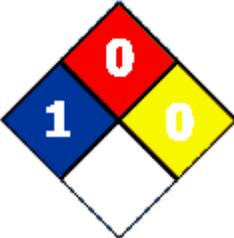




Material Safety Data Sheet

United Phosphorus, Inc.

NFPA	PPE		
			

Issued Date 14-Feb-2012

Revision Date 14-Feb-2012

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	Phoenix Dovetail
EPA Reg #	70506-261
Recommended Use	fungicide
Product Code	12P-0018

2. HAZARDS IDENTIFICATION

Emergency Overview

May cause eye irritation
May be harmful if swallowed, inhaled, or absorbed through the skin.

CAUTION

Appearance White.

Physical State Liquid. Emulsion.

Odor Not available.

Potential Health Effects

- Inhalation
- Skin contact
- Repeated or long term exposure may cause adverse effects on the liver or thyroid.

Acute Effects

Based on single exposure animal tests, it is considered to be slightly toxic if swallowed, no more than slightly toxic if inhaled and slightly irritating to the eyes and skin. Inhalation may be irritating to the respiratory tract.

Eyes

Irritating to eyes.

Inhalation

Slightly toxic if inhaled. Symptoms of overexposure include nose bleeding, lacrimation, atonia of abdominal muscles, lethargy, decreased respiratory rate, mydriasis. .

Ingestion

Possible nausea, vomiting, and diarrhea.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients Name

Chemical Name	CAS-No	Weight %	OSHA PEL
Thiophanate-methyl	23564-05-8	19.65	N/A
Iprodione	36734-19-7	19.65	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

If breathing is irregular or stopped, administer artificial respiration
May cause allergic respiratory reaction
Call a poison control center or doctor for further treatment advice.

Ingestion

Call a physician or poison control center immediately
May produce an allergic reaction
Do not induce vomiting unless told to do so by a poison control center or doctor
Never give anything by mouth to an unconscious person

Notes to Physician

No information available

5. FIRE-FIGHTING MEASURES

Flammable Explosive Properties

Flash Point	Not applicable
Autoignition Temperature	Not available
Flammability Limits in Air	Not available
Extnguishing Media	Use: Water spray, Foam, Carbon dioxide (CO2), Dry chemical.
Fire/Explosion Hazard	Firefighters and others who may be exposed to products of combustion should wear full fire fighting turn out gear and self-contained breathing apparatus. Fire fighting equipment should be thoroughly decontaminated after use.
Hazardous Combustion Products	Heat and fire may result in thermal decomposition and the release of hydrogen chloride and oxides of nitrogen, sulfur and carbon. .

NFPA

Health 1

Flammability 0

Instability 0

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Avoid contact with the skin and the eyes. Ensure adequate ventilation.
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. Do not flush into surface water or sanitary sewer system.
Methods for Clean-up	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable and closed containers for disposal.

7. HANDLING AND STORAGE

Handling	Do not breathe vapours or spray mist. Avoid contact with skin, eyes and clothing. Keep out of reach of children. Do not eat, drink or smoke when using this product.
Storage	Keep container tightly closed in a dry and well-ventilated place.

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. 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.

Personal Protective Equipment

Eye/face Protection

Goggles. Avoid contact with eyes.

Skin Protection

Chemical resistant gloves. Chemical resistant apron. Long sleeved clothing. Long pants. 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

Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	White	Odor	Not available
Physical State	Liquid Emulsion	pH	approx 6
Boiling Point/Range	Not available	Melting Point/Range	Not available
Specific Gravity	1.1974	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	9.974 lb/gal	Percent Solids	Not available
Percent Volatiles	Not available		

10. STABILITY AND REACTIVITY

Stability	Stable under recommended storage conditions
Conditions to Avoid	No information available
Incompatible Materials	Strong oxidizing agents
Hazardous Decomposition Products	No information available
Possibility of Hazardous Polymerization	Hazardous polymerisation does not occur

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Product Information

Single exposure studies indicate:

Oral: Practically non-toxic to rats (LD50 >5,000 mg/kg)

Dermal: No more than slightly toxic to rabbits (LD50 >2,000 mg/kg)

Inhalation: Slightly toxic to rats (4 hr LC50 1.8 mg/l)

Skin Irritation: Non-irritating to rabbits

Eye Irritation: Non-irritating to rabbits

Skin allergy was observed in guinea pigs following repeated exposure. Repeated or long-term oral administration produced effects on the thyroid, liver or kidneys in rats, mice and dogs. An increased incidence of liver tumors was observed in mice and thyroid tumors were observed in male rats following long-term oral exposure.

No effects were seen on the ability of male or female rats to reproduce when exposed orally for 2 successive generations. No birth defects were observed in the offspring of rats exposed orally during pregnancy. In rabbits, developmental effects were noted only at maternally toxic doses. No genetic changes were observed in tests using animal cells. Polyglycol

Repeated exposure of rats to aerosol of some block polymers produced an inflammatory response and slight fibrosis in the lung. Long-term dietary administration of a block polymer to dogs produced no adverse effects. Some block polymers have produced genetic changes in tests using bacteria or animal cells.

