



MATERIAL SAFETY DATA SHEET

United Phosphorus, Inc.

NFPA	PPE			

Issued Date 23-Jul-2007

Revision date 17-Mar-2014

Revision Number: 1

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-Cyde 2.5 EC CANADA
EPA Reg #	PMRA # 28795
Recommended use	Insecticide
Product code	12U-127CAN

2. Hazards Identification

EMERGENCY OVERVIEW
Toxic by inhalation

DANGER WARNING		
appearance yellow.	Physical state liquid.	Odor aromatic.
Potential health effects		

- Skin Contact
 - Contains aromatic hydrocarbons- aspiration hazard
- | | |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------|
| EYES | Contact with eyes may cause irritation. |
| skin | MAY CAUSE SKIN IRRITATION. |
| Inhalation | Immediate medical attention is required. Toxic by inhalation. Avoid breathing vapors or mists. Poison - may be fatal if inhaled. |
| Ingestion | Ingestion may cause irritation to mucous membranes. |

3. Composition/information on Ingredients

Ingredients Name

Component	CAS-No	Weight %	OSHA PEL
cypermethrin cis/trans +/- 40/60 52315-07-8 (30.6)	52315-07-8	30.6	N/A
Mineral oil 64742-55-8 (<30)	64742-55-8	<30	N/A
Aromatic hydrocarbons (<40)	-	<40	N/A

4. First aid measures

Eye contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes Keep eye wide open while rinsing If symptoms persist, call a physician
Skin contact	Immediate medical attention is not required Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes If skin irritation persists, call a physician
Inhalation	Move to fresh air in case of accidental inhalation of vapors or decomposition products If symptoms persist, call a physician Immediate medical attention is required Call a physician or poison control center immediately Toxic by inhalation
Ingestion	Never give anything by mouth to an unconscious person Do not induce vomiting without medical advice Clean mouth with water and drink afterwards plenty of water afterwards Consult a physician
Notes to physician	Treat symptomatically

5. Fire-fighting measures

Flammable Explosive Properties

flash point

>

50

°C

/

>

122

°F

Method

Autoignition temperature

Pensky Martin Closed Cup

Not Available

Flammability Limits in Air

Not Established

Extngushing Media

Foam, Carbon dioxide (CO2) Dry chemical.

Fire/Explosion Hazard Combustible material Heated material can form flammable and explosive vapors with air.

Hazardous combustion products Carbon monoxide, Carbon dioxide (CO₂), Hydrogen chloride, Chlorine, Hydrogen cyanide.

NFPA HEALTH 4 flammability 2 Instability 0

6. Accidental release measures

Personal Precautions Use personal protective equipment. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

Environmental precautions Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

Methods for Clean-Up Dam up. Soak up with inert absorbent material. Pick up and transfer to properly labelled containers.

7. Handling and Storage

Handling Wear personal protective equipment. Use only in area provided with appropriate exhaust ventilation. Do not breathe vapours or spray mist. Use product only in closed system.

Storage Keep containers tightly closed in a cool, well-ventilated place. Keep away from heat. Protect from light. Keep in properly labelled containers.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure guidelines

Engineering controls Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Eye/Face Protection

Tightly fitting safety goggles. Face-shield.

Skin protection

Long sleeved clothing. Boots. Apron. Impervious butyl rubber gloves.

Respiratory protection

In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit.

General hygiene considerations

When using, do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing.

9. Physical and Chemical Properties

appearance	yellow	Odor	aromatic
Physical state	liquid	pH	4.71
Boiling Point/Range	Not Available	Melting Point/Range	5.71 °C / 42 °F
Specific gravity	0.971	solubility	Emulsifies
evaporation rate	Not Available	vapor pressure	Not Available
vapor density	Not Available	VOC Content	Not Available
viscosity	Not Available	molecular weight	8.095 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 monoxide Carbon dioxide (CO ₂) Hydrogen cyanide Hydrogen chloride Chlorine
Possibility of Hazardous Polymerization	None under normal processing

11. Toxicological Information

Acute toxicity

Product information

Up-Cyde 2.5 EC
Acute oral LD₅₀: 355 mg/kg
Acute dermal LD₅₀: > 2,000 mg/kg (rabbit)
Acute inhalation LC₅₀: >2.02 mg/L (4 hr rat)
Eye and skin irritation: Moderately irritating
Dermal sensitization: Not a sensitizer

Signs of toxicity in laboratory animals included hypertonicity, ataxia, lethargy, convulsions, gasping, salivation, dyspnea and alopecia.

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 Dispose of in accordance with local regulations.

Contaminated packaging Empty containers should be taken for local recycling, recovery or waste disposal.

14. Transport Information

DOT

Proper shipping name Flammable liquid, n.o.s (aromatic hydrocarbon)
Hazard class 3
UN-No UN1993
Packing group PG III
Marine Pollutant This product contains a chemical which is listed as a severe marine pollutant according to DOT.

ICAO

UN-No UN1993
Proper shipping name Flammable liquid, n.o.s (aromatic hydrocarbon)
Hazard class 3
Packing group III
Description Marine Pollutant (Cypermethrin)

IATA

UN-No UN1993
Proper shipping name Flammable liquid, n.o.s (aromatic hydrocarbon)
Hazard class 3
Packing group PG III
ERG Code 3L
Description Marine Pollutant (Cypermethrin)

IMDG/IMO

Proper shipping name Flammable liquid, n.o.s (aromatic hydrocarbon)
Hazard class 3
UN-No UN1993
Packing group PG III
EmS No. F-E,S-E
Special Provisions 223, 274, 330, 944, 955
Marine Pollutant This product contains a chemical which is listed as a severe marine pollutant according to IMDG/IMO Specified Class 1 Substances PRTR

TDG

Proper shipping name Flammable liquid, n.o.s (aromatic hydrocarbon)
Hazard class 3
UN-No UN1993
Packing group PG III

15. Regulatory Information

International Inventories

Chemical name	TSCA	DSL	NDSL	EINECS/ ELINCS	ENCS	China	KECL	AICS
cypermethrin cis/trans +/- 40/60				X		X	Present	X
Mineral oil	Present	X		X	Present	X	Present	X
Aromatic hydrocarbons	Present	X		X	Present	X	Present	X

USA

Federal Regulations

SARA 313

The preparation is classified as dangerous in accordance with Directive 1999/45/EC

16. Other Information

Revision date 17-Mar-2014

Revision Summary

Update section 14

Miscellaneous

TDG regulations:

UN1993

Flammable liquids, n.o.s. (aromatic hydrocarbon)

3

PG III

Marine Pollutant (cypermethrin)

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