







# Material Safety Data Sheet

## United Phosphorus, Inc.

NFPA	PPE		
			

Issued Date 06-May-2008

Revision Date 23-Aug-2013

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 R&D Technical Service	1-800-438-6071 610-223-2180	8:00 am to 5:00 pm EST 8:00 am - 5:00 pm (EST)

**Product Name** SuperTin 4L  
**EPA Reg #** 70506-212  
**Recommended Use** fungicide  
**Product Code** RAM05

## 2. HAZARDS IDENTIFICATION

### Emergency Overview

Fatal if inhaled

May be fatal if swallowed

Causes irreversible eye damage

Harmful if absorbed through skin

The active ingredient has been determined by US EPA to cause affects to fetal development. Exposure to this product during pregnancy should be avoided.

### DANGER!

**Appearance** White.

**Physical State** Liquid.

**Odor** Slight.

### Potential Health Effects

#### Acute Effects

Repeated exposures may produce impaired immune system function with increased susceptibility to disease, altered white blood cell and lymphocyte counts, and effects on the pituitary, testes, and liver.

#### Eyes

Eye contact may cause corneal opacity or clouding of the eye. Severe eye irritation can occur with tearing, pain or blurred vision.

#### Skin

Causes skin irritation. Exposure can result in reddening and swelling.

#### Inhalation

Inhalation may cause irritation of the nose, throat, and lungs with cough, difficulty breathing or shortness of breath.

#### Ingestion

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

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### Ingredients Name

Chemical Name	CAS-No	Weight %	OSHA PEL
Triphenlytin hydroxide	76-87-9	40	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

If breathing is irregular or stopped, administer artificial respiration  
May cause allergic respiratory reaction  
Call a poison control center or doctor for further treatment advice.

#### Ingestion

Call a physician or poison control center immediately  
May produce an allergic reaction  
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** Probable mucosal damage may contraindicate the use of gastric lavage

## 5. FIRE-FIGHTING MEASURES

### Flammable Explosive Properties

**Flash Point**

>  
200  
°C

**Autoignition Temperature**

Not available

**Flammability Limits in Air**

Not available

**Extnguishing Media**

Dry chemical, Carbon dioxide (CO2) Water spray Foam.

**Fire/Explosion Hazard**

Toxic vapors may be released in the event of fire.

**Hazardous Combustion Products**

Diphenyltin hydroxide, monophenyltin hydroxides, and metallic tin under fire conditions.

**NFPA**

**Health** 4

**Flammability** 1

**Instability** 0

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions**

Avoid contact with the skin and the eyes. Use personal protective equipment. Remove all sources of ignition.

**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**

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.

## 7. HANDLING AND STORAGE

**Handling**

Do not eat, drink or smoke when using this product. Do not breathe vapours or spray mist. Remove and wash contaminated clothing before re-use.

**Storage**

Store in an area where cross-contamination with pesticides, fertilizers, food or feed could not occur. Keep out of the reach of children. Store in cool/well-ventilated place. Avoid temperature extremes during storage. Store in original container.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<b>Exposure Guidelines</b>	This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.
<b>Engineering Controls</b>	When handlers use closed systems, enclosed cabs, or aircraft in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [(40 CFR 170.240 (d) (4-6) ], the handler PPE requirements may be reduced or modified as specified in the WPS.
<b>Personal Protective Equipment</b>	
<b>Eye/face Protection</b>	Where there is potential for eye contact have eye flushing equipment available. Use eye protection to avoid eye contact. Goggles. or. Face-shield.
<b>Skin Protection</b>	Long sleeved clothing. Long pants. Chemical resistant gloves. Chemical resistant apron.
<b>Respiratory Protection</b>	Select respirator with an organic vapor cartridge with 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 organic vapor cartridge or canister with any N,P,R, or HE filter.
<b>General Hygiene Considerations</b>	Do not eat, drink or smoke when using this product. Avoid contact with skin, eyes and clothing. Wash hands and face before breaks and immediately after handling the product. Remove and wash contaminated clothing before re-use. Wear suitable gloves and eye/face protection. Wear respiratory protection.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance</b>	White	<b>Odor</b>	Slight
<b>Physical State</b>	Liquid	<b>pH</b>	7.8
<b>Boiling Point/Range</b>	Not available	<b>Melting Point/Range</b>	Not available
<b>Specific Gravity</b>	Not available	<b>Solubility</b>	Disperses to form a suspension
<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>	10 lb/gal	<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>	Extreme temperatures
<b>Incompatible Materials</b>	No information available
<b>Hazardous Decomposition Products</b>	Diphentyltin hydroxide, monophenyltin hydroxide, and metallic tin (Organic acid vapors)
<b>Possibility of Hazardous Polymerization</b>	Hazardous polymerisation does not occur

## 11. TOXICOLOGICAL INFORMATION

### Acute Toxicity

#### Product Information

SuperTin 4L:  
Oral LD50 = 250 mg/kg in male rats  
Oral LD50 = 315 mg/kg in female rats  
Dermal LD50 = 2000 mg/kg in rabbits  
Inhalation 4 hr LC50 = 0.062 mg/L in male rats  
Inhalation 4 hr LC50 = 0.029 mg/L in female rats

Eye = moderate to severely irritating to the eyes  
Skin = moderate to severe skin irritation

Rats and mice exhibited non-specific weight loss and reduced food consumption upon ingestion. In tests with laboratory animals, ingestion produced altered lymphocyte, white blood cell, and immunoglobulin counts.

