1. PRODUCT AND COMPANY IDENTIFICATION

**Company Information**

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

**Contact Information**

- Customer Service 1-800-438-6071  
8:00 am to 5:00 pm EST
- R&D Technical Service 610-878-6100  
8:00 am - 5:00 pm (EST)

**Product Information**

- **Product name**: Tengard SFR One Shot  
- **EPA Reg #**: 70506-6 / PMRA no 29886  
- **Recommended use**: Insecticide termiticide  
- **Product code**: 12U-131

**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

**Potential health effects**

- **Inhalation**  
  Skin contact may produce skin sensations such as numbing, burning, or tingling. These sensations are reversible within 12 - 24 hours of onset. Very toxic in contact with skin.

- **Skin Contact**  
  Inhalation of solvent vapors may cause headache, fatigue and intermittent episodes of inebriation that resolve after removal from exposure.

- **Ingestion**  
  MAY BE HARMFUL IF SWALLOWED.
3. Composition/information on Ingredients

<table>
<thead>
<tr>
<th>Ingredients Name</th>
<th>Component</th>
<th>CAS-No</th>
<th>Weight %</th>
<th>OSHA PEL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Triacetin</td>
<td>102-76-1</td>
<td>20-35</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Permethrin technical</td>
<td>52645-53-1</td>
<td>36.8</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>Hydrocarbon solvent ( &gt;15 )</td>
<td>-</td>
<td>&gt;15</td>
<td>TWA: 500 ppm TWA: 2900 mg/m³ (vacated) TWA: 100 ppm (vacated) TWA: 525 mg/m³</td>
</tr>
</tbody>
</table>

4. First aid measures

**Eye contact**
Immediate medical attention is not required
Rinse thoroughly with plenty of water, also under the eyelids
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes

**Skin contact**
If skin irritation persists, call a physician
Immediate medical attention is not required
Wash off immediately with plenty of water
Call a physician immediately
Wash off immediately with plenty of water for at least 15 minutes
Remove and wash contaminated clothing before re-use

**Inhalation**
Immediate medical attention is not required
Move to fresh air

**Ingestion**
Immediate medical attention is not required
Rinse mouth
Drink plenty of water
If symptoms persist, call a physician
Do not induce vomiting without medical advice
Never give anything by mouth to an unconscious person
Consult a physician

**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

**Flammable Explosive Properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>flash point</td>
<td>44 C 111 °F</td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>Not Available</td>
</tr>
<tr>
<td>Flammability Limits in Air</td>
<td>Not Available</td>
</tr>
</tbody>
</table>
12U-131
Tengard SFR One Shot

Extinguishing Media
Foam, Carbon dioxide (CO2) Dry chemical.

Fire/Explosion Hazard
Heated material can form flammable and explosive vapors with air. Contain run-off from fire. Keep product and empty container away from heat and sources of ignition. Vapors are heavier than air and may travel along ground or be moved by ventilation and ignited by heat, pilot lights, and other flames and ignition sources at locations distant from material handling point.

Hazardous combustion products
Carbon dioxide (CO2), Chlorine, Hydrogen chloride.

NFPA HEALTH 3 flammability 2 Instability 1

6. Accidental release measures

Personal Precautions
Provide adequate ventilation.

Environmental precautions
Prevent further leakage or spillage if safe to do so. No special environmental precautions required.

Methods for Clean-Up
Pick up and transfer to properly labelled containers. After cleaning, flush away traces with water.

7. Handling and Storage

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.

Storage
Keep in a dry place. Keep containers tightly closed in a cool, well-ventilated place.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure guidelines

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrocarbon solvent</td>
<td>TWA: 100 ppm</td>
<td>TWA: 500 ppm (vacated) TWA: 2900 mg/m³ (vacated) TWA: 100 ppm (vacated) TWA: 525 mg/m³</td>
</tr>
</tbody>
</table>

Engineering controls
Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

| Eye/Face Protection      | Tightly fitting safety goggles. |
| Skin protection          | Impervious gloves. |
| Respiratory protection   | Effective dust mask. |

General hygiene considerations
General industrial hygiene practice.

