES</u>	<u>Remarks/ • Method</u>
pH	6.49	
Melting point/freezing point	No information available	
Boiling Point/Range	No information available	
Flash Point	No information available	
Evaporation Rate	No information available	
Flammability (solid, gas)	No information available	
Flammability limit in air		
Upper Flammability Limit	No information available	
Lower Flammability Limit	No information available	
vapor pressure	No information available	
Vapor Density	No information available	
Specific gravity	1.2 g/cm ³	
Water solubility	No information available	
Solubility in Other Solvents	No information available	
Partition coefficient: n-octanol/water	No information available	
Autoignition temperature	No information available	
Decomposition temperature	No information available	
Viscosity, kinematic	No information available	
Dynamic viscosity	No information available	
Explosive properties	No information available	
Oxidizing properties	No information available	

OTHER INFORMATION

Softening point	No information available
molecular weight	No information available
VOC Content	No information available
density	No information available
Bulk density	No information available

10. Stability and Reactivity

Reactivity

no data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

Extremes of temperature and direct sunlight.

incompatible materials

No materials to be especially mentioned.

Hazardous decomposition products

Hydrogen chloride. Carbon oxides. Oxides of sulfur. Hydrogen chloride. Hydrogen fluoride.

11. Toxicological Information

Information on Likely Routes of Exposure

Product information

Shutdown/Boycott

Acute Oral LD50 (rat) = >2000 mg/kg

Acute Dermal LD50 (rat) = >2000 mg/kg

Acute inhalation LC50 (rat) 4 hr = >0.435 mg/L - No mortality

Inhalation	May cause irritation of respiratory tract.
Eye contact	May cause slight irritation.
Skin contact	May cause irritation.
Ingestion	MAY BE HARMFUL IF SWALLOWED.

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.
Carcinogenicity	There are no known carcinogenic chemicals in this product.
Reproductive effects	Not Available.
STOT - Single Exposure	No information available.
STOT - Repeated Exposure	No information available.
Aspiration hazard	No information available.

Numerical Measures of Toxicity - No information available

LD50 Oral	> 2,000 mg/kg (rat)
LD50 Dermal	> 2,000 mg/kg (rat)
LC50 Inhalation	> 1.74 mg/l (rat) (1 hr) No mortality

12. Ecological Information

ecotoxicity

Sulfentrazone
 Slightly toxic to fish and aquatic arthropods LC50 ranges from 60.4 - >130 mg/L
 Upland game birds Oral LD50 >2,250 mg/kg
 Bluegill sunfish LC50 (96 hr) = 30.8 mg/L
 Daphnia magna LC50 (48 hr) = 8.31 mg/L
 Bee Oral LC50 (48 hr) = >2006 mg/bee

Persistence/Degradability

No information available.

Bioaccumulation/ Accumulation

Bioaccumulative potential.

Chemical name	Log Pow
Ethylene glycol 107-21-1	-1.93

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. Dispose of contents/container in accordance with local regulation.

Contaminated packaging Refer to product label.

14. Transport Information

DOT When shipped domestically by highway in non-bulk containers this product can be shipped as not regulated. When shipped in bulk, by vessel, or internationally use the IMDG shipping description:

TDG When shipped in Canada domestic highway non-bulk this product can be shipped as Not regulated as per TDG 1.45.1
 In bulk - use IMDG description

IATA

UN-No UN3082
Proper shipping name Environmentally hazardous substances, liquid, n.o.s (sulfentrazone)
Hazard class 9
Packing group PG III
Description Marine Pollutant

IMDG/IMO

UN-No UN3082
Proper shipping name Environmentally hazardous substances, liquid, n.o.s (sulfentrazone)
Hazard class 9

Packing group PG III
Marine Pollutant Marine pollutant

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 WARNING

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.

Keep out of Reach of Children. May be fatal if inhaled. Harmful if swallowed or absorbed through the skin. Toxic to aquatic and estuarine invertebrates.

International Inventories

USINV Does not comply
DSL/NDSL Does not comply
EINECS/ELINCS Does not comply
ENCS Does not comply
China Does not comply
KECL Does not comply
PICCS Does not comply
AICS Does not comply
TSCA 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 does not contain any 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

Acute health hazard yes
Chronic health hazard NO
Fire hazard No
Sudden release of pressure hazard No
Reactive Hazard No

Chemical name	RQ	CERCLA EHS RQs	RQ
Ethylene glycol 107-21-1	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ

CERCLA

Component	RQ
Ethylene glycol 107-21-1 (5.1)	5000 lb

RCRA

Pesticide Information

Component	FIFRA - Restricted Use	FIFRA - Pesticide Product Other Ingredients	FIFRA - Listing of Pesticide Chemicals	California Pesticides - Restricted Materials
Ethylene glycol 107-21-1 (5.1)			X	

State Regulations

State Right-to-Know

International regulations

U.S. EPA Label information

EPA Pesticide registration number 70506-326

16. Other Information

NFPA

HEALTH 2

flammability 0

Instability 0

Physical hazard -

Preparation Date

01-Sep-2016

Revision date

06-Feb-2017

Revision Summary

Update section 11

Disclaimer

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End of MSDS