

Safety Data Sheet

Issue Date: 25-Feb-2014

Revision Date: 12-Dec-2019

Version 2

1. IDENTIFICATION

Product Identifier

Product Name Solar (THP)

Other means of identification

SDS # VLS-007

Recommended use of the chemical and restrictions on use

Recommended Use Fertilizer.

Details of the supplier of the safety data sheet

Supplier Address

Turf Health Products Co.
17285 Ford Road
Pit Meadow, BC V3Y 0A6 Canada

Emergency Telephone Number

Company Phone Number Business Phone: (604)-309-8690

Emergency Telephone (24 hr)

2. HAZARDS IDENTIFICATION

Physical State Liquid

Classification

Acute toxicity - Oral	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2

Signal Word

Warning

Hazard Statements

Harmful if swallowed
Causes skin irritation
Causes serious eye irritation



Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 If eye irritation persists: Get medical advice/attention
 IF ON SKIN: Wash with plenty of soap and water
 If skin irritation occurs: Get medical advice/attention
 Take off contaminated clothing and wash it before reuse
 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
 Rinse mouth

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other Hazards

Very toxic to aquatic life with long lasting effects

Unknown Acute Toxicity

10.72% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Sulfur Compound	Proprietary	<25
Proprietary Blend	Proprietary	<5
Organic Acid	Proprietary	<5
Proprietary Blend	Proprietary	<5
Proprietary Blend	Proprietary	<5
Inorganic Acid	Proprietary	<1

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST-AID MEASURES

First Aid Measures

Eye Contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Skin Contact	Wash off immediately with plenty of water. Take off contaminated clothing. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/ attention.
Inhalation	Remove to fresh air.
Ingestion	Rinse mouth. Do not induce vomiting. Call a poison center or doctor/physician if you feel unwell.

Most important symptoms and effects

Symptoms	Contact may cause irritation and redness.
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Indication of any immediate medical attention and special treatment needed

Notes to Physician	Treat symptomatically.
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5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Non-flammable solution.

Protective equipment and precautions for firefighters

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 Use personal protective equipment as required.

Environmental Precautions See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling Wash thoroughly after handling. Use personal protection recommended in Section 8. Do not eat, drink or smoke when using this product.

Conditions for safe storage, including any incompatibilities

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

Incompatible Materials None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Sulfur Compound	TWA: 1 mg/m ³ Fe	(vacated) TWA: 1 mg/m ³ Fe	TWA: 1 mg/m ³ Fe
Proprietary Blend	TWA: 0.2 mg/m ³ Mn	(vacated) Ceiling: 5 mg/m ³ Ceiling: 5 mg/m ³ Mn	IDLH: 500 mg/m ³ Mn TWA: 1 mg/m ³ Mn STEL: 3 mg/m ³ Mn
Organic Acid	-	15 mg / m3 (Total)	-
Proprietary Blend	TWA: 1 mg/m ³ Cu dust and mist	-	IDLH: 100 mg/m ³ Cu dust and mist TWA: 1 mg/m ³ Cu dust and mist
Inorganic Acid	STEL: 6 mg/m ³ inhalable fraction TWA: 2 mg/m ³ inhalable fraction	-	-

Appropriate engineering controls

Engineering Controls Apply technical measures to comply with the occupational exposure limits.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Splash goggles or safety glasses.

Skin and Body Protection Wear suitable protective clothing.

Respiratory Protection Ensure adequate ventilation, especially in confined areas.

General Hygiene Considerations Do not eat, drink or smoke when using this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State	Liquid	Odor	Not determined
Appearance	Not determined	Odor Threshold	Not determined
Color	Not determined		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	Not determined	
Melting Point/Freezing Point	Not determined	
Boiling Point/Boiling Range	Not determined	
Flash Point	Not determined	
Evaporation Rate	Not determined	
Flammability (Solid, Gas)	n/a-liquid	
Upper Flammability Limits	Not determined	
Lower Flammability Limit	Not determined	
Vapor Pressure	Not determined	
Vapor Density	Not determined	
Specific Gravity	Not determined	
Water Solubility	Not determined	
Solubility in other solvents	Not determined	
Partition Coefficient	Not determined	
Auto-ignition Temperature	Not determined	
Decomposition Temperature	Not determined	
Kinematic Viscosity	Not determined	
Dynamic Viscosity	Not determined	
Explosive Properties	Not determined	
Oxidizing Properties	Not determined	

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to Avoid

Keep out of reach of children.

Incompatible Materials

None known based on information supplied.

Hazardous Decomposition Products

None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact	Causes serious eye irritation.
Skin Contact	Causes skin irritation.
Inhalation	Avoid breathing vapors or mists.
Ingestion	Harmful if swallowed.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Organic Acid	= 3000 mg/kg (Rat)	-	-
Proprietary Blend	= 300 mg/kg (Rat)	= 1000 mg/kg (Rabbit)	-
Inorganic Acid	= 2660 mg/kg (Rat)	> 2000 mg/kg (Rabbit)	> 0.16 mg/L (Rat) 4 h

Information on physical, chemical and toxicological effects

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

Numerical measures of toxicity

Not determined

Unknown Acute Toxicity 10.72% of the mixture consists of ingredient(s) of unknown toxicity.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Very toxic to aquatic life with long lasting effects.

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Organic Acid		1516: 96 h Lepomis macrochirus mg/L LC50 static		120: 72 h Daphnia magna mg/L EC50
Proprietary Blend		0.1: 96 h Oncorhynchus mykiss mg/L LC50		0.0058 - 0.0073: 48 h Daphnia magna mg/L EC50 Static
Inorganic Acid		1020: 72 h Carassius auratus mg/L LC50 flow-through		115 - 153: 48 h Daphnia magna mg/L EC50

Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

Mobility

Chemical Name	Partition Coefficient
Organic Acid	-1.72
Inorganic Acid	-0.757

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging Disposal should be in accordance with applicable regional, national and local laws and regulations.

California Hazardous Waste Status

Chemical Name	California Hazardous Waste Status
Proprietary Blend	Toxic
Proprietary Blend	Toxic
Inorganic Acid	Toxic

14. TRANSPORT INFORMATION

<u>DOT</u>	Not regulated
<u>IATA</u>	Not regulated
<u>IMDG</u>	
Marine Pollutant	This product contains cupric sulfate which is listed as a DOT Marine Pollutant (49 CFR 172.101, Appendix B)

15. REGULATORY INFORMATION

International Inventories

Not determined

US Federal Regulations**CERCLA**

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Sulfur Compound	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ
Proprietary Blend	10 lb		RQ 10 lb final RQ RQ 4.54 kg final RQ
Proprietary Blend	1000 lbs	1000 lbs	1000 lbs

SARA 313

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Proprietary Blend -		<5	1.0
Proprietary Blend -		<5	1.0
Proprietary Blend -		<5	1.0

CWA (Clean Water Act)

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sulfur Compound (<25)				X
Proprietary Blend (<5)	10 lb	X		X
Proprietary Blend (<5)		X		

US State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals.

Chemical Name	California Proposition 65
Proprietary Blend -	X

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Sulfur Compound		X	X
Proprietary Blend	X		X
Proprietary Blend	X	X	X
Proprietary Blend	X		X

16. OTHER INFORMATION**NFPA****Health Hazards**

Not determined

Flammability

Not determined

Instability

Not determined

Special Hazards

Not determined

HMIS**Health Hazards**

Not determined

Flammability

Not determined

Physical Hazards

Not determined

Personal Protection

Not determined

Issue Date:

25-Feb-2014

Revision Date:

12-Dec-2019

Revision Note:

Company address update

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet