



United Phosphorus, Inc.

<b>NFPA</b>	<b>PPE</b>		

Issued Date 06-Jan-2012

Revision Date 06-Jan-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	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**

<b>Emergency Overview</b>		
Mild eye irritation Harmful by inhalation, in contact with skin and if swallowed		
<b>CAUTION</b>		
<b>Appearance</b> Grey, Yellow, Brown.	<b>Physical State</b> Free flowing microgranules.	<b>Odor</b> Slight. Rotten egg-like.

**Potential Health Effects**

**Eyes** May cause slight irritation.  
**Skin** Irritating to skin.  
**Inhalation** Slightly toxic if inhaled.  
**Ingestion** Harmful if swallowed.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### Ingredients Name

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

### 4. FIRST AID MEASURES

<b>Eye Contact</b>	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.
<b>Skin Contact</b>	Take off contaminated clothing Rinse skin immediately with plenty of water for 15-20 minutes Call poison control center or doctor for treatment advice.
<b>Inhalation</b>	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.
<b>Ingestion</b>	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
<b>Notes to Physician</b>	No information available

### 5. FIRE-FIGHTING MEASURES

#### Flammable Explosive Properties

<b>Flash Point</b>	Not available
<b>Autoignition Temperature</b>	
159 °C	
<b>Flammability Limits in Air</b>	Not available
<b>Extinguishing Media</b>	Water spray, Carbon dioxide (CO2), Dry chemical
<b>Fire/Explosion Hazard</b>	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.
<b>Hazardous Combustion Products</b>	If heated to decomposition (>235 F) flammable ethylene is produced.

**NFPA**

**Health 2**

**Flammability 0**

**Instability 0**

## 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions</b>	Avoid contact with the skin and the eyes. Ensure adequate ventilation.
<b>Environmental Precautions</b>	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.
<b>Methods for Clean-up</b>	Sweep up and shovel into suitable containers for disposal.

## 7. HANDLING AND STORAGE

<b>Handling</b>	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.
<b>Storage</b>	Keep tightly closed in a dry and cool place. If allowed to become wet the product will deteriorate and represent a fire hazard.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Exposure Guidelines

<b>Engineering Controls</b>	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.
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### Personal Protective Equipment

#### Eye/face Protection

Avoid contact with eyes. Goggles.

#### Skin Protection

Long sleeved clothing. Long pants. Coveralls. Chemical resistant gloves. waterproof gloves. 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

<b>Appearance</b>	Grey, Yellow, Brown	<b>Odor</b>	Slight Rotten egg-like
<b>Physical State</b>	Free flowing microgranules	<b>pH</b>	(1% solution) 6.9
<b>Boiling Point/Range</b>	Not available	<b>Melting Point/Range</b>	Decomposes before melting
<b>Specific Gravity</b>	Not available	<b>Solubility</b>	Dispersible in water
<b>Evaporation Rate</b>	Not available	<b>Vapor pressure</b>	Not available
<b>Vapor Density</b>	Not available	<b>VOC Content</b>	Not available
<b>Viscosity</b>	Not available	<b>Molecular Weight</b>	no data available
<b>Bulk Density</b>	0.63 g/ml	<b>Percent Solids</b>	Not available
<b>Percent Volatiles</b>	Not available		

## 10. STABILITY AND REACTIVITY

<b>Stability</b>	Stable under recommended storage conditions
<b>Conditions to Avoid</b>	Protect from water
<b>Incompatible Materials</b>	Strong acids, Strong oxidizing agents, Water, quaternary ammonium salts, EDBC sequestering agents
<b>Hazardous Decomposition Products</b>	carbon disulfide, ethylene thiourea
<b>Possibility of Hazardous Polymerization</b>	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 Inhalation LC50 (rat) = >5.2 mg/L - 4 hr

### Chronic Toxicity

#### **Carcinogenicity**

Mancozeb:  
The effects in animals from repeated high inhalation dose of mancozeb dust equivalent to 150 -250 times the AEL include reduced body weight, inflammation of the lungs, and abnormal thyroid function.

Toxic effects in animals from repeated ingestion of high doses of Mancozeb include reduced body weight and thyroid effects. In a different study, repeated dosing caused toxic and neopathological effects in male and female rats which included compound-related mortality, decreased body weight, impaired hind limb motor activity and histopathological evidence of nerve damage. The no-observable effect level was 125 ppm.

Increased incidences of thyroid tumors and ocular lesions were observed in rats administered 750 ppm (equivalent to approximately 35 mg/kg/day) of mancozeb in their diet for two years. Mancozeb is considered to show weak carcinogenic activity. Tests in some animals indicate that mancozeb may produce embryo and fetal toxicity, but only at maternally toxic doses. Multi-generation studies in animals demonstrate no reproductive toxicity.

**12-370CAN**  
**PENNCOZEB 75 DF RAINCOAT FUNGICIDE**

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 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**

When shipped domestically by highway in non-bulk containers this product can be shipped as not regulated. When shipped in bulk, by vessel, or internationally use the following shipping description:

**Proper Shipping Name** Environmentally hazardous substances, solid, n.o.s. (Mancozeb)  
**Hazard Class** 9  
**UN-No** UN3077  
**Packing Group** PG III  
**Marine Pollutant:** Yes.

**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

**12-370CAN  
PENNZOZEB 75 DF RAINCOAT FUNGICIDE**

**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

**15. REGULATORY INFORMATION**

**International Inventories**

Chemical Name	TSCA	DSL	NDSL	EINECS/ELI NCS	ENCS	CHINA	KECL	AICS
Zinc manganese ethylenebis dithiocarbamate					(2)-2127 (2)-1841	X	KE-13636	X
Ethylene thiourea	Present	X		X	(5)-423	X	KE-20941	X

**USA**

**Federal Regulations**

**SARA 313**

Y

Chemical Name	CAS-No	Weight %	Ethy
96-45-7	0.5		

**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	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

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**RCRA**

**Component**  
 Ethylene thiourea  
 96-45-7 ( 0.5 )

**RCRA - D Series Wastes**

**RCRA - P Series Wastes**

**RCRA - U Series Wastes**  
 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	Zinc eth dithio
8018-01-7	Carcinogen	Carcinogen	Ethylene thiourea	
Carcinogen	Carcinogen Developmental			

**State Right-to-Know**

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Zinc manganese ethylenebis dithiocarbamate				X	
Ethylene thiourea	X	X	X	X	X

**International Regulations**

**Mexico - Grade**

Mexico - Grade

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**

Not determined

Chemical Name	NPRI
Ethylene thiourea	X

**16. OTHER INFORMATION**

**Revision Date** 06-Jan-2012

**Revision Summary**

Add to system

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**End of MSDS**