

Safety Data Sheet

United Phosphorus, Inc.

Preparation Date 16-Dec-2015

Revision date 25-Mar-2016

Revision Number: 2

1. Identification of the Substance/Preparation and of the Company/Undertaking

Product identifier Product Description:

Goliath XP

Other means of identification Item#: Synonyms Registration number(s)

12-GOLXP Not Available 42750-291-70506

Recommended use of the chemical and restrictions on useRecommended useFungicide.Uses advised againstActivities contrary to label recomendation

Details of the Supplier of the Safety Data SheetSupplier AddressUnited Phosphorus Inc.630 Freedom Business CenterSuite 402King of Prussia, PA 19406Emergency telephone numberCompany Phone NumberEmergency telephone numberChemtrec: (800) 424-9300 (24hrs) or (703) 527-3887Medical: Rocky Mountain Poison Control Center(866) 673-6671 (24hrs)

2. Hazards Identification

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

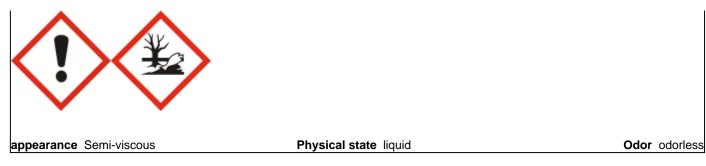
Acute toxicity - Inhalation (Gases)	Not classified
Acute toxicity - Inhalation (Vapors)	Not classified
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin sensitization	Category 1
FLAMMABLE LIQUIDS	Category 4

Label elements

EMERGENCY OVERVIEW

DANGER

hazard statements May cause an allergic skin reaction May be harmful if inhaled combustible liquid



Precautionary Statements - Prevention

Do not breathe dust/fume/gas/mist/vapors/spray Use only outdoors or in a well-ventilated area In case of inadequate ventilation wear respiratory protection Contaminated work clothing should not be allowed out of the workplace Do not spray on an open flame or other ignition source Wear protective gloves/protective clothing/eye protection/face protection Ground/bond container and receiving equipment

IF ON SKIN: Wash with plenty of soap and water If skin irritation or rash occurs: Get medical advice/attention Wash contaminated clothing before reuse IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Immediately call a POISON CENTER or doctor/physician Call a POISON CENTER or doctor if you feel unwell In case of fire: Use CO2, dry chemical, or foam for extinction

Precautionary Statements - Storage

Store in a well-ventilated place. Keep container tightly closed Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards Not Otherwise Classified (HNOC)

OTHER INFORMATION

- Toxic to aquatic life with long lasting effects
- Toxic to aquatic life

3. Composition/information on Ingredients

Chemical name	CAS-No	Weight %	Trade secret
Azoxystrobin	131860-33-8	5.73	
Propiconazole	60207-90-1	9.54	

If CAS number is "proprietary", the specific chemical identity and percentage of composition has been withheld as a trade secret.

4. First aid measures		
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, 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. Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice.	
Most Important Symptoms and Ef	fects, Both Acute and Delayed	
Most Important Symptoms and Effects	No information available.	
Indication of Any Immediate Medio	cal Attention and Special Treatment Needed	
Notes to physician	Treat symptomatically.	
	5. Fire-fighting measures	
Suitable extinguishing media Use extinguishing measures that are	e appropriate to local circumstances and the surrounding environment.	
Unsuitable extinguishing med	ia No information available.	
Specific hazards arising from the No information available.	chemical	
Explosion data Protective equipment and precaut As in any fire, wear self-contained be protective gear.	<u>ions for firefighters</u> eathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full	
6. Accidental release measures		
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Personal precautions, protective e	6. Accidental release measures	
Personal precautions, protective e		
	equipment and emergency procedures	
Personal Precautions	equipment and emergency procedures	
Personal Precautions	Equipment and emergency procedures Provide adequate ventilation. 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.	
Personal Precautions Environmental Precautions Environmental precautions	Equipment and emergency procedures Provide adequate ventilation. 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.	
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Personal Precautions Environmental Precautions Environmental precautions Methods and material for container Methods for Clean-Up Precautions for safe handling Handling	Equipment and emergency procedures Provide adequate ventilation. 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. ment and cleaning up Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Sweep up and shovel into suitable containers for disposal. T. Handling and Storage Keep out of reach of children. Use only in well-ventilated areas. Do not eat, drink or smoke when using this product. Avoid contact with skin and eyes. Remove and wash contaminated clothing before re-use. Keep away from heat, sparks and open flame No smoking. Wash thoroughly after handling.	

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	Use eye protection to avoid eye contact. Where there is potential for eye contact have eye flushing equipment available. Safety glasses with side-shields. Goggles. If splashes are likely to occur, wear:. Face-shield.	
Skin protection Respiratory protection	Long sleeved clothing. Long pants. Chemical resistant footwear plus socks. 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. Wear suitable gloves and eye/face protection. Wash hands before breaks and immediately after handling the product.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical state appearance color	liquid Semi-viscous amber	Odor	odorless
Property	VALUES	Remarks/ • Method	
pH	4	Approximately	
Melting point/freezing point	No information available		
Boiling Point/Range	No information available		
Flash Point	78 °C		
Evaporation Rate	No information available		
flammability (solid, gas)	No information available		
Flammability limit in air			
Upper Flammability Limit	No information available		
Lower Flammability Limit	No information available		
vapor pressure	No information available		
Vapor Density	No information available		
Specific gravity	1.08-1.12 g/ml		
Water solubility	No information available		
Solubility in Other Solvents	No information available		
Partition coefficient: n-octanol/wat	erNo information available		
Autoignition temperature	No information available		
decomposition temperature	No information available		
Viscosity, kinematic	No information available		
Dynamic viscosity	No information available		
Explosive properties	No information available		
Oxidizing properties	No information available		

