



Material Safety Data Sheet

United Phosphorus, Inc.

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

Issued Date 22-Jun-2007

Revision Date 19-Nov-2009

Revision Number: 2

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 Up-Cyde Pro 2.0 EC
EPA Reg # 70506-19
Recommended Use insecticide termiticide
Product Code 12U-128

2. HAZARDS IDENTIFICATION

Emergency Overview

May cause reversible skin reaction.
May cause central nervous system effects.
May be harmful if swallowed, inhaled, or absorbed through the skin.

CAUTION

Appearance Yellow.

Physical State Liquid.

Odor soapy .

Potential Health Effects

- Inhalation
- Skin contact

Eyes Skin

May cause tearing. .
Skin contact may produce skin sensations such as numbing, burning, or tingling. These sensations are reversible within 12 - 24 hours of onset. .

Inhalation Ingestion

May cause irritation of respiratory tract.
Harmful if swallowed.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients Name

| Chemical Name | CAS-No | Weight % | OSHA PEL |
|------------------------|------------|----------|----------|
| 2-ethylethanol | 104-76-7 | <6 | N/A |
| cypermethrin technical | 52315-07-8 | 24.8 | 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.

Skin Contact

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 artificial respiration.
Call a physician or Poison Control Centre immediately

Ingestion

Call a physician or Poison Control Center immediately
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

Treat symptomatically. Do not administer milk, cream or other substance containing vegetable or animal fats which enhance absorption of lipophilic substances.
Central nervous system stimulation should be controlled with sedation by e.g. barbiturates. Treatment is otherwise controlled removal of exposure followed by symptomatic and supportive care.

5. FIRE-FIGHTING MEASURES

Flammable Explosive Properties

Flash Point 94°C / 201°F
Autoignition Temperature Not available

Flammability Limits in Air Not established

Extnguishing Media Foam, Carbon dioxide (CO2) Dry chemical.

Fire/Explosion Hazard Combustible material May support combustion at elevated temperatures. Mixture may contain traces of ethylene oxide, a highly flammable chemical that may build up in the headspace of containers.

Hazardous Combustion Products Carbon monoxide, Carbon dioxide (CO2), chlorine, Hydrogen chloride, hydrogen cyanide.

NFPA Health 1 Flammability 1 Instability 0

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Use personal protective equipment. Avoid contact with the skin and the eyes. 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 pertinent environmental permits.. Keep material out of lakes, streams, ponds and sewer drains. Dike to confine spill and absorb with an absorbant such as clay, sand or soil. .

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. Keep away from open flames, hot surfaces and sources of ignition. Wash thoroughly after handling. . Remove and wash contaminated clothing before re-use.

Storage Keep in a dry, cool 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

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. Wash hands before breaks and immediately after handling the product. Remove and wash contaminated clothing before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

| | | | |
|----------------------------|-------------------|----------------------------|------------------|
| Appearance | Yellow | Odor | soapy |
| Physical State | Liquid | pH | (1% solution)4.8 |
| Boiling Point/Range | Not available | Melting Point/Range | Not available |
| Specific Gravity | 0.954 g/ml | Solubility | Emulsifies |
| Evaporation Rate | Not available | Vapor Pressure | Not available |
| Vapor Density | Not available | VOC Content | Not available |
| Viscosity | Not available | Molecular Weight | 8.1 lb/gal |
| 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 | Heat, flames and sparks |
| Incompatible Materials | No materials to be especially mentioned. |
| Hazardous Decomposition Products | Carbon oxides. Hydrogen chloride. hydrogen cyanide. chlorine. |
| Possibility of Hazardous Polymerization | None under normal processing |

11. TOXICOLOGICAL INFORMATION

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Acute Toxicity

Product Information

Up-Cyde Pro
Acute Oral LD50 = 1,085 mg/kg
Acute dermal LD50 (rabbit) = >2,000 mg/kg
Acute Inhalation LC50 = 12.35 mg/L/1 hr

Signs of toxicity in laboratory animals included loss of motor control, tremors, decreased activity, urinary incontinence, uncoordination, increased sensitivity to sound and convulsions.

Experience to date indicates that contact with this product may produce skin sensitizations such as numbing, burning and tingling. These sensations are reversible and usually subside within 12 hours.

Chronic Toxicity

Carcinogenicity

Cypermethrin: In animal studies cypermethrin did not cause reproductive toxicity, teratogenicity, neurotoxicity or carcinogenicity in male and female rats and male mice. Cypermethrin caused an increase in benign lung tumors in female mice at 1600 ppm in the diet. The EPA concluded on a weight of evidence approach that cypermethrin represents a low oncogenic potential to female mice at this dose level (approximately 228 mg/kg/day). Liver enlargement is often noted in laboratory animals that have ingested large doses of cypermethrin in their life span. An overall absence of genotoxicity has been demonstrated in tests of mutagenicity, DNA damage and chromosome aberrations. .

12. ECOLOGICAL INFORMATION

Ecotoxicity

Cypermethrin:

Is rapidly degraded in soil with a half life of 2-4 weeks. It is readily hydrolyzed under basic conditions; hydrolysis half-life period can be 20-29 days. Cypermethrin has a high affinity for organic matter and a Log Pow of 5.0; yet, because of the ease with which the material undergoes degradation, it has very low potential for bioconcentration (BCF= 17), and it is not mobile in soil.

Cypermethrin is considered extremely toxic to fish and aquatic arthropods, and has LC50 values which range from 0.004 ug/L to 3.6 ug/L. The aquatic arthropods tended to be some of the more sensitive species. Care should be taken to avoid contamination of the aquatic environment. Cypermethrin is slightly toxic to birds and oral LD50 values are greater than 10,248 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

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DOT When shipped domestically by highway in non-bulk containers this product can be shipped as not regulated.
When shipped in bulk use IMDG shipping description

ICAO Not regulated

IATA

| | |
|-----------------------------|---|
| UN-No | 3082 |
| Proper Shipping Name | Environmentally hazardous substances, liquid, n.o.s. (cypermethrin) |
| Hazard Class | 9 |
| Packing Group | PG III |
| ERG Code | 9L |

IMDG/IMO

| | |
|-----------------------------|---|
| Proper Shipping Name | Environmentally hazardous substances, liquid, n.o.s. (Cypermethrin) |
| Hazard Class | 9 |
| UN-No | 3082 |
| Packing Group | III |
| EmS No. | F-A,S-F |
| Marine Pollutant | Yes |

15. REGULATORY INFORMATION

International Inventories

2-ethylethanol

| | |
|----------------------|--------|
| DSL | Listed |
| EINECS/ELINCS | Listed |
| ENCS | Listed |
| CHINA | Listed |
| KECL | Listed |

cypermethrin technical

| | |
|----------------------|--------|
| EINECS/ELINCS | Listed |
| CHINA | Listed |
| KECL | Listed |

USA

Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and and Title 40n of the Code of Federal Regulations, Part 372.

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 ActClean 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 |
|----------------|----------|----------|-----------|---------------|-------------------------|-------------------------|
| 2-ethylethanol | 104-76-7 | <6 | | Listed. | | |

CERCLARCRAPesticide InformationState 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 |
|------------------------|---------------|-------------------------------|--------------|----------|--------------|
| 2-ethylethanol | Listed. | Substance no. 2079 Listed. | Listed. | | |
| cypermethrin technical | 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

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| 16. OTHER INFORMATION |
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Revision Date

19-Nov-2009

Revision Summary

Update section 14

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End of MSDS