



Preparation Date 08-May-2015

Revision date 02-Jan-2019

Revision Number: 4

Safety Data Sheet

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



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 Carbon dioxide (CO₂). 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 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

Chemical name	ACGIH TLV	OSHA PEL
Hydrocarbon solvent	TWA: 100 ppm	TWA: 500 ppm TWA: 2900 mg/m ³ (vacated) TWA: 100 ppm (vacated) TWA: 525 mg/m ³
Naphthalene	TWA: 10 ppm S*	TWA: 10 ppm TWA: 50 mg/m ³ (vacated) TWA: 10 ppm (vacated) TWA: 50 mg/m ³ (vacated) STEL: 15 ppm (vacated) STEL: 75 mg/m ³

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

Skin protection

Respiratory 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. 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	Liquid	Odor	faint Mild (bad translation) Petroleum
Appearance	amber		
color	No information available		
Property	VALUES	Remarks/ • Method	
pH	4.9		
Melting point/freezing point	5.9 °C / 43 °F		
Boiling Point/Range	> 35 °C		
Flash Point	44 C / 111 °F		
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	1.039 @ 20 C		

Water solubility	No information available
Solubility in Other Solvents	No information available
Partition coefficient: n-octanol/water	No information available
Autoignition temperature	no data 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	No information available
molecular weight	1.039 @ 20 C
VOC Content	No information available
Liquid Density	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**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/m³ 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/m³ 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.

Chemical name	ACGIH	IARC	NTP	OSHA
Permethrin technical 52645-53-1	-	Group 3		-
Naphthalene 91-20-3	A3	Group 2B	Reasonably Anticipated	X

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/m³ 0 ml/m³ (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.

Chemical name	Log Pow
Permethrin technical 52645-53-1	6.5
Naphthalene 91-20-3	3.3

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.

Chemical name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Naphthalene			Toxic waste waste number F025 Waste description: Condensed light ends, spent filters and filter aids, and spent desiccant wastes from the production of certain chlorinated aliphatic hydrocarbons, by free radical catalyzed processes. These chlorinated aliphatic hydrocarbons are those having carbon chain lengths ranging from one to and including five, with varying amounts and positions of chlorine substitution.	
Chemical name	Naphthalene			

14. 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:

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Naphthalene 91-20-3	100 lb	X	X	X

CERCLA

Not applicable

Chemical name	RQ	CERCLA EHS RQs	RQ
Naphthalene 91-20-3	100 lb		RQ 100 lb final RQ RQ 45.4 kg final RQ

CERCLA

Component	RQ
Naphthalene 91-20-3 (0.2)	100 lb

SARA Product RQ 0

RCRA

Component	RCRA - D Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Naphthalene 91-20-3 (0.2)			U165

Pesticide Information

State Regulations

Component	CAS No	CATEGORY
Naphthalene 91-20-3 (0.2)	91-20-3	Carcinogen
Component	California Prop. 65	Non-additive, corrosive chemical type
Naphthalene 91-20-3 (0.2)	Carcinogen	

State Right-to-Know

Not applicable

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 02-Jan-2019

Revision Summary

Update logo Update section 1 Update Section 16***

Disclaimer

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End of SDS