



# Safety Data Sheet

United Phosphorus, Inc.

Preparation Date 08-May-2015

Revision date 08-May-2015

Revision Number: 1

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

### Product identifier

**Product Description:** Tengard SFR One Shot

### Other means of identification

**Item#:** 12U-131  
**UN-No** UN1993  
**Synonyms** Not Available  
**Registration number(s)** 70506-6

### Recommended use of the chemical and restrictions on use

**Recommended use** Insecticide. termiticide.  
**Uses advised against** Activities contrary to label recommendation

### Details of the Supplier of the Safety Data Sheet

#### Supplier Address

UPI  
630 Freedom Business Center  
Suite 402  
King of Prussia, PA 19406

#### Emergency telephone number

**Company Phone Number** 1-800-438-6071  
**Emergency telephone number** Chemtrec: (800) 424-9300 (24hrs) or (703) 527-3887  
Medical: 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)

Skin sensitization	Category 1
Germ cell mutagenicity	Category 1B
Carcinogenicity	Category 1B
Aspiration toxicity	Category 1

### Label elements

#### **EMERGENCY OVERVIEW**

**DANGER**

#### **hazard statements**

May cause an allergic skin reaction  
May cause genetic defects  
May cause cancer  
May be fatal if swallowed and enters airways



**appearance** amber

**Physical state** liquid

**Odor** faint Mild (bad translation) Petroleum

**Precautionary Statements - Prevention**

Do not handle until all safety precautions have been read and understood  
 Do not handle until all safety precautions have been read and understood  
 Wear cold insulating gloves/face shield/eye protection  
 Do not get in eyes, on skin, or on clothing  
 Contaminated work clothing should not be allowed out of the workplace  
 Wear protective gloves

**Precautionary Statements - Response**

IF exposed or concerned: Get medical advice/attention  
 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 SWALLOWED: Immediately call a POISON CENTER or doctor/physician  
 Do NOT induce vomiting

**Precautionary Statements - Storage**

Store locked up

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards Not Otherwise Classified (HNOC)**

**OTHER INFORMATION**

- Very toxic to aquatic life with long lasting effects
- Very toxic to aquatic life

**3. Composition/information on Ingredients**

Chemical name	CAS-No	Weight %	Trade secret
Permethrin technical	52645-53-1	36.8	
Hydrocarbon solvent	Proprietary	>15	

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

control center immediately.

**Ingestion** Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.

**Protection of First-aiders** Use personal protective equipment.

#### **Most Important Symptoms and Effects, Both Acute and Delayed**

**Most Important Symptoms and Effects** No information available.

#### **Indication of Any Immediate Medical Attention and Special Treatment Needed**

**Notes to physician** Treat symptomatically. Treatment should include monitoring for the development of hypersensitivity reactions with respiratory distress. For paresthesia, Vitamin E topical application is highly effective.

### **5. Fire-fighting measures**

#### **Suitable extinguishing media**

Carbon dioxide (CO<sub>2</sub>). Water. Foam.

**Unsuitable extinguishing media** No information available.

#### **Specific hazards arising from the chemical**

Thermal decomposition can lead to release of irritating gases and vapours.

**Hazardous combustion products** Carbon dioxide (CO<sub>2</sub>). Chlorine. Hydrogen chloride.

#### **Explosion data**

#### **Protective equipment and precautions for firefighters**

Use personal protective equipment. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

### **6. Accidental release measures**

#### **Personal precautions, protective equipment and emergency procedures**

**Personal Precautions** Provide adequate ventilation. Avoid contact with the skin and the eyes. Remove all sources of ignition. Wear protective gloves/clothing and eye/face protection. Wash thoroughly after handling.

#### **Environmental Precautions**

**Environmental precautions** Prevent further leakage or spillage if safe to do so. 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 and material for containment and cleaning up**

**Methods for Clean-Up** Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Ground and bond containers when transferring material. Sweep up and shovel into suitable containers for disposal.

### **7. Handling and Storage**

#### **Precautions for safe handling**

**Handling** Do not eat, drink or smoke when using this product. Remove all sources of ignition. Avoid contact with skin and eyes. Keep away from open flames, hot surfaces and sources of

ignition. Check that all equipment is properly bonded and grounded. Use spark resistant tools. Remove and wash contaminated clothing before re-use.

#### Conditions for safe storage, including any incompatibilities

**Storage** Keep container tightly closed in a dry and well-ventilated place. Keep away from open flames, hot surfaces and sources of ignition. Keep out of the reach of children. Store in an area where cross-contamination with pesticides, fertilizers, food or feed could not occur. Static electricity may accumulate when transferring material. All containers must be bonded and grounded during filling and emptying operations.

