

# Safety Data Sheet

Issue Date: 25-Feb-2014

Revision Date: 26-Feb-2014

Version 1

## 1. IDENTIFICATION

### Product Identifier

Product Name Solar

### 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

Verdesian Life Sciences, U.S., LLC.  
12222 Ave 352  
Visalia, CA 93291

### Emergency Telephone Number

Company Phone Number Business Phone: (800) 868-6446  
Fax Phone: (559) 625-9255  
Emergency Telephone (24 hr) INFOTRAC 1-352-323-3500 (International)  
1-800-535-5053 (North America)

## 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**

<b>Eye Contact</b>	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.
<b>Skin Contact</b>	Wash off immediately with plenty of water. Take off contaminated clothing. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/ attention.
<b>Inhalation</b>	Remove to fresh air.
<b>Ingestion</b>	Rinse mouth. Do not induce vomiting. Call a poison center or doctor/physician if you feel unwell.

**Most important symptoms and effects**

<b>Symptoms</b>	Contact may cause irritation and redness.
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**Indication of any immediate medical attention and special treatment needed**

<b>Notes to Physician</b>	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 <sup>3</sup> Fe	(vacated) TWA: 1 mg/m <sup>3</sup> Fe	TWA: 1 mg/m <sup>3</sup> Fe
Proprietary Blend	TWA: 0.2 mg/m <sup>3</sup> Mn	(vacated) Ceiling: 5 mg/m <sup>3</sup> Ceiling: 5 mg/m <sup>3</sup> Mn	IDLH: 500 mg/m <sup>3</sup> Mn TWA: 1 mg/m <sup>3</sup> Mn STEL: 3 mg/m <sup>3</sup> Mn
Organic Acid	-	15 mg / m <sup>3</sup> (Total)	-
Proprietary Blend	TWA: 1 mg/m <sup>3</sup> Cu dust and mist	-	IDLH: 100 mg/m <sup>3</sup> Cu dust and mist TWA: 1 mg/m <sup>3</sup> Cu dust and mist
Inorganic Acid	STEL: 6 mg/m <sup>3</sup> inhalable fraction TWA: 2 mg/m <sup>3</sup> 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

<b>Physical State</b>	Liquid	<b>Odor</b>	Not determined
<b>Appearance</b>	Not determined	<b>Odor Threshold</b>	Not determined
<b>Color</b>	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

<b>Eye Contact</b>	Causes serious eye irritation.
<b>Skin Contact</b>	Causes skin irritation.
<b>Inhalation</b>	Avoid breathing vapors or mists.
<b>Ingestion</b>	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

<b>Disposal of Wastes</b>	Disposal should be in accordance with applicable regional, national and local laws and regulations.
<b>Contaminated Packaging</b>	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

**DOT** Not regulated

**IATA** Not regulated

**IMDG**

**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****Flammability****Instability****Special Hazards**

Not determined

Not determined

Not determined

Not determined

**HMIS****Health Hazards****Flammability****Physical Hazards****Personal Protection**

Not determined

Not determined

Not determined

Not determined

**Issue Date:** 25-Feb-2014**Revision Date:** 26-Feb-2014**Revision Note:** New product**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**