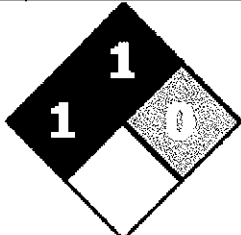






## Material Safety Data Sheet

## United Phosphorus, Inc.

NFPA	PPE	
		

Issued Date 04-Jun-2008

Revision Date 13-Nov-2008

Revision Number: 1

12U-136C - Up-Star Easy Spread Granular  
Insecticide

### 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)

<u>Company Information</u>	<u>Contact Information</u>	<u>Phone Number</u>	<u>Available Hrs</u>
UPI	Customer Service R&D Technical Service	1-800-438-6071 610-878-6100	8:00 am to 5:00 pm EST 8:00 am - 5:00 pm (EST)

<b>Product Name</b>	Up-Star Easy Spread Granular Insecticide
<b>EPA Reg #</b>	70506-73
<b>Recommended Use</b>	insecticide
<b>Product Code</b>	12U-136C

### 2. HAZARDS IDENTIFICATION

#### Emergency Overview

Contains crystalline silica which can cause cancer.  
Highly toxic to fish and aquatic organisms. Keep out of drains and water courses.  
May be harmful if inhaled.

#### WARNING!

Appearance off-white.

Physical State Granular.

Odor Slight.

#### Potential Health Effects

<b>Eyes</b>	May cause slight irritation.
<b>Skin</b>	Skin contact may produce skin sensations such as numbing, burning, or tingling. These sensations are reversible within 12 - 24 hours of onset .
<b>Inhalation</b>	May cause irritation of respiratory tract.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Ingredients Name**

Chemical Name	CAS-No	Weight %	OSHA PEL
Cristobalite	14464-46-1	<2	0.05 mg/m <sup>3</sup> Respirable dust.
Bifenithrin technical	82657-04-3	0.2	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 poison control center or doctor for further treatment advice.

**Ingestion**

Call a physician or Poison Control Center immediately  
Have person sip a glass of water if able to swallow  
Never give anything by mouth to an unconscious person  
Do not induce vomiting unless told to do so by a poison control center or doctor

**Notes to Physician**

This product contains a pyrethroid. Treatment is symptomatic and supportive.

**5. FIRE-FIGHTING MEASURES****Flammable Explosive Properties****Flash Point**

Not applicable

**Autoignition Temperature**

Not available

**Flammability Limits in Air**

Not available

**Extinguishing Media**

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

**Fire/Explosion Hazard**

May support combustion at elevated temperatures. As this material is a granular/solid which may produce dust that may form flammable dust clouds in the air

**Hazardous Combustion Products**

Carbon monoxide, Carbon dioxide (CO<sub>2</sub>), hydrogen fluoride, Hydrogen chloride.

**NFPA**

Health 1

Flammability 1

Instability 0

**6. ACCIDENTAL RELEASE MEASURES****Personal Precautions**

Avoid dust formation. Avoid contact with the skin and the eyes.

**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**

Sweep up and shovel into suitable containers for disposal.

## 7. HANDLING AND STORAGE

**Handling**

Avoid dust formation. Avoid contact with skin and eyes.

**Storage**

Keep out of the reach of children. Keep tightly closed in a dry and cool place. Keep away from open flames, hot surfaces and sources of ignition.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL
Cristobalite	0.025 mg/m <sup>3</sup> Respirable fraction.	0.05 mg/m <sup>3</sup> Respirable dust.

**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**

Protective gloves. Lightweight protective 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. Wear suitable gloves and eye/face protection. Wash hands before breaks and immediately after handling the product. Remove and wash contaminated clothing before re-use.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	off-white	<b>Odor</b>	Slight
<b>Physical State</b>	Granular	<b>pH</b>	6.68
<b>Boiling Point/Range</b>	Not available	<b>Melting Point/Range</b>	Not available
<b>Specific Gravity</b>	Not available	<b>Solubility</b>	Not available
<b>Evaporation Rate</b>	Not available	<b>Vapor Pressure</b>	Not available
<b>Vapor Density</b>	Not available	<b>VOC Content</b>	Not available
<b>Viscosity</b>	Not available	<b>Molecular Weight</b>	No data available
<b>Bulk Density</b>	No data available	<b>Percent Solids</b>	Not available
<b>Percent Volatiles</b>	Not available		

## 10. STABILITY AND REACTIVITY

**Stability**

Stable under recommended storage conditions

**Conditions to Avoid**

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

**Incompatible Materials**

No materials to be especially mentioned.

**Hazardous Decomposition Products**

Carbon dioxide (CO<sub>2</sub>). Carbon monoxide. Hydrogen chloride. Hydrogen fluoride.

