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

Product identifier
Product Description: Tengard SFR One Shot

Other means of identification
Product code 12U-131
UN/ID no. UN1993
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
UPL NA Inc.
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

Page 1 / 10
Precautionary Statements - Prevention
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
Specific treatment (see .? on this label)
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

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS No</th>
<th>Weight-%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permethrin technical</td>
<td>52645-53-1</td>
<td>36.8</td>
</tr>
<tr>
<td>Hydrocarbon solvent</td>
<td>Proprietary</td>
<td>&gt;15</td>
</tr>
<tr>
<td>Naphthalene</td>
<td>91-20-3</td>
<td>0.2</td>
</tr>
</tbody>
</table>

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 a 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 data 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 (CO2). Aquatic. Foam.

Unsuitable extinguishing media

no data available.

Specific hazards arising from the chemical

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

Hazardous combustion products


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 skin and eyes. Remove all sources of ignition. Wear protective gloves/protective 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**

<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</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(vacated) TWA: 100 ppm (vacated) TWA: 525 mg/m³</td>
</tr>
<tr>
<td>Naphthalene</td>
<td>TWA: 10 ppm S*</td>
<td>TWA: 10 ppm TWA: 50 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(vacated) TWA: 10 ppm (vacated) TWA: 50 mg/m³ (vacated) STEL: 15 ppm (vacated) STEL: 75 mg/m³</td>
</tr>
</tbody>
</table>

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

- **Skin 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.

- **Respiratory protection**
  - 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.

**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**

<table>
<thead>
<tr>
<th>Property</th>
<th>VALUES</th>
<th>Remarks/ • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
<td>Odor</td>
</tr>
<tr>
<td>Appearance</td>
<td>amber</td>
<td></td>
</tr>
<tr>
<td>color</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>5.9 °C / 43 °F</td>
<td></td>
</tr>
<tr>
<td>Boiling point/Range</td>
<td>&gt; 35 °C</td>
<td></td>
</tr>
<tr>
<td>Flash Point</td>
<td>44 °C / 111 °F</td>
<td></td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flammability limit in air</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Upper Flammability Limit</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Lower Flammability Limit</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Vapor Density</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Specific gravity</td>
<td>1.039 @ 20 C</td>
<td></td>
</tr>
</tbody>
</table>
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**

- **Inhalation**
  
  HARMFUL IF INHALED.

- **Eye contact**
  
  Moderately irritating to the eyes.

- **Skin contact**
  
  May be harmful if absorbed through the skin.

- **Ingestion**
  
  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/m³ 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.m$^3$), 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.

### 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 data available.

**Carcinogenicity**

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

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>ACGIH</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permethrin technical</td>
<td>-</td>
<td>Group 3</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Naphthalene 91-20-3</td>
<td>A3</td>
<td>Group 2B</td>
<td>Reasonably Anticipated</td>
<td>X</td>
</tr>
</tbody>
</table>

**Reproductive effects**

Not Available.

**STOT - Single Exposure**

no data available.

**STOT - Repeated Exposure**

no data 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$^3$ 0 ml/m$^3$ (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

34.8% of the mixture consists of components(s) of unknown hazards to the aquatic environment

#### Persistence/Degradability
no data available.

**Bioaccumulation/ Accumulation**
Bioaccumulative potential.

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Log Pow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Permethrin technical</td>
<td>6.5</td>
</tr>
<tr>
<td>52645-53-1</td>
<td></td>
</tr>
<tr>
<td>Naphthalene</td>
<td>3.3</td>
</tr>
<tr>
<td>91-20-3</td>
<td></td>
</tr>
</tbody>
</table>

**Other Adverse Effects**
no data 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.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphthalene</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Transport Information**

**DOT**
Not regulated as per 173.150(f) when shipped by highway in non-bulk (below 119 gallon) containers.
When shipped domestically IN NON-BULK packages by highway this material is classed as a combustible liquid and as such is not subject to the DOT regulations per 49 CFR 173.150(f) (2) and therefore can be designated as Not Regulated
When shipped in bulk or internationally the following description must be used:

**UN/ID no.**
UN1993

**Proper shipping name**
Flammable liquid, n.o.s (Hydrocarbon)

**Hazard class**
3

**Packing group**
PG III

**IMDG - Marine Pollutant**
Marine Pollutant. (Permethrin).

**TDG**
ICAO
UN/ID no. UN1993
Proper shipping name Flammable liquid, n.o.s (hydrocarbon solvent)
Hazard class 3
Packing group PG III
Description IMDG - Marine Pollutant (Permethrin)

IATA
UN/ID no. UN1993
Proper shipping name Flammable liquid, n.o.s (hydrocarbon)
Hazard class 3
Packing group PG III
Description IMDG - Marine Pollutant (Permethrin)

IMDG
UN/ID no. UN1993
Proper shipping name Flammable liquid, n.o.s (hydrocarbon)
Hazard class 3
Packing group PG III
EmS No. F-E, S-E
Environmental hazards IMDG - 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
USINV Not present
DSL/NDSL Not present
EINECS/ELINCS Not present
ENCS Not present
China Not present
KECL Not present
PICCS Not present
AICS Not present
TSCA Not present

*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 40 of the Code of Federal Regulations, Part 372:

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CWA - Reportable Quantities</th>
<th>CWA - Toxic Pollutants</th>
<th>CWA - Priority Pollutants</th>
<th>CWA - Hazardous Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphthalene</td>
<td>100 lb</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

CERCLA
Not applicable

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>RQ</th>
<th>CERCLA EHS RQs</th>
<th>RQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphthalene</td>
<td>100 lb</td>
<td>RQ 100 lb final</td>
<td>RQ 45.4 kg final</td>
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</table>

CERCLA

<table>
<thead>
<tr>
<th>Component</th>
<th>RQ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphthalene</td>
<td>100 lb</td>
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</tbody>
</table>

SARA Product RQ
0

RCRA

<table>
<thead>
<tr>
<th>Component</th>
<th>RCRA - D Series Wastes</th>
<th>RCRA - P Series Wastes</th>
<th>RCRA - U Series Wastes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphthalene</td>
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<td>U165</td>
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</table>

Pesticide Information

State Regulations

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No</th>
<th>CATEGORY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphthalene</td>
<td>91-20-3</td>
<td>Carcinogen</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component</th>
<th>California Prop. 65</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naphthalene</td>
<td>Carcinogen</td>
<td>Non-additive, corrosive chemical type</td>
</tr>
</tbody>
</table>

State Right-to-Know
Not applicable

International regulations

U.S. EPA Label information

EPA Pesticide registration number 70506-6

16. Other Information

NFPA

<table>
<thead>
<tr>
<th>HEALTH</th>
<th>flammability</th>
<th>Instability</th>
<th>Physical hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>2</td>
<td>1</td>
<td>-</td>
</tr>
</tbody>
</table>

Preparation Date
08-May-2015

Revision date
02-Jan-2019

Revision Summary
Update logo Update section 1 Update Section 16***

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End of SDS