



MATERIAL SAFETY DATA SHEET

United Phosphorus, Inc.

NFPA	PPE		

Issued Date 06-Jan-2012

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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)		
<u>Company Information</u>	<u>Contact Information</u>	<u>Phone number</u>	<u>Available Hrs</u>
UPI	Customer Service	1-800-438-6071	8:00 am to 5:00 pm EST
Product name	PENNCOZEB 75 DF RAINCOAT FUNGICIDE		
EPA Reg #	PMRA #30241		
Recommended use	Fungicide		
Product code	12-370CAN		

2. Hazards Identification

EMERGENCY OVERVIEW		
Mild eye irritation Harmful by inhalation, in contact with skin and if swallowed irritant Very toxic in contact with skin Very toxic if swallowed		
DANGER appearance Grey, yellow, brown.	Physical state Free flowing microgranules.	Odor Slight. Rotten egg-like.

Potential health effects

EYES	May cause slight irritation.
skin	Irritating to skin. Very toxic in contact with skin.
Inhalation	Slightly toxic if inhaled.
Ingestion	HARMFUL IF SWALLOWED. Very toxic if swallowed.

3. Composition/information on Ingredients

Ingredients Name

Component	CAS-No	Weight %	OSHA PEL
Zinc manganese ethylenebis dithiocarbamate 8018-01-7 (75)	8018-01-7	75	N/A
Ethylene thiourea 96-45-7 (0.5)	96-45-7	0.5	N/A

4. First aid measures

Eye contact

Hold eye open and rinse slowly and gently with water for 30 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes

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.
Call a physician immediately
Wash off immediately with plenty of water for at least 15 minutes
Remove and wash contaminated clothing before re-use

Inhalation

Move person to fresh air.
If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.
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
Call a physician immediately
Do not induce vomiting without medical advice

Notes to physician

No information available

5. Fire-fighting measures

Flammable Explosive Properties

flash point Not Available

Autoignition temperature

159

°C

/

318

°F

Flammability Limits in Air Not available

Extnguishing Media Water spray, 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 If heated to decomposition (>235 F) flammable ethylene is produced.

NFPA HEALTH 4 flammability 0 Instability 0

6. Accidental release measures

Personal Precautions Avoid contact with the skin and the eyes. Provide 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.

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. Avoid contact with skin, eyes and clothing. In case of insufficient ventilation, wear suitable respiratory equipment.

Storage Keep tightly closed in a dry and cool place. If allowed to become wet the product will deteriorate and represent a fire hazard. Keep containers tightly closed in a cool, 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

Skin protection

Respiratory protection

Avoid contact with eyes. Goggles.

Long sleeved clothing. Long pants. Coveralls. Chemical resistant gloves. waterproof gloves. Socks and footwear.

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 Physical state Boiling Point/Range	Grey, yellow, brown Free flowing microgranules Not Available	Odor pH Melting Point/Range	Slight Rotten egg-like (1% solution) 6.9 Decomposes before melting 7.9 °C / 46 °F
Specific gravity evaporation rate vapor density viscosity Bulk density Percent Volatiles	Not Available Not Available Not Available Not Available 0.63 g/ml Not Available	solubility vapor pressure VOC Content molecular weight Percent Solids	Dispersible in water Not Available Not Available No Data Available Not Available

10. Stability and Reactivity

stability	Stable under recommended storage conditions
Conditions to avoid	Protect from water
incompatible materials	Strong acids, Strong oxidizing agents, Water, quaternary ammonium salts, EDBC sequestering agents
Hazardous decomposition products	Oxides of carbon and nitrogen
Possibility of Hazardous Polymerization	Hazardous polymerisation does not occur

11. Toxicological Information

Acute toxicity

Component Information	Mancozeb: Acute oral LD50 (rat) = >5.0 g/kg Acute dermal LD50 (rabbit) = >2.0 g/kg Acute Inalation LC50 (rat) = >5.2 mg/L - 4 hr
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Chronic toxicity