Single exposure studies indicate that this material is practically non-toxic if swallowed (mouse LD50 >15,000 mg/kg) or absorbed through skin (rabbit LD50 2,000 mg/kg) moderately toxic if inhaled (rat 4 hr LC50 0.1-0.34 mg/l) and practically non irritating to rabbit eyes (10% aqueous solution).

Chronic Toxicity

Carcinogenicity

Iprodione (technical grade) = Produced benign testicular tumors in rats and benign liver and ovary tumors in mice when tested at a maximum tolerated dose.

Iprodione is not considered to be a neurotoxicant and was not mutagenic or genotoxic based published information available.

Iprodione did not cause reproductive toxicity in multigeneration studies in rats.

Information indicates that iprodione is not a primary developmental toxicant. Thiophanate methyl:

Repeated or long term administration produced effects on the thyroid, liver, or kidneys in rats, mice or dogs. An increased evidence of liver tumors was observed in mice and thyroid tumors were observed in male rats following long term oral exposure. No effects were seen on the ability of male or female rats to reproduce when exposed orally for 2 successive generations. No birth defects were observed in the offspring of rats exposed orally during pregnancy. In rabbits, developmental toxic effects were noted at maternally toxic doses. No genetic changes were observed in tests using animal cells.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Thiophanate methyl :

This material is practically non-toxic to carp (96 hr LC50 >100 mg/l) and fiddler crab (96 hr LC50 >560 mg/l). It is slightly toxic to bluegill (96 hr LC50 15.8 mg/l), Daphnid (48 hr EC50 15.6 mg/l) and shrimp (96 hr LC50 25.1 mg/l). It is moderately toxic to trout (96 hr LC50 2.2 mg/l) and oysters (96 hr LC50 4.6 ppm), and highly toxic to catfish.

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. Dispose of contents/container in accordance with local regulation.
Contaminated Packaging	Non refillable container. Do not reuse this container. (For containers less than 5 gallons). Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. The offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke. (For containers larger than 5 gallons). Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

14. TRANSPORT INFORMATION

DOT

Proper Shipping Name	Environmentally hazardous substance, liquid, n.o.s (Thiophanate methyl)
Hazard Class	9
UN-No	UN3082
Packing Group	PG III
Reportable Quantity (RQ):	10 lbs (Thiophanate methyl)

ICAO

UN-No	UN3082
Proper Shipping Name	Environmentally hazardous substance, liquid, n.o.s (Thiophanate methyl)
Hazard Class	9
Packing Group	PG III

IATA

UN-No	UN3082
Proper Shipping Name	Environmentally hazardous substances, liquid, n.o.s. (Thiophanate methyl)
Hazard Class	9
Packing Group	PG III
ERG Code	9L

IMDG/IMO

Proper Shipping Name Environmentally hazardous substances, liquid, n.o.s. (Thiophanate-methyl)
Hazard Class 9
UN-No UN3082
Packing Group PG III
Marine pollutant This product contains a chemical which is listed as a marine pollutant according to IMDG/IMO

15. REGULATORY INFORMATION

International Inventories

Chemical Name	TSCA	DSL	NDSL	EINECS/ ELINCS	ENCS	CHINA	KECL	AICS
Thiophanate-methyl		X		X		X	KE-28330	X
Iprodione				X		X	KE-10192	X

USA

Federal Regulations

SARA 313

Y

Chemical Name	CAS-No	Weight %	SARA 313 - Threshold Values
Thiophanate-methyl	23564-05-8	19.65	1.0

SARA 311/312 Hazardous Categorization

Chronic Health Hazard Yes
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

Component	RQ
Thiophanate-methyl 23564-05-8 (19.65)	10 lb

RCRA

Component	RCRA - D Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Thiophanate-methyl 23564-05-8 (19.65)			U409

Pesticide Information

12P-0018
Phoenix Dovetail

Component	FIFRA - Restricted Use	FIFRA - Pesticide Product Other Ingredients	FIFRA - Listing of Pesticide Chemicals	California Pesticides - Restricted Materials
Thiophanate-methyl 23564-05-8 (19.65)			X	
Iprodione 36734-19-7 (19.65)			X	

State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:

Chemical Name	CAS-No	Category	California Prop. 65	Non-additive, corrosive chemical type
Thiophanate-methyl	23564-05-8		Female Reproductive Male Reproductive	Female Reproductive Male Reproductive
Iprodione	36734-19-7	Carcinogen	Carcinogen	

State Right-to-Know

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Thiophanate-methyl		X			

International Regulations

Mexico - Grade

Mexico - Grade

Component	Category	Carcinogen Status	Exposure Limits
Iprodione 36734-19-7 (19.65)	Carcinogen		

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

14-Feb-2012

Revision Summary

Add to system

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End of MSDS