



Safety Data Sheet

United Phosphorus, Inc.

Preparation Date 10-May-2015

Revision date 10-May-2015

Revision Number: 1

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

Product identifier

Product Description: UP-Star SC Insecticide

Other means of identification

Item#: 12U-137
Synonyms Not Available
Registration number(s) 70506-23

Recommended use of the chemical and restrictions on use

Recommended use Insecticide.
Uses advised against Activities contrary to label recommendation

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 1-800-438-6071
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 - Inhalation (Vapors) | Category 4 |

Label elements

EMERGENCY OVERVIEW

WARNING

hazard statements

HARMFUL IF SWALLOWED
HARMFUL IF INHALED



appearance Off-white

Physical state liquid

Odor Mild (bad translation)

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
 Do not eat, drink or smoke when using this product
 Do not get in eyes, on skin, or on clothing
 Use only outdoors or in a well-ventilated area

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
 Call a POISON CENTER or doctor if you feel unwell
 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
 Rinse mouth

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards Not Otherwise Classified (HNOC)**OTHER INFORMATION**

- May be harmful in contact with skin
- Very toxic to aquatic life with long lasting effects
- Very toxic to aquatic life

3. Composition/information on Ingredients

| Chemical name | CAS-No | Weight % | Trade secret |
|-----------------------|------------|----------|--------------|
| Bifenithrin technical | 82657-04-3 | 7.9 | |

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 | 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 | Rinse skin immediately with plenty of water for 15-20 minutes. Remove and wash contaminated clothing before re-use. 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, 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 Effects No information available.

Indication of Any Immediate Medical Attention and Special Treatment Needed

Notes to physician This product contains a pyrethroid. Treatment is symptomatic and supportive.

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 dioxide (CO2). Carbon monoxide. Chlorine. Hydrogen chloride. Hydrogen fluoride.

Explosion data

Protective equipment and precautions for firefighters

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

Environmental Precautions

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 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 Keep out of reach of children. Keep away from heat, sparks and open flame. - No smoking. Avoid contact with skin and eyes. Wear personal protective equipment. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities

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.

incompatible materials No materials to be especially mentioned.

8. Exposure Controls/Personal Protection

Exposure guidelines This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

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. 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. 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

Information on basic physical and chemical properties

| | | | |
|-----------------------|--------------------------|-------------|------------------------|
| Physical state | liquid | Odor | Mild (bad translation) |
| appearance | Off-white | | |
| color | No information available | | |

| <u>Property</u> | <u>VALUES</u> | <u>Remarks/ • Method</u> |
|---|--------------------------|--------------------------|
| pH | 6 | |
| Melting point/freezing point | 7 °C / 45 °F | |
| Boiling Point/Range | No information available | |
| Flash Point | 100 C / > 212 F | |
| 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 | 1.039 g/ml | |
| 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 | 8.66 lb/gal |

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

Heat, flames and sparks.

incompatible materials

No materials to be especially mentioned.

Hazardous decomposition products

Carbon dioxide (CO₂). Carbon monoxide. Chlorine. Hydrogen chloride. Hydrogen fluoride.

11. Toxicological Information

Information on Likely Routes of Exposure

| | |
|------------------------------|--|
| Product information | USSC FBP- Acute oral LD50 - 632 mg/kg (rat) Acute dermal LD50 - > 2,000 mg/kg (rabbit) Inhalation LC50 - 11.58 mg/L/1 hr (rat) |
| Inhalation | Harmful by inhalation. |
| Eye contact | May cause irritation. |
| Skin contact | May be harmful if absorbed through the skin. |
| Ingestion | HARMFUL IF SWALLOWED. |
| Component Information | Bifenthrin products may produce skin sensations such as rashes, numbing, burning, or tingling, which are reversible and usually subside in 12 hours. |

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 | 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. |
| 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 - Product information

| | |
|-------------------------|------------------------------------|
| LD50 Oral | 632 mg/kg (rat) |
| LD50 Dermal | > 0 mg/kg (rat) |
| LC50 Inhalation: | Inhalation LC50 11.58 mg/l (1 hr) |

12. Ecological Information

ecotoxicity

Bifenthrin : Highly toxic to fish and aquatic arthropods (LC50 values between 0.0038 to 17.8 ug/L. Slightly toxic to water fowl and upland game birds (LD50 between 1800 to >2150 mg/kg)

Persistence/Degradability

No information available.

Bioaccumulation/ Accumulation

No information available.

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. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or other waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. Do not apply directly to wetlands or water.

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

ICAO

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

IATA

| | |
|-----------------------------|--|
| UN-No | UN3082 |
| Proper shipping name | Environmentally hazardous substances, liquid, n.o.s (Bifenthrin) |
| 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 (Bifenthrin) |
| 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 CAUTION

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.

Restricted Use Pesticide. Keep out of Reach of Children. Harmful if swallowed. Harmful if inhaled or absorbed through skin. Toxic to fish and aquatic invertebrates.

International Inventories

USINV Not determined
DSL/NDSL Not determined
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 contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40n of the Code of Federal Regulations, Part 372:

| Chemical name | SARA 313 - Threshold Values |
|-----------------------------------|-----------------------------|
| Bifenthrin technical - 82657-04-3 | 1.0 |

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

CERCLA

SARA Product RQ 0

RCRA

Pesticide Information

State Regulations

State Right-to-Know

| Chemical name | Massachusetts | New Jersey | Pennsylvania | Illinois | Rhode Island |
|---------------|---------------|------------|--------------|----------|--------------|
| | | | | | |

| | | | | | |
|----------------------|--|---|--|---|--|
| Bifenthrin technical | | X | | X | |
|----------------------|--|---|--|---|--|

International regulations

U.S. EPA Label information

EPA Pesticide registration number 70506-23

16. Other Information

NFPA **HEALTH 1** **flammability 1** **Instability 0** **Physical hazard -**

Preparation Date 10-May-2015

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Revision Summary

Update to GHS format

Disclaimer

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End of MSDS