Possibility of Hazardous Polymerization

Hazardous polymerisation does not occur

## 11. TOXICOLOGICAL INFORMATION

### Acute Toxicity

#### Product Information

UP Star Granulars

Acute oral LD50 (rat) &gt;5,000 mg/kg - for similar formulation

Acute dermal LD50 (rabbit) &gt;2,000 mg/kg - for bifenthrin

### Chronic Toxicity

### Carcinogenicity

BIFEN

In studies with laboratory animals, Bifenthrin technical did not cause reproductive toxicity or teratogenicity. Tremors were associated with repeated exposure of laboratory animals to Bifenthrin technical. In lifetime feeding studies conducted with rodents a slight increase in the incidence of urinary bladder tumors at the highest dose in male mice was considered to be an equivocal response, not evidence of a clear compound-related effect. The overall absence of genotoxicity has been demonstrated in mutagenicity tests with Bifenthrin. Chronic exposure to aromatic hydrocarbons may cause headaches, dizziness, loss of sensations or feelings and liver and kidney damage. There is no sufficient evidence to suggest that aromatic hydrocarbons are reproductive toxicants, mutagens or developmental toxicants. . Bifenthrin technical- In studies with laboratory animals, bifenthrin did not cause reproductive toxicity or teratogenicity. Tremors were associated with repeated exposure of laboratory animals with Bifenthrin. In lifetime feeding studies conducted with rodents, a slight increase in the incidence of urinary bladder tumors at the highest dose in male mice was considered to be an equivocal response, not evidence of a clear compound-related effect. The overall absence of genotoxicity has been demonstrated in mutagenicity tests with bifenthrin. . This product contains crystalline silica which has been shown to cause cancer in laboratory animals and humans. Crystalline silica is listed by IARC and NTP. Thyroid follicular cell tumors observed in rats were considered a secondary response cause by mechanisms not relevant to humans. Benign skin and adexnal tumors observed in rats may also have been secondary to thyroid effects..

Chemical Name	ACGIH	IARC	NTP	OSHA
Cristobalite	A2			

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Bifenthrin has moderate stability in the soil under aerobic conditions with a half-life ranging from 65 to 125 days depending on soil type. It is stable at a wide range of pH values. Bifenthrin has a high Lig Pow (>6.0), a high affinity for organic matter, and is not mobile in soil which indicate little potential for movement into ground water. There is potential for bifenthrin to bioconcentrate (BCF = 11,750). Bifenthrin is highly toxic to fish and aquatic arthropods and LC50 values range from 0.0038 to 17.8 ug/L. In general, the aquatic arthropods are the most sensitive species. Care should be taken to avoid contamination of the aquatic environment. Bifenthrin had no effect on mollusks at its limit of water solubility. Bifenthrin is only slightly toxic to both water fowl and upland game birds (LD50 values range from 1,800 mg/kg to >2,150 mg/kg).. Toxic to fish. Toxic to aquatic organisms.

## 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 may contain hazardous residues. Containers should be handled as instructed by following all container disposal directions .

**14. TRANSPORT INFORMATION**

**DOT** Not regulated  
**ICAO** Not regulated  
**IATA** Not regulated  
**IMDG/IMO** Not regulated

**15. REGULATORY INFORMATION**

**International Inventories**

Cristobalite  
**DSL** Listed  
**EINECS/ELINCS** Listed  
**ENCS** Listed  
**CHINA** Listed  
**KECL** Listed  
 Bifenthrin technical  
**ENCS** Listed  
**CHINA** Listed  
**KECL** Listed

**USA**

**Federal Regulations**

**SARA 313**

Y

Chemical Name	CAS-No	Weight %
Bifenthrin technical	82657-04-3	0.2

**SARA 311/312 Hazardous Categorization**

**Chronic Health Hazard** No  
**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 does not contain any HAPs.

**CERCLA**

**RCRA**

**Pesticide Information**

**State Regulations**

**California Proposition 65**

This product contains the following Proposition 65 chemicals:

Chemical Name	CAS-No	Category	California Prop. 65
Cristobalite	14464-46-1		Listed. Listed: October 1, 1988 Carcinogenic.

**State Right-to-Know**

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island

Cristobalite	Listed.	Substance no. 1657 Listed.	Listed.	Listed.	
--------------	---------	-------------------------------	---------	---------	--

**International Regulations**

**Mexico - Grade** Not available

Chemical Name	Category	Carcinogen Status	Exposure Limits
Cristobalite			0.05 mg/m <sup>3</sup>

**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

<b>16. OTHER INFORMATION</b>
------------------------------

**Revision Date** 13-Nov-2008

**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