



Material Safety Data Sheet

United Phosphorus, Inc.

NFPA	PPE	

Issued Date 12-Dec-2007

Revision Date 20-Nov-2009

Revision Number: 3

1. PRODUCT AND COMPANY IDENTIFICATION

UPI
 630 Freedom Business Center
 Suite 402
 King of Prussia, PA 19406

Emergency Telephone Number
 Chemtrec: (800) 424-9300 (24hrs) or (703) 527-3887
 Medical: Rocky Mountain Poison Control Center
 (866) 673-6671 (24hrs)

Company Information
 UPI

Contact Information
 Customer Service
 R&D Technical Service

Phone Number
 1-800-438-6071
 610-878-6100

Available Hrs
 8:00 am to 5:00 pm EST
 8:00 am - 5:00 pm (EST)

Product Name Storm Herbicide
EPA Reg # 70506-59
Recommended Use herbicide
Product Code 12U-140

2. HAZARDS IDENTIFICATION

Emergency Overview

May cause severe eye irritation and moderate skin irritation.
 Harmful if inhaled

DANGER!

Appearance Light, to, Dark amber.

Physical State Liquid.

Odor Unusual . Mild.

Potential Health Effects

Eyes Causes irreversible eye damage..
Skin May be absorbed through the skin in harmful amounts.
Inhalation Harmful by inhalation.
Ingestion Harmful if swallowed.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients Name

Chemical Name	CAS-No	Weight %	OSHA PEL
53% solution of Sodium bentazon	50723-80-3	29.2	N/A
Acifluorfen, sodium salt	62476-59-9	13.4	N/A

4. 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

Take off contaminated clothing.
Rinse skin immediately with plenty of water for 15-20 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.
Call a physician or Poison Control Centre immediately

Ingestion

Call a physician or Poison Control Center immediately
Have 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
Never give anything by mouth to an unconscious person

Notes to Physician

No information available

5. FIRE-FIGHTING MEASURES

Flammable Explosive Properties

Flash Point

Not determined

Autoignition Temperature

Not available

Flammability Limits in Air

Not available

Extinguishing Media

Water, Foam Dry chemical.

Fire/Explosion Hazard

May produce toxic materials during fire conditions

Hazardous Combustion Products

Sulfur oxides, Oxides of nitrogen, Hydrogen chloride, hydrogen fluoride.

NFPA

Health 2

Flammability 0

Instability 0

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Avoid contact with the skin and the eyes. Use personal protective equipment.
Environmental Precautions	Consult a regulatory specialist to determine appropriate state or local reporting requirements, for assistance in waste characterization and/or hazardous waste disposal and other requirements listed in pertinent environmental permits..
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

Handling	Keep out of reach of children. Do not eat, drink or smoke when using this product. Wear personal protective equipment. Avoid breathing vapors or mists. Keep from freezing.
Storage	Keep from freezing.. Store in original container. . Store in an area where cross-contamination with pesticides, fertilizers, food or feed could not occur. .

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

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

Where there is potential for eye contact have eye flushing equipment available.. Use eye protection to avoid eye contact. .

Skin Protection

Wear protective gloves/clothing.

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. Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. Remove and wash contaminated clothing before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Light to Dark amber	Odor	Unusual Mild
Physical State	Liquid	pH	approx.8.5
Boiling Point/Range	approx. 212°F	Melting Point/Range	Not available
Specific Gravity	1.22 g/mL	Solubility	Soluble
Evaporation Rate	Not available	Vapor Pressure	Not available
Vapor Density	Not available	VOC Content	Not available
Viscosity	Not available	Molecular Weight	No data available
Bulk Density	10.15 lb/gal	Percent Solids	Not available
Percent Volatiles	Not available		

10. STABILITY AND REACTIVITY

Stability	Stable under recommended storage conditions
Conditions to Avoid	Freezing temperatures.
Incompatible Materials	No materials to be especially mentioned.
Hazardous Decomposition Products	Oxides of sulfur. Oxides of nitrogen. Hydrogen fluoride. Hydrogen chloride.
Possibility of Hazardous Polymerization	Hazardous polymerisation does not occur

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Product Information

Storm Herbicide:
Acute oral LD50 : 998 mg/kg (rat)
Acute dermal LD50 : >2,000 mg/kg (rat)
Acute inhalation LC50 : >2.03 mg/L (rat, 4 hour)
Eye irritation : Severe irritant (rabbit)
Skin irritation : Moderately irritating (rabbit)

Chronic Toxicity

Sodium acifluorfen, the active ingredient has been designated as a probable human carcinogen by US EPA..

Carcinogenicity

12. ECOLOGICAL INFORMATION

Ecotoxicity

12. ECOLOGICAL INFORMATION

Sodium acifluorfen-

Aquatic:

Rainbow trout, 96 hr LC50 = 54 mg ai/L

Bluegill sunfish, 96 hr LC 50 = 31 mg ai/L (static)

Daphnia magna, 48 hr EC50 = 28 mg ai/L

Avian:

Bobwhite quail, LC50 >10,000 mg/kg

Mallard duck, LC50 >10,000 mg/kg. Sodium bentazon -

Aquatic:

Rainbow trout, 96 hr LC50 = >100 mg/L

Bluegill sinfish, 96 hr LC50 = > 100 mg/L

Daphnia magna, 48 hr EC50 = > 500 mg/L

Avain:

Bobwhite quail, LC50 >5,000 mg/kg

Mallard duck, LC50 >5,000 mg/kg.

13. DISPOSAL CONSIDERATIONS

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

Empty containers should be taken for local recycling, recovery or waste disposal

14. TRANSPORT INFORMATION

DOT Not regulated

ICAO Not regulated

IATA Not regulated

IMDG/IMO Not regulated

15. REGULATORY INFORMATION

International Inventories

53% solution of Sodium bentazon

EINECS/ELINCS Listed

CHINA Listed

KECL Listed

Acifluorfen, sodium salt

NDSL Listed

EINECS/ELINCS Listed

CHINA Listed

USA

12U-140 - Storm Herbicide

Federal Regulations

SARA 313

Y

Chemical Name	CAS-No	Weight %
Acifluorfen, sodium salt	62476-59-9	13.4

SARA 311/312 Hazardous Categorization

Chronic Health Hazard	Yes
Acute Health Hazard	Yes
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product contains the following HAPs:

Chemical Name	CAS-No	Weight %	HAPS data	VOC Chemicals	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Acifluorfen, sodium salt	62476-59-9	13.4	Listed.			

CERCLA

Chemical Name	RQ
Acifluorfen, sodium salt	Listed.

RCRA

Pesticide Information

State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:

Chemical Name	CAS-No	Category	California Prop. 65
Acifluorfen, sodium salt	62476-59-9		Listed. Listed: January 1, 1990 Carcinogenic.

State Right-to-Know

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Acifluorfen, sodium salt				Listed.	

International Regulations

Mexico - Grade

Not available

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class

Not determined

16. OTHER INFORMATION

Revision Date

20-Nov-2009

Revision Summary

Update section 15

UPI, Inc. believes that the information and recommendations contained herein (including data and statements) are accurate as of the date hereof. NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WARRANTY OF MERCHANTABILITY, OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, IS MADE CONCERNING THE INFORMATION PROVIDED HEREIN. The information provided herein relates only to the specific product designated and may not be valid where such product is used in combination with other materials or in any process. Further, since the conditions and methods of use are beyond the control of UPI, Inc. UPI, Inc. expressly disclaims any and all liability as to any results obtained or arising from any use of the product or reliance on such information.

End of MSDS