



Material Safety Data Sheet

United Phosphorus, Inc.

NFPA	PPE	

Issued Date 07-Sep-2007

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Revision Number: 2

12U-136 - UP-Star Gold 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)

Product Name	UP-Star Gold Granular Insecticide
EPA Reg #	70506-73
Recommended Use	insecticide
Product Code	12U-136

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

Eyes	May cause slight irritation.
Skin	Skin contact may produce skin sensations such as numbing, burning, or tingling. These sensations are reversible within 12 - 24 hours of onset. .
Inhalation	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 ³ Respirable dust.
Bifenthrin 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

Extnguishing 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 (CO₂), 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 ³ Respirable fraction.	0.05 mg/m ³ 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

Appearance	off-white	Odor	Slight
Physical State	Granular	pH	6.68
Boiling Point/Range	Not available	Melting Point/Range	Not available
Specific Gravity	Not available	Solubility	Not available
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	No data available	Percent Solids	Not available
Percent Volatiles	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 ₂). 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) >5,000 mg/kg - for similar formulation****Acute dermal LD50 (rabbit) >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 adnexal 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 Log 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
 Bifenithrin technical
ENCS Listed
CHINA Listed
KECL Listed

USA

Federal Regulations

SARA 313
 Y

Chemical Name	CAS-No	Weight %
Bifenithrin 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.	
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International Regulations**Mexico - Grade**

Not available

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

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

13-Nov-2008

Revision Summary

Update section 15

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End of MSDS