OTHER INFORMATION

Softening point molecular weight VOC Content density Bulk density No information available No information available No information available No information available 9.01-9.35 lb/gal

10. Stability and Reactivity

Reactivity no data available

Chemical stability

Stable under recommended storage conditions. Possibility of hazardous reactions None under normal processing. Conditions to avoid Extremes of temperature and direct sunlight. incompatible materials Acids. Incompatible with oxidizing agents. Hazardous decomposition products Carbon oxides. Nitrogen oxides (NOx).

11. Toxicological Information

Information on Likely Routes of Exposure

Product information

	Goliath XP Acute oral LD50 (rat) = > 5000 mg/kg Acute dermal LD50 (rat) = >5000 mg/kg Acute inhalation dust/mist LC50 (rat) = 0.58- 2.08 mg/L
Inhalation	There is no data available for this product.
Eye contact	Causes serious eye irritation.
Skin contact	There is no data available for this product.
Ingestion	HARMFUL IF SWALLOWED.

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Azoxystrobin 131860-33-8	>5000 mg/kg	> 2000 mg/kg	0.69 mg/l
Propiconazole 60207-90-1	-	-	= 1264 mg/m³ (Rat) 4 h

Information on Toxicological Effects

Symptoms

No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

sensitization	No information available.
Mutagenic effects	No information available.
Carcinogenicity	There are no known carcinogenic chemicals in this product.
Reproductive effects	Not Available.
STOT - Single Exposure	No information available.
STOT - repeated exposure	No information available.
Aspiration hazard	No information available.

Numerical Measures of Toxicity - Product information

LD50 Oral

> 5000 mg/kg (rat)

LD50 Dermal LC50 Inhalation:

> 5000 mg/kg (rat)> 0.58 - 2.08 mg/l (rat)

12. Ecological Information

ecotoxicity

Azoxystrobin and Propiconazole Toxic to freshwater and estuarine/marine fish Azoxystrobin is toxic to aquatic invertebrates

Azoxystrobin FISH toxicity rainbow trout 96 hr LC50 = 0.47 ppm Bluegill 96 hr LC50 = 1.10 ppm AVIAN toxicity Bobwhite quail dietary LC50 = >5200 ppm Mallard duck dietary LC50 = >5200 ppm BEE toxicity = 200 ug/bee

Propiconazole FISH toxicity rainbow trout 96 hr LC50 = 0.8ppm Bluegill 96 hr LC50 = 1.3 ppm AVIAN toxicity Bobwhite quail dietary LC50 = >5000 ppm Mallard duck dietary LC50 = >5000 ppm BEE toxicity = >25 ug/bee

Persistence/Degradability

No information available.

Bioaccumulation/ Accumulation No information available.

Other Adverse Effects

No information available

13. Disposal Considerations

Waste Treatment Methods

Waste Disposal MethodPesticide 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 packagingRefer to product label.

14. Transport Information

DOT

Not regulated when shipped domestically by highway in non-buk containers as per 49 CFR 171.4 When shipped in bulk, by vessel, or internationally use the IMDG shipping description:

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IATA_ UN-No Proper shipping name Hazard class Packing group Description	UN3082 Environmentally hazardous substances, liquid, n.o.s (Azoxystrobin) (Propiconazole) 9 PG III Marine Pollutant
IMDG/IMO UN-No Proper shipping name Hazard class Packing group Marine Pollutant	UN3082 Environmentally hazardous substances, liquid, n.o.s (Azoxystrobin) (Propiconazole) 9 PG III Marine Pollutant

15. Regulatory Information

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

signal word CAUTION

Keep out of Reach of Children. Harmful if swallowed. Harmful if inhaled. Causes moderate eye irritation. Azoxystrobin and Propiconazole are toxic to freshwater and marine/estuarine fish. Azoxystrobin is toxic to aquatic invertebrates.

International Inventories	
USINV	Not determined
DSL/NDSL	Not determined
EINECS/	Does not comply
ELINCS	
ENCS	Does not comply
China	Does not comply
KECL	Does not comply
PICCS	Does not comply
AICS	Does not comply
TSCA	Does not comply

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

Federal Regulations

<u>SARA 313</u>

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	SARA 313 - Threshold Values
Propiconazole - 60207-90-1	1.0

SARA 311/312 Hazardous	
Categorization	
Acute health hazard	NO
Chronic health hazard	NO
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CERCLA RCRA Pesticide Information

State Regulations

State Right-to-Know

Chemical name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island		
Propiconazole		Х					
International regulations							

U.S. EPA Label information

EPA Pesticide registration number 42570-291-70506

16. Other Information						
NFPA	HEALTH 2	flammability 1	Instability 0	Physical hazard -		
Preparation Date	16-De	ec-2015				
Revision date	25-Ma	ar-2016				
Revision Summary						
Update section 14						
Disclaimer						
	Inc. believes that the	information and recomme	ndations container here	in (including data and		
		reof. NO WARRANTY OF I				

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End of MSDS