Repeated inhalation produced lung and respiratory irritation and edema in rats.

### Chronic Toxicity

#### Carcinogenicity

Super Tin 4L:  
90 day neurotoxicity study = No evidence of neurotoxicity up to the highest level tested (80 ppm)

Animal data using Triphenyltin hydroxide show an increase in pituitary and testicular tumors in rats and an increase in liver tumors in mice.

Developmental effects were seen to exposure levels producing other toxic effects in the adult animal when tested with Triphenyltin hydroxide.

2-generation reproduction study with Triphenyltin hydroxide in rats produced a decreased litter size and effects on the liver and spleen weight at exposure levels lower than where parental toxicity was observed.

3-generation study with Triphenyltin hydroxide in rats resulted in retardation of testicular development but did not effect testicular damage or fertility.

Triphenyltin hydroxide did not produce genetic damage in bacterial cell cultures or in animals.

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Super Tin 4L:

Aquatic toxicity

96 hr LC50 Rainbow trout : 0.049 mg/L

96 hr LC50 Channel catfish : 2.5 ppm

48 hr EC50 Daphnia magna : 0.012 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** Refer to product label.

**14. TRANSPORT INFORMATION**

**DOT**

**Proper Shipping Name** Organotin pesticides, liquid, toxic, (Triphenyltin hydroxide 40%)  
**Hazard Class** 6.1  
**UN-No** UN 3020  
**Packing Group** PG I  
**Marine pollutant** Yes - when shipped in bulk.

**ICAO**

**UN-No** UN 3020  
**Proper Shipping Name** Organotin pesticides, liquid, toxic (Triphenyltin hydroxide 40%)  
**Hazard Class** 6.1  
**Packing Group** PG I  
**Description** Marine pollutant

**IATA**

**UN-No** UN 3020  
**Proper Shipping Name** Organotin pesticides, liquid, toxic (Triphenyltin hydroxide 40%)  
**Hazard Class** 6.1  
**Packing Group** PG I  
**ERG Code** 6 L  
**Special Provisions** A3  
**Description** Marine pollutant

**IMDG/IMO**

**Proper Shipping Name** Organotin pesticides, liquid, toxic (Triphenyltin hydroxide 40%)  
**Hazard Class** 6.1  
**UN-No** UN 3020  
**Packing Group** PG I  
**EmS No.** F-A, S-A  
**Special Provisions** 61, 223, 274  
**Marine pollutant** This product contains a chemical which is listed as a severe marine pollutant according to IMDG/IMO

**15. REGULATORY INFORMATION**

**International Inventories**

Chemical Name	TSCA	DSL	NDSL	EINECS/ ELINCS	ENCS	CHINA	KECL	AICS
Triphenyltin hydroxide	Present		X	X	(3)-3412		KE-20922	X

**USA**

**RAM05**  
**SuperTin 4L**

**Federal Regulations**

**SARA 313**

Y

Chemical Name	CAS-No	Weight %	SARA 313 - Threshold Values
Triphenlytin hydroxide	76-87-9	40	1.0

**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 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
Triphenlytin hydroxide 76-87-9 ( 40 )			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
Triphenlytin hydroxide	76-87-9	Carcinogen	Carcinogen Developmental	

**State Right-to-Know**

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Triphenlytin hydroxide	X	X			

**International Regulations**

**Mexico - Grade**

Mexico - Grade

Component	Category	Carcinogen Status	Exposure Limits
-----------	----------	-------------------	-----------------

**RAM05**  
**SuperTin 4L**

---

Triphenlytin hydroxide 76-87-9 ( 40 )	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

**16. OTHER INFORMATION**

**Revision Date** 23-Aug-2013

**Revision Summary**  
Recurrent confirmation/update of data

**Miscellaneous**

Restricted Use Pesticide - For retail sale to and use by Certified Applicators or persons directly under their supervision, and only for those uses covered by the Certified Applicators certification.

UPI, Inc. believes that the information and recommendations contained herein (including data and statements) are accurate as of the date hereof. **NO WARRANTY OF FITNESS FOR ANY PARTICULAR PURPOSE, WARRANTY OF MERCHANTABILITY, OR ANY OTHER WARRANTY, EXPRESSED OR IMPLIED, IS MADE CONCERNING THE INFORMATION PROVIDED HEREIN.** The information provided herein relates only to the specific product designated and may not be valid where such product is used in combination with other materials or in any process. Further, since the conditions and methods of use are beyond the control of UPI, Inc. UPI, Inc. expressly disclaims any and all liability as to any results obtained or arising from any use of the product or reliance on such information.

**End of MSDS**