**incompatible materials** Strong oxidizing agents.

### 8. Exposure Controls/Personal Protection

#### Exposure guidelines

Chemical name	ACGIH TLV	OSHA PEL
Hydrocarbon solvent	TWA: 100 ppm	TWA: 500 ppm TWA: 2900 mg/m <sup>3</sup> (vacated) TWA: 100 ppm (vacated) TWA: 525 mg/m <sup>3</sup>

**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. Goggles. If splashes are likely to occur, wear: Face-shield.

##### Skin protection

Wear protective gloves/clothing. Chemical resistant footwear plus socks.

##### 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. 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

<b>Physical state</b>	liquid	<b>Odor</b>	faint Mild (bad translation)
<b>appearance</b>	amber		Petroleum
<b>color</b>	No information available		
<b><u>Property</u></b>	<b><u>VALUES</u></b>	<b><u>Remarks/ • Method</u></b>	
<b>pH</b>	4.9		
<b>Melting point/freezing point</b>	5.9 °C / 43 °F		
<b>Boiling Point/Range</b>	No information available		
<b>Flash Point</b>	44 C 111 °F		
<b>Evaporation Rate</b>	No information available		
<b>flammability (solid, gas)</b>	No information available		
<b>Flammability limit in air</b>			
<b>Upper Flammability Limit</b>	No information available		
<b>Lower Flammability Limit</b>	No information available		
<b>vapor pressure</b>	No information available		

<b>Vapor Density</b>	No information available
<b>Specific gravity</b>	1.039 @ 20 C
<b>Water solubility</b>	No information available
<b>Solubility in Other Solvents</b>	No information available
<b>Partition coefficient: n-octanol/water</b>	No information available
<b>Autoignition temperature</b>	No information available
<b>decomposition temperature</b>	No information available
<b>Viscosity, kinematic</b>	No information available
<b>Dynamic viscosity</b>	No information available
<b>Explosive properties</b>	No information available
<b>Oxidizing properties</b>	No information available

**OTHER INFORMATION**

<b>Softening point</b>	No information available
<b>molecular weight</b>	1.039 @ 20 C
<b>VOC Content</b>	No information available
<b>density</b>	No information available
<b>Bulk density</b>	No information available

## 10. Stability and Reactivity

**Reactivity**

no data available

**Chemical stability**

Stable under normal conditions.

**Possibility of hazardous reactions**

None under normal processing.

**Hazardous polymerization**

Hazardous polymerisation does not occur.

**Conditions to avoid**

Heat, flames and sparks.

**incompatible materials**

Strong oxidizing agents.

**Hazardous decomposition products**

Carbon oxides.

## 11. Toxicological Information

**Information on Likely Routes of Exposure**

<b>Inhalation</b>	HARMFUL IF INHALED.
<b>Eye contact</b>	Moderately irritating to the eyes.
<b>Skin contact</b>	May be harmful if absorbed through the skin.
<b>Ingestion</b>	HARMFUL IF SWALLOWED.

**Component Information**

Permethrin - has low mammalian toxicity and virtually no allergic side effects and is not a skin or eye irritant. However, prolonged exposure might result in parathesia (tingling sensation), which is reversible within 12 hours. Exposure to permethrin is via dermal contact and inhalation. In repeat patch tests in humans, dermal applications of permethrin at 1% for up to 9 days did not result in irritation or sensitization. The clinical manifestations of inhalation exposure are confined to the upper respiratory tract and include rhinitis, sneezing, cough, and scratchy throat.

Hydrocarbon solvent (Stoddard) - Exposure via inhalation or dermal contact. Humans exposed for 30 minutes to up to 2,400 mg/m<sup>3</sup> of completely vaporized Stoddard solvent had no dose related changes in motor coordination and the exposure level of 2,400 mg/m<sup>3</sup> was considered as the no observed effect level. In a 15 minute period, eye irritation,

characterized as a slight dryness, was reported in one of six volunteers at 150 ppm. At 470 ppm (2,700 mg.m3), ocular irritation was reported by all six volunteers. Exposure greater than 525 mg/m<sup>3</sup> have been associated with ocular and dermal irritation, defatting of the skin, and anusea. Acute effects from inhaling large concentrations of Stoddard solvent has been associated with headaches, fatigue, intermittent episodes of inebriation, and memory deficits that generally resolve on discontinuation of exposure. Ingestion of petroleum hydrocarbons are poorly absorbed from the gastrointestinal tract, and do not cause appreciable systemic toxicity by this route unless aspiration has occurred.

Chemical name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Hydrocarbon solvent	500	-	-

**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** The information below indicates whether any agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Permethrin technical 52645-53-1	-	Group 3		-

**Reproductive effects** Not Available.  
**STOT - Single Exposure** No information available.  
**STOT - repeated exposure** No information available.  
**Target organ effects** kidney, Respiratory System, EYES, skin, Central Nervous System (CNS).  
**Aspiration hazard** No information available.

**Numerical Measures of Toxicity - No information available**

The following values are calculated based on chapter 3.1 of the GHS document . 777 mg/kg (rat) 0 mg/kg (rat) 0 mg/l (mist) (dust) mg/m<sup>3</sup> 0 ml/m<sup>3</sup> (Vapor)

**12. Ecological Information**

Marine Pollutant. (Permethrin).

