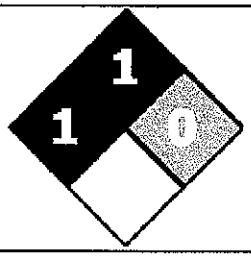
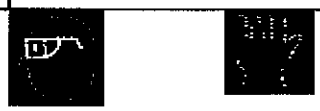
# Material Safety Data Sheet

## United Phosphorus, Inc.

| NFPA | PPE |
|---|---|
|  |  |



**Issued Date** 07-Sep-2007 **Revision Date** 30-Jul-2008 **Revision Number:** 1

**12U-134 - UP-Star Gold 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)

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

| | |
|---|---|
| **Product Name** | UP-Star Gold Insecticide |
| **EPA Reg #** | 70506-24 |
| **Recommended Use** | insecticide |
| **Product Code** | 12U-134 |

## 2. HAZARDS IDENTIFICATION

**Emergency Overview**

Highly toxic to fish and aquatic organisms. Keep out of drains and water courses.
May cause reversible skin reaction.

**CAUTION**

**Appearance** off-white. **Physical State** Liquid. **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. . |

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Ingredients Name**

| Chemical Name | CAS-No | Weight % | OSHA PEL |
|---|---|---|---|

| | | | |
|---|---|---|---|
| Glycerin | 56-81-5 | <1 | 5 mg/m³ Respirable fraction. 10 mg/m³ Total dust. |
| Bifenithrin technical | 82657-04-3 | 7.9 | 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.
If skin irritation persists, call a physician

**Inhalation**

Move person to fresh air.
If person is not breathing, call 911 or an ambulance, then give artifical 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
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**
> 100°C / > 212°F

**Autoignition Temperature**
Not available

**Flammability Limits in Air**

Not available

**Extnguishing Media**

Foam, Carbon dioxide (CO2) Dry chemical.

**Fire/Explosion Hazard**

May support combustion at elevated temperatures.

**Hazardous Combustion Products**

Carbon dioxide (CO2), Carbon monoxide, chlorine, Hydrogen chloride, hydrogen fluoride.

**NFPA** **Health** 1 **Flammability** 1 **Instability** 0

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions**

Avoid contact with the skin and the eyes. Use personal protective equipment. Remove all sources of ignition.

**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 pertinenet 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. Keep away from heat, sparks and open flame. - No smoking.

**Storage** Keep container tightly closed in a dry and well-ventilated place. Store in an area where cross-contamination with pesticides, fertilizers, food or feed could not occur. .

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Exposure Guidelines**

| Chemical Name | ACGIH TLV | OSHA PEL |
|---|---|---|
| Glycerin | 10 mg/m$^3$ Mist. | 5 mg/m$^3$ Respirable fraction.<br>10 mg/m$^3$ Total 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 and face 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** | Liquid | **pH** | approx.6 |
| **Boiling Point/Range** | Not available | **Melting Point/Range** | Not available |
| **Specific Gravity** | 1.039 g/ml | **Solubility** | Dispersible in water |
| **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** | 8.66 lb/gal | **Percent Solids** | Not available |
| **Percent Volatiles** | Not available | | |

## 10. STABILITY AND REACTIVITY

**Stability** Stable under recommended storage conditions

**Conditions to Avoid** Heat, flames and sparks.

**Incompatible Materials** No materials to be especially mentioned.

**Hazardous Decomposition Products** Carbon monoxide. Carbon dioxide (CO2). chlorine. Hydrogen chloride. Hydrogen fluoride.

**Possibility of Hazardous Polymerization** Hazardous polymerisation does not occur

## 11. TOXICOLOGICAL INFORMATION

**Acute Toxicity**

**Product Information**

**UP-Star Gold-**
**Acute oral LD50 - 632 mg/kg (rat)**
**Acute dermal LD50 - > 2,000 mg/kg (rabbit)**
**Acute Inhalation LC50 - 11.58 mg/L/1 hr (rat)**

**Component Information**

Bifenthrin products may produce skin sensations such as rashes, numbing, burning, or tingling, which are reversible and usually subside in 12 hours.

**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. .

## 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)..

## 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 container 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**

Glycerin

| | |
|---|---|
| **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 | 7.9 |

**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 contains the following HAPs:

| Chemical Name | CAS-No | Weight % | HAPS data | VOC Chemicals | Class 1 Ozone Depletors | Class 2 Ozone Depletors |
|---|---|---|---|---|---|---|
| Glycerin | 56-81-5 | <1 | | Listed. | | |

**CERCLA**
**RCRA**
**Pesticide Information**

**State Regulations**

**California Proposition 65**
This product does not contain any Proposition 65 chemicals.

**State Right-to-Know**

| Chemical Name | Massachusetts | New Jersey | Pennsylvania | Illinois | Rhode Island |
|---|---|---|---|---|---|
| Glycerin | Listed. | | Listed. | Listed. | Listed. |

**International Regulations**

**Mexico - Grade** Mexico - Grade

| Chemical Name | Category | Carcinogen Status | Exposure Limits |
|---|---|---|---|
| Glycerin | | | 10 mg/m³ Mist. |

**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** 30-Jul-2008

**Revision Summary**
Correct spelling error(s)

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**End of MSDS**