



Material Safety Data Sheet

United Phosphorus, Inc.

NFPA	PPE

Issued Date 16-Jun-2010

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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 - 5:00 pm (EST)

Product Name Phoenix Hammerkop Hydrocap
EPA Reg # 70506-230
Recommended Use Pre-emergence weed control
Product Code 12-230B

2. HAZARDS IDENTIFICATION

Appearance Yellow-orange.	Emergency Overview Harmful if swallowed Irritating to eyes Harmful if absorbed through skin	Odor faint.
	Physical State Liquid.	

Potential Health Effects

Acute Effects

Inhalation and skin contact are expected to be the primary routes of occupational exposure to this material. Based on its composition, it is anticipated to be practically non-toxic if swallowed or absorbed through skin, and slightly irritating to eyes and skin. On the basis of available information, exposure to this material is not expected to produce significant adverse human health effects; however, use of appropriate good industrial hygiene and safety precautions to control exposure is recommended when handling or using this material. Overexposure may cause urine to have orange-red color which is caused by dye and not associated with methemoglobinemia.

Personal Precautions	Avoid contact with the skin and the eyes. Ensure adequate ventilation. Remove all sources of ignition. Use personal protective equipment.
Environmental Precautions	Keep material out of lakes, streams, ponds and sewer drains. Dike to confine spill and absorb with an absorbant such as clay, sand or soil.
Methods for Clean-up	Follow all label instructions regarding spill clean-up and residual disposal methods.

7. HANDLING AND STORAGE

Handling	Pesticide applicator and workers must follow the label and Direction for Use in accordance with the EPA Worker's Protection Standard. For manufacturing, blending or packaging the following recommendations are provided:.. Avoid contact with skin and eyes. Keep away from open flames, hot surfaces and sources of ignition. Do not eat, drink or smoke when using this product. Ensure adequate ventilation. Remove all sources of ignition. Wash thoroughly after handling. Keep out of reach of children.
Storage	If stored below 0 C or above 40 C for extended periods of time changes to the product properties may 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.
Personal Protective Equipment	
Eye/face Protection	Where there is potential for eye contact have eye flushing equipment available. Use eye protection to avoid eye contact.
Skin Protection	Long sleeved clothing. Chemical resistant gloves.
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	Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing before re-use. Avoid contact with skin, eyes and clothing. Wear suitable gloves and eye/face protection. Wash hands and face before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Yellow-orange	Odor	faint
Physical State	Liquid	pH	(@20C) 7.72
Boiling Point/Range	Not available	Melting Point/Range	Not available
Specific Gravity	1.1705 @ 20 C	Solubility	Not available
Evaporation Rate	Not available	Vapor pressure	Not available
Vapor Density	Not available	VOC Content	Not available
Viscosity	423.8 cP @ 20 C / 205.3 cP @ 40 C	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	Heat, flames and sparks
Incompatible Materials	No materials to be especially mentioned Corrosive effect on brass, mild steel
Hazardous Decomposition Products	None under normal use
Possibility of Hazardous Polymerization	Hazardous polymerisation does not occur

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Product Information	Pendimethalin 38.7% = Oral LD50 (rat) = >5,000 mg/kg Dermal LD50 (rat/rabbit) = >5,000 mg/kg Inhalation LC50 (rat) = >5.39 mg/L (Max achievable breathing zone) Primary eye irritation (rabbit) = Not an eye irritant Primary dermal irritation (rabbit) = Not a skin irritant Dermal Sensitization = Not a sensitizer
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Chronic Toxicity

Carcinogenicity	There are no known carcinogenic chemicals in this product.
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12. ECOLOGICAL INFORMATION

Ecotoxicity

Pendimethalin:

Not readily biodegradable

Rainbow trout LC50 (86 hr) = 0.89 mg/l

Daphnia magna EC50 (48 hr) = 0.977 mg/l

Green algae EC50 (72 hr) = 0.0081 mg/l

Mallard duck LD50 = 1,421 mg/kg

Honey bee LD50 = 49.8 ug/bee.

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method Follow label for proper disposal instructions.

Contaminated Packaging Refer to product label.

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 substance, liquid, n.o.s (Pendimethalin)
Hazard Class 9
UN-No UN3082
Packing Group PG III
Marine pollutant Marine pollutant.

ICAO

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

IATA

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

IMDG/IMO

Proper Shipping Name Environmentally hazardous substances, liquid, n.o.s. (Pendimethalin)
Hazard Class 9
UN-No UN3082
Packing Group PG III
Marine pollutant Marine pollutant

15. REGULATORY INFORMATION

International Inventories

Chemical Name	TSCA	DSL	NDSL	EINECS/ ELINCS	ENCS	CHINA	KECL	AICS
Pendimethalin [N-(1-ethylpropyl)-3,4-dimethyl-2,6-dinitrobenzeneamine]				X		X	KE-14053	X

USA

Federal Regulations

SARA 313

Y

Chemical Name	CAS-No	Weight %	SARA 313 - Threshold Values
Pendimethalin [N-(1-ethylpropyl)-3,4-dimethyl-2,6-dinitrobenzeneamine]	40487-42-1	38.7	1.0

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

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

This product does not contain any HAPs.

CERCLA

RCRA

Pesticide Information

Component	FIFRA - Restricted Use	FIFRA - Pesticide Product Other Ingredients	FIFRA - Listing of Pesticide Chemicals	California Pesticides - Restricted Materials
Pendimethalin [N-(1-ethylpropyl)-3,4-dimethyl-2,6-dinitrobenzeneamine] 40487-42-1 (38.7)			X	

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
Pendimethalin [N-(1-ethylpropyl)-3,4-dimethyl-2,6-dinitrobenzearamine]		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 17-Sep-2012

Revision Summary

Update section 14

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End of MSDS