**ecotoxicity**

Permethrin in soil is stable over a wide range of pH values when applied at agricultural use rates. Permethrin has moderate rate of degradation in soil, At termicidal use rates, permethrin degrades at a slower rate which is governed by soil characteristics such as soil type, microbial population concentration in soil and aerobic conditions of the soil. Due to its high affinity for organic matter, there is little potential for movement in soil or entry into ground water. Permethrin has a low Pow of 6.1 but a low potential to bioconcentrate (BCF=500) due to the ease with which it is metabolized.

Extremely toxic to fish = 0.05 ug/L to 315 ug/L  
 Extremely toxic to aquatic arthropods LC50 = 0.02 ug/L to 7.6 ug/L

Marine species are often more sensitive than freshwater species. Bacteria, algae, mollusks and amphibians are much more tolerant of permethrin than the fish and arthropods. Care should be taken to avoid contamination of the aquatic environment. Permethrin is slightly toxic to birds and oral L50 values are greater than 3,600 mg/kg. Longer dietary studies showed that concentrations of up to 500 ppm in the diet had no effect on bird reproduction. Permethrin is extremely toxic to fish, aquatic invertebrates and honey bees.

rainbow trout 96 hr LC50 = 2.5 ug/L  
 Bluegill sunfish 95 hr LC50 = 1.8 ug/L  
 Japanese quail LD50 = 23,000 mg/kg  
 Mallard duck LD50 = 11,257 mg/kg

**Persistence/Degradability**

No information available.

**Bioaccumulation/ Accumulation**

Bioaccumulative potential.

Chemical name	Log Pow
Permethrin technical 52645-53-1	6.5

**Other Adverse Effects**

No information available

**13. Disposal Considerations****Waste Treatment Methods****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**

<b>UN-No</b>	UN1993
<b>Proper shipping name</b>	Flammable liquid, n.o.s (Hydrocarbon)
<b>Hazard class</b>	3
<b>Packing group</b>	PG III
<b>Marine Pollutant</b>	Marine Pollutant. (Permethrin).

**TDG****ICAO**

<b>UN-No</b>	UN1993
<b>Proper shipping name</b>	Flammable liquid, n.o.s (hydrocarbon solvent)
<b>Hazard class</b>	3
<b>Packing group</b>	PG III
<b>Description</b>	Marine Pollutant (Permethrin)

**IATA**

<b>UN-No</b>	UN1993
<b>Proper shipping name</b>	Flammable liquid, n.o.s (hydrocarbon)
<b>Hazard class</b>	3
<b>Packing group</b>	PG III
<b>Description</b>	Marine Pollutant (Permethrin)

**IMDG/IMO**

<b>UN-No</b>	UN1993
<b>Proper shipping name</b>	Flammable liquid, n.o.s (hydrocarbon)
<b>Hazard class</b>	3
<b>Packing group</b>	PG III
<b>EmS No.</b>	F-E, S-E
<b>Marine Pollutant</b>	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

**Ventilation Control** 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.

**Harmful if inhaled or absorbed through skin. Harmful if swallowed. Keep out of Reach of Children. Causes moderate eye irritation. Extremely toxic to aquatic organisms including fish and invertebrates.**

### International Inventories

<b>USINV</b>	Not determined
<b>DSL/NDSL</b>	Not determined
<b>EINECS/ ELINCS</b>	Does not comply
<b>ENCS</b>	Does not comply
<b>China</b>	Does not comply
<b>KECL</b>	Does not comply
<b>PICCS</b>	Does not comply
<b>AICS</b>	Does not comply
<b>TSCA</b>	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

#### 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 40n of the Code of Federal Regulations, Part 372:

Chemical name	SARA 313 - Threshold Values
Permethrin technical - 52645-53-1	1.0

#### SARA 311/312 Hazardous

##### Categorization

<b>Acute health hazard</b>	yes
<b>Chronic health hazard</b>	NO
<b>Fire hazard</b>	yes
<b>Sudden release of pressure hazard</b>	No
<b>Reactive Hazard</b>	yes

#### CERCLA

**SARA Product RQ** 0

#### RCRA

##### Pesticide Information

Component	FIFRA - Restricted Use	FIFRA - Pesticide Product Other Ingredients	FIFRA - Listing of Pesticide Chemicals	California Pesticides - Restricted Materials



Permethrin technical 52645-53-1 ( 36.8 )			X	
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**State Regulations**

**State Right-to-Know**

Chemical name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Permethrin technical	X	X		X	
Hydrocarbon solvent	X	X	X		

**International regulations**

**U.S. EPA Label information**

EPA Pesticide registration number 70506-6

**16. Other Information**

**NFPA**                      **HEALTH 3**                      **flammability 2**                      **Instability 1**                      **Physical hazard -**

**Preparation Date**                      08-May-2015  
**Revision date**                      08-May-2015  
**Revision Summary**  
 Update to GHS format

**End of MSDS**