Carcinogenicity	The information below indicates whether any agency has listed any ingredient as a carcinogen.
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Chemical name	ACGIH	IARC	NTP	OSHA
Ethylene thiourea		Group 3	Reasonably Anticipated	X

12. Ecological Information

ecotoxicity

Mancozeb:Aquatic toxicity: 96 hour LC50 = rainbow trout 0.73 mg/L 96 hour LC50 = fathead minnows 0.57 mg/L 96 hour LC50 = Bluegill sunfish 0.84 mg/L 72 hour EC50 = freshwater algae = 0.43 mg/L.

13. Disposal Considerations

Waste Disposal Method	Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide or
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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 Mancozeb
Hazard class 9
UN-No UN3077
Packing group PG III
Marine Pollutant yes. This product contains a chemical which is listed as a marine pollutant according to DOT.

ICAO

UN-No UN3077
Proper shipping name Environmentally hazardous substance, solid, n.o.s Mancozeb
Hazard class 9
Packing group PG III

IATA

UN-No UN3077
Proper shipping name Environmentally hazardous substances, solid, n.o.s Mancozeb
Hazard class 9
Packing group PG III
ERG Code 9L

IMDG/IMO

Proper shipping name Environmentally hazardous substances, solid, n.o.s (Mancozeb)
Hazard class 9
UN-No UN3077
Packing group PG III
Marine Pollutant Marine Pollutant

TDG

Proper shipping name NOT REGULATED
Proper shipping name Environmentally hazardous substances, solid, n.o.s (Mancozeb)
Hazard class 9
UN-No UN3077
Packing group PG III

15. Regulatory Information

International Inventories

Chemical name	TSCA	DSL	NDSL	EINECS/ ELINCS	ENCS	China	KECL	AICS
Zinc manganese ethylenebis dithiocarbamate					Present	X	Present	X
Ethylene thiourea	Present	X		X	Present	X	Present	X

USA

Federal Regulations

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SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical name	CAS-No	Weight %	SARA 313 - Threshold Values
Ethylene thiourea	96-45-7	0.5	0.1

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 contains the following HAPs:

Chemical name	CAS-No	Weight %	HAPS data	VOC Chemicals	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Zinc manganese ethylenebis dithiocarbamate	8018-01-7	75				
Ethylene thiourea	96-45-7	0.5				

CERCLA

Component	RQ
Ethylene thiourea 96-45-7 (0.5)	10 lb

SARA Product RQ 0

RCRA

Component	RCRA - D Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Ethylene thiourea 96-45-7 (0.5)			U116

Pesticide Information

Component	FIFRA - Restricted Use	FIFRA - Pesticide Product Other Ingredients	FIFRA - Listing of Pesticide Chemicals	California Pesticides - Restricted Materials
Zinc manganese ethylenebis dithiocarbamate 8018-01-7 (75)			X	
Ethylene thiourea 96-45-7 (0.5)			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
Zinc manganese ethylenebis dithiocarbamate	8018-01-7	Carcinogen	Carcinogen	
Ethylene thiourea	96-45-7	Carcinogen	Carcinogen Developmental	

State Right-to-Know

Chemical name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Zinc manganese ethylenebis				X	

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dithiocarbamate					
Ethylene thiourea	X	X	X	X	

International regulations

Mexico - Grade Severe risk, Grade 4

Component	CATEGORY	Carcinogen Status	Exposure limits
Zinc manganese ethylenebis dithiocarbamate 8018-01-7 (75)	Carcinogen		
Ethylene thiourea 96-45-7 (0.5)	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

Non-controlled

Chemical name	NPRI
Ethylene thiourea	X

Legend

NPRI - National Pollutant Release Inventory

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

16. Other Information

Revision date 04-Mar-2015

Revision Summary

Reconfirm MSDS set up a revision date for printing

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End of MSDS