9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>property</th>
<th>value</th>
</tr>
</thead>
<tbody>
<tr>
<td>appearance</td>
<td>amber</td>
</tr>
<tr>
<td>Odor</td>
<td>faint Mild (bad translation)</td>
</tr>
<tr>
<td>Petroleum</td>
<td></td>
</tr>
<tr>
<td>Physical state</td>
<td>liquid</td>
</tr>
<tr>
<td>pH</td>
<td>(6% in water) 4.9</td>
</tr>
<tr>
<td>Boiling Point/Range</td>
<td>Not Available</td>
</tr>
<tr>
<td>Melting Point/Range</td>
<td>5.9 °C / 43 °F</td>
</tr>
</tbody>
</table>
10. Stability and Reactivity

stability
Stable under recommended storage conditions

Conditions to avoid
Heat, flames and sparks

incompatible materials
Strong oxidizing agents

Hazardous decomposition products
Carbon oxides

Possibility of Hazardous Polymerization
None under normal processing

11. Toxicological Information

Acute toxicity

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. Triacetin - is not an irritant or a sensitizer in a clinical maximization study involving humans and only very mild reactions were seen in a test using 50% dilution. While it appears to be innocuous when swallowed, inhaled or in contact with the skin, it may cause slight irritation to sensitive individuals. The dermal LD50 of triacetin in rabbits is >5 g/kg (non-toxic). Triacetin was non-toxic when administered via inhalation or parenterally or in subchronic studies administered via feed or inhalation. Hydrocarbon solvent (Stoddard) - Exposure via inhalation or dermal contact. Humans exposed for 30 minutes to up to 2,400 mg/m$^3$ of completely vaporized Stoddard solvent had no dose related changes in motor coordination and the exposure level of 2,400 mg/m$^3$ 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$^3$ 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.

Chronic toxicity

Carcinogenicity
The information below indicates whether any agency has listed any ingredient as a
12. Ecological Information

**ecotoxicity**

Permethrin

When applied at agricultural use rates, permethrin has a moderate rate of degradation in soil. At termicidal use rates, permethrin degrades as a slower rate which is governed by soil characteristics such as soil type, microbial population, concentration in soil, and aerobis conditions of the soils. Due to its high affinity for organic matter (Koc=86,000), there is little potential for movement in soil or entry into ground water. Permethrin has a Log Pow of 6.1, but a low potential to bioconcentrate (BCF= 500) due to the ease which it is metabolized.

**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 LD50 values are greater than 3,600 mg/kg. Longer dietary studies showed that concentrations of up to 500ppm in the diet had no effect on bird reproduction. Permethrin: This product is extremely toxic to fish, aquatic invertebrates, and honeybees. Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans or other bodies of water unless in accordance with the requirements of a National Pollutant discharge Elimination system (NDPES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or the Regional Office of the Environmental Protection Agency.

**FISH TOXICITY:**

Rainbow trout LC50 (96 hr) 2.5 ug/L
Bluegill sunfish LC50 (95 HR) 1.8 ug/L

**AVIAN TOXICITY**

Mallard duck LD50 11,275 mg/kg b.w.
Japanese quail LD50 23,000 mg/kg b.w.

13. Disposal Considerations

**Waste Disposal Method**

Can be incinerated, when in compliance with local regulations. Can be disposed as waste water, when in compliance with local regulations. Can be landfilled or incinerated, when in compliance with local regulations.

**Contaminated packaging**

Clean container with water. Empty containers should be taken for local recycling, recovery or waste disposal.

