



Material Safety Data Sheet

United Phosphorus, Inc.

NFPA	PPE		

Issued Date 07-Feb-2007

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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

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

EPA Reg

Recommended Use

Product Code

ZIRAM 76DF

70506-173

fungicide

12-140

2. HAZARDS IDENTIFICATION

Emergency Overview

Causes irreversible eye damage
Harmful by inhalation, in contact with skin and if swallowed
May be fatal if inhaled

DANGER!

Appearance White, Light brown.

Physical State Powder.

Odor Odorless.

Potential Health Effects

- Inhalation
- Skin contact

Eyes

Severely irritating to the eyes. Causes irreversible eye damage..

Skin

May cause mild skin irritation.

Inhalation

Toxic by inhalation. Prolonged inhalation may cause visual disturbances.. Irritating to respiratory system.

Ingestion

Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients Name

Chemical Name	CAS-No	Weight %	OSHA PEL
Zinc, bis(dimethylcarbamodithioat- kappaS, kappaS)-(T-4)	137-30-4	76	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

Move person to fresh air.
If person is not breathing, call 911 or an ambulance, then give artificial respiration.
Call a poison control center or doctor for further treatment advice.

Ingestion

Call a physician or Poison Control Center immediately
Have person sip a glass of water if able to swallow
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
Treat symptomatically

5. FIRE-FIGHTING MEASURES**Flammable Explosive Properties****Flash Point**

Not available

Autoignition Temperature

Not available

Flammability Limits in Air

Not available

Extinguishing MediaUse: 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

carbon disulfide, sulfur dioxide.

NFPA**Health 2****Flammability 0****Instability 0****6. ACCIDENTAL RELEASE MEASURES****Personal Precautions**

Avoid contact with the skin and the eyes. 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 pertinent 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. Avoid contact with skin, eyes and clothing. Ensure adequate ventilation. Empty containers may contain hazardous residues.

Storage

Keep tightly closed in a dry and cool place. Store in an area where cross-contamination with pesticides, fertilizers, food or feed could not occur. .

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. . 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	Rubber gloves. Wear protective gloves/clothing.
Respiratory Protection	For exposure in enclosed areas, wear a respirator with an organic-vapor removing cartridge with a prefilter approved for pesticides(MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G), or a NIOSH approved respirator with an organic vapor (OV) cartridge or canister with any N,P,R, or HE filter. For exposure outdoors, wear a dust/mist filtering respirator (MSHA/NIOSH approval number prefix TC-21C) or NIOSH approved respirator with any N,R,P, or HE filter. .
General Hygiene Considerations	Do not eat, drink or smoke when using this product. Wash hands before breaks and immediately after handling the product. Wear suitable gloves and eye/face protection.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	White Light brown	Odor	Odorless
Physical State	Powder	pH	No data available
Boiling Point/Range	Not available	Melting Point/Range	Not available
Specific Gravity	Not available	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	No data available	Percent Solids	Not available
Percent Volatiles	Not available		

10. STABILITY AND REACTIVITY

Stability	Stable under recommended storage conditions
Conditions to Avoid	Keep away from children.
Incompatible Materials	Strong oxidizing agents.
Hazardous Decomposition Products	Oxides of sulfur.
Possibility of Hazardous Polymerization	Hazardous polymerisation does not occur

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Product Information

Ziram 76 DF

Single exposure studies indicate that this material is slightly toxic if swallowed (rat LD50 1,889 mg/kg), practically non-toxic if absorbed through skin (rabbit LD50 >5,000 mg/kg), moderately toxic if inhaled (rat 4 hr LC50 < 0.53 mg/l), severely irritating to rabbit eyes and non-irritating to rabbit skin. No skin allergy was observed in guinea pigs following repeated exposure.

Chronic Toxicity

Carcinogenicity

The information below indicates whether any agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Zinc, bis(dimethylcarbamodithioato- kappaS, kappaS)-(T-4)		Group 3		

12. ECOLOGICAL INFORMATION

Ecotoxicity

This material is highly toxic to *Daphnia magna* (48 hr EC50 0.048 mg/l) and bluegill sunfish (96 hr LC50 0.0097mg/l) and moderately toxic to rainbow trout (96 hr LC50 1.7 mg/l). The reported toxicity to Bobwhite quail is LC50 >5,200 ppm or LD50 97 mg/kg, mallard duck is LC50 5,156 ppm and honeybees is LC50 100 ug/bee..

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

Non refillable container. Do not reuse this container. . Completely empty bag into application equipment. Then offer for recycling if available or dispose of empty bag 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 substances, solid, n.o.s. (Ziram)
Hazard Class	9
UN-No	3077
Packing Group	PG III
Marine Pollutant:	Yes.

14. TRANSPORT INFORMATION

ICAO Not regulated

IATA

UN-No 3077
Proper Shipping Name Environmentally hazardous substances, solid, n.o.s. (Ziram)
Hazard Class 9
Packing Group PG III
ERG Code 9L

IMDG/IMO

Proper Shipping Name Environmentally hazardous substances, solid, n.o.s. (Ziram)
Hazard Class 9
UN-No 3077
Packing Group PG III
EmS No. F-A, S-F
Marine Pollutant Yes

15. REGULATORY INFORMATION

International Inventories

Zinc, bis(dimethylcarbomodithioaot-kappaS, kappaS)-(T-4)

DSL Listed
EINECS/ELINCS Listed
ENCS 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.

Chemical Name	CAS-No	Weight %
Zinc, bis(dimethylcarbomodithioaot-kappaS, kappaS)-(T-4)	137-30-4	76

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 Act

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Zinc, bis(dimethylcarbomodithioaot-kappaS, kappaS)-(T-4)		Listed.		

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

This product does not contain any HAPs.

CERCLA

Chemical Name	RQ
Zinc, bis(dimethylcarbamodithioaot- kappaS, kappaS)-(T-4)	Listed.

RCRA

Chemical Name	RCRA - D Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Zinc, bis(dimethylcarbamodithioaot- kappaS, kappaS)-(T-4)		P205	

Pesticide Information**State 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
Zinc, bis(dimethylcarbamodithioaot- kappaS, kappaS)-(T-4)	Listed.	Substance no. 2370 Listed. Substance no. 2369 Listed. Substance no. 2371 Listed. Substance no. 2372 Listed. Substance no. 3012 Listed.		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

Chemical Name	NPRI
Zinc, bis(dimethylcarbamodithioaot-kappaS, kappaS)-(T-4)	X

16. OTHER INFORMATION

Revision Date

04-Jan-2011

Revision Summary

Update section 13 Update section 8

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End of MSDS