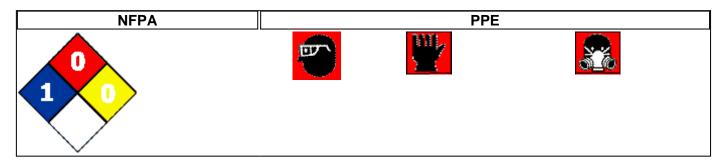
Material Safety Data Sheet



United Phosphorus, Inc.



Issued Date 07-Feb-2007 Revision Date 02-Jul-2013 Revision Number: 8

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 R&D Technical Service	1-800-438-6071 610-223-2180	8:00 am to 5:00 pm EST 8:00 am - 5:00 pm (EST)

Product Name EPA Reg # Recommended Use Product Code TOPSIN® M 70% WP 73545-11-70506 fungicide 12-322

2. HAZARDS IDENTIFICATION

Emergency Overview

Harmful by inhalation, in contact with skin and if swallowed May cause thyroid and liver damage based on animal data May cause allergic skin reaction

Irritating to eyes

CAUTION

Appearance Light brown. Physical State Powder. Odor Slight. Rotten egg-like.

Potential Health Effects

InhalationSkin contact

Eyes Irritating to eyes.

Skin Repeated or prolonged skin contact may cause allergic reactions with susceptible persons.

InhalationSlightly toxic if inhaled.IngestionMay be harmful if swallowed.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients Name

Chemical Name	CAS-No	Weight %	OSHA PEL
Thiophanate-methyl	23564-05-8	72.2	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

12-322 TOPSIN® M 70% WP

Flammable Explosive Properties

Flash Point Not available Autoignition Temperature Not available

Flammability Limits in Air Not available

Extriguishing Media Use: Water spray, Carbon dioxide (CO2), Foam 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

No information available.

NFPA Health 1 Flammability 0 Instability 0

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions Avoid contact with skin, eyes and clothing. Use personal protective equipment.

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. Do not

flush into surface water or sanitary sewer system.

Methods for Clean-up Sweep up and shovel into suitable containers for disposal.

7. HANDLING AND STORAGE

Handling Avoid breathing dust. Keep out of reach of children. Wash thoroughly after

handling. Do not eat, drink or smoke when using this product.

Storage Keep containers tightly closed in a dry, cool and well-ventilated place.

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
Skin Protection
Respiratory Protection

Avoid contact with eyes. Goggles.

Rubber gloves. Wear protective gloves/clothing.

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

Odor **Appearance** Light brown Slight Rotten egg-like **Physical State** Powder Ha no data available **Boiling Point/Range** Not available Melting Point/Range Not available **Specific Gravity** Not available Solubility Insoluble

Evaporation Rate Not available Vapor pressure 7.12 X 10-8 mmHg(tech)

Vapor DensityNot availableVOC ContentNot availableViscosityNot availableMolecular Weightno data availableBulk Densityno data availablePercent SolidsNot availablePercent VolatilesNot 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.

Chronic Toxicity

Carcinogenicity There are no known carcinogenic chemicals in this product.

12. ECOLOGICAL INFORMATION

Ecotoxicity

This material is practically non-toxic to carp(95 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 2.2 mg/l) and oysters (96 hr LC50 4.6 ppm) and highly toxic to catfish. Chem Fate:. No information available.

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

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

14. TRANSPORT INFORMATION

DOT

When shipped in packages greater than 15 lbs the following descriptions applies: Environmentally hazardous substances, solid, n.o.s. (Thiophanate methyl)

Proper Shipping Name Hazard Class

UN3077 PG III

UN-No Packing Group

10 Lbs (Thiophanate methyl)

Reportable Quantity (RQ):

ICAO

TOPSIN® M 70% WP

UN-No UN3077

Proper Shipping Name Environmentally hazardous substance, solid, n.o.s (Thiophanate methyl)

Hazard Class 9
Packing Group PG III

IATA

ŪN-No 3077

Proper Shipping Name Environmentally hazardous substances, solid, n.o.s. (Thiophanate methyl)

Hazard Class9Packing GroupPG IIIERG Code9L

IMDG/IMO

Proper Shipping Name Environmentally hazardous substances, solid, n.o.s. (Thiophanate-methyl)

Hazard Class9UN-No3077Packing GroupPG III

15. REGULATORY INFORMATION

International Inventories

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

USA

Federal Regulations

SARA 313

Υ

Chemical Name	CAS-No	Weight %	SARA 313 - Threshold Values
Thiophanate-methyl	23564-05-8	72.2	1.0

SARA 311/312 Hazardous Categorization

Chronic Health HazardYesAcute Health HazardYesFire HazardNoSudden Release of Pressure HazardNoReactive HazardNo

Clean Water Act

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product does not contain any HAPs.

CERCLA

<u></u>	
Component	RQ
Thiophanate-methyl	10 lb
23564-05-8 (72.2)	

RCRA

Component	RCRA - D Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Thiophanate-methyl			U409
23564-05-8 (72.2)			

Pesticide Information

FIFRA - Restricted Use	FIFRA - Pesticide Product Other Ingredients	FIFRA - Listing of Pesticide Chemicals	California Pesticides - Restricted Materials
		X	
	FIFKA - Kestricted Use	Product Other	Product Other Pesticide Chemicals

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

State Right-to-Know

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

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

16. OTHER INFORMATION

Revision Date

02-Jul-2013

Revision Summary

Update section 1

UPI, Inc. believes that the information and recommendations container 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