14. Transport Information

**DOT.**

<table>
<thead>
<tr>
<th>Proper shipping name</th>
<th>Flammable liquid, n.o.s (Hydrocarbon)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazard class</td>
<td>3</td>
</tr>
<tr>
<td>UN-No</td>
<td>UN1993</td>
</tr>
<tr>
<td>Packing group</td>
<td>PG III</td>
</tr>
<tr>
<td>Marine Pollutant</td>
<td>Y. (Permethrin). This product contains a chemical which is listed as a marine pollutant</td>
</tr>
</tbody>
</table>
according to DOT.

ICAO

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

IATA

UN-No: UN1993
Proper shipping name: Flammable liquid, n.o.s (hydrocarbon)
Hazard class: 3
Packing group: PG III
ERG Code: 3L
Description: Marine Pollutant (Permethrin)

IMDG/IMO

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

TDG

Proper shipping name: Flammable liquid, n.o.s (hydrocarbon)
Hazard class: 3
UN-No: UN1993
Packing group: PG III

### 15. Regulatory Information

#### International Inventories

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>TSCA</th>
<th>DSL</th>
<th>NDSL</th>
<th>EINECS/ELINCS</th>
<th>ENCS</th>
<th>China</th>
<th>KECL</th>
<th>AICS</th>
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</thead>
<tbody>
<tr>
<td>Triacetin</td>
<td>Present</td>
<td>X</td>
<td></td>
<td>X</td>
<td>Present</td>
<td>X</td>
<td>Present</td>
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<tr>
<td>Permethrin technical</td>
<td>X</td>
<td>X</td>
<td>Present</td>
<td>X</td>
<td>Present</td>
<td>X</td>
<td>Present</td>
<td>X</td>
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<td>Present</td>
<td>X</td>
<td></td>
<td>X</td>
<td>Present</td>
<td>X</td>
<td>Present</td>
<td>X</td>
</tr>
</tbody>
</table>

#### USA

**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 and Title 40n of the Code of Federal Regulations, Part 372:

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No</th>
<th>Weight %</th>
<th>SARA 313 - Threshold Values</th>
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<tbody>
<tr>
<td>Permethrin technical</td>
<td>52645-53-1</td>
<td>36.8</td>
<td>1.0</td>
</tr>
</tbody>
</table>

**SARA 311/312 Hazardous Categorization**

- Chronic health hazard: NO
- Acute health hazard: yes
- Fire hazard: yes
- Sudden release of pressure hazard: No
- Reactive Hazard: yes

**Clean Water Act**
Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)
This product does not contain any HAPs.

CERCLA
SARA Product RQ 0

RCRA
Pesticide Information

<table>
<thead>
<tr>
<th>Component</th>
<th>FIFRA - Restricted Use</th>
<th>FIFRA - Pesticide Product Other Ingredients</th>
<th>FIFRA - Listing of Pesticide Chemicals</th>
<th>California Pesticides - Restricted Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Triacetin 102-76-1 (20-35)</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
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<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

State Regulations
California Proposition 65
This product does not contain any Proposition 65 chemicals

State Right-to-Know

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Massachusetts</th>
<th>New Jersey</th>
<th>Pennsylvania</th>
<th>Illinois</th>
<th>Rhode Island</th>
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</thead>
<tbody>
<tr>
<td>Permethrin technical</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Hydrocarbon solvent</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

International regulations
Mexico - Grade
Moderate risk, Grade 2

<table>
<thead>
<tr>
<th>Component</th>
<th>CATEGORY</th>
<th>Carcinogen Status</th>
<th>Exposure limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrocarbon solvent (&gt;15)</td>
<td></td>
<td></td>
<td>Mexico: TWA 100 ppm Mexico:</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>TWA 523 mg/m³ Mexico: STEL 200 ppm Mexico: STEL 1050 mg/m³</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>NPRI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrocarbon solvent</td>
<td>X</td>
</tr>
</tbody>
</table>

Legend
NPRI - National Pollutant Release Inventory

The preparation is classified as dangerous in accordance with Directive 1999/45/EC

16. Other Information

Revision date 03-Jan-2011

Revision Summary
Update section 11

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