

# MATERIAL SAFETY DATA SHEET

## Purshade-O™

A Plant Protectant for Solar Stress

### 1. Identification of the Substance and Company Identification

Product name: Purshade-O™  
 Manufacturer: Purfresh, Inc.  
 47211 Bayside Parkway  
 Fremont, CA 94538  
 Tel: +1.510.580.0700  
 Internet: [www.purfresh.com](http://www.purfresh.com)

Material description: Calcium carbonate suspension

### 2. Hazards Identification

Appearance: This is a non-combustible, odorless, white suspension.  
 Primary routes of entry: Skin contact, eye contact, ingestion and inhalation. (See section 4 below for first aid measures.) Care should be taken in handling this material to wear appropriate protective clothing and eye protection. If working with dry material, an OSHA/NIOSH approved respirator should be worn.  
 Hazard classification: None

### 3. Composition/Information on Ingredients

Components:	CAS Number	Weight %
Limestone	1317-65-3	62.5 %
Crystalline silica, quartz (impurity)	14808-60-7	0.06-1.25%
Other	-----	Balance

### 4. First Aid Measures

Eye contact: In case of contact, immediately flush eyes with water for a minimum of 15 minutes. If irritation persists, seek medical attention.  
 Skin contact: Exposure may cause skin irritation. Flush skin with water. If irritation persists, seek medical attention.  
 Carcinogenicity: This product is not listed as a carcinogen by the IARC, NTP or OSHA. This product may contain greater than 0.1% crystalline silica which is listed as a Group 1 carcinogen by IARC, a known carcinogen by NTP, OSHA and as a suspected human carcinogen by ACGIH  
 Ingestion: No adverse effect is expected. If ingested, seek medical advice.

Inhalation: Upon drying, calcium carbonate can form a dust hazard. If exposure causes irritation, remove individual to fresh air. Aid in breathing, if necessary and seek medical attention

### 5. Fire Fighting Measures

Extinguishing media: Material is non-combustible. All extinguishing media can be used. Use suitable media appropriate to the surrounding fire.

Unsafe extinguishing media: None

Special exposure hazards: None

Special protective equipment: Firefighters should wear protective clothing and use equipment that is suitable for the materials involved in the surrounding fire.

### 6. Accidental Release Measures

Environmental precautions: This product does not present any particular risk to the environment. Refer to applicable national, state and local regulations prior to washing into a sanitary drain.

Clean up methods: Material can be swept, scooped or vacuumed into an appropriate container for safe disposal.

### 7. Handling and Storage

Handling: Product has a high specific gravity. Use caution when lifting.

Storage: Store in water tight containers; avoid freezing temperatures; avoid excessive heat.

### 8. Exposure Controls/Personal Protection

Engineering controls: Use mechanical ventilation

Eye protection: Safety glasses with side shields

Skin and body protection: Light weight protective clothing and gloves

Hygiene measures: Handle in accordance with good industrial hygiene and safety practices.

Components	OSHA PEL	ACGIH TLV
Calcium carbonate	5 mg/m <sup>3</sup> Respirable Fraction 15 mg/m <sup>3</sup> Total Dust	10 mg/m <sup>3</sup> Total Dust
Crystalline silica, quartz (impurity)	(10 mg/m <sup>3</sup> )/ (%SiO <sub>2</sub> + 2) Respirable Fraction (30 mg/m <sup>3</sup> )/ (%SiO <sub>2</sub> + 2) Total Dust	0.05 mg/m <sup>3</sup> Total Dust

Unless otherwise noted, all Personal Exposure Limits (PEL) and Threshold Limit Values (TLV) are reported as 8 hour time weighted averages

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### 9. Physical and Chemical Properties

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Appearance:	White Liquid Suspension
Density:	1.67 g/mL
pH (5% w/w suspension):	8.4-10.2
Water solubility (20°C):	1.3 mg/L

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### 10. Stability and Reactivity

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Stability:	Stable, however, if separation occurs, suspension can be mixed.
Conditions to avoid:	Do not freeze; avoid excessive heat.
Materials to avoid:	Do not mix with materials that will lower the pH of suspension (acids)
Hazardous decomposition products:	None

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### 11. Toxicological Information

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Eye Irritation:	Calcium carbonate is a severe eye irritant.
Skin Irritation:	Calcium carbonate is a moderate skin irritant and may dry skin and mucous membranes.
Sensitization:	Does not cause sensitization
Ingestion:	Calcium carbonate oral LD(50) is 6450mg/kg
Inhalation:	Inhalation of excessive quantities of dust for prolonged and continuous periods of time may aggravate existing asthmatic or respiratory conditions.

Consult *Dangerous Properties of Industrial Materials*, 7<sup>th</sup> Ed, pp 667, Sax and Lewis 1989.

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### 12. Ecological Information

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Mobility:	Inert material
Persistence / Degradability:	Non-degradable
Bio-accumulative Potential:	None

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### 13. Disposal Considerations

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Disposal:	Dispose in accordance with local, state and national regulations. Under the Resource Conservation and Recovery Act (RCRA, 40 CFR 261) ground limestone is a non-hazardous waste.
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### 14. Transportation Information

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DOT:	Not regulated
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#### 15. Other Information

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The information contained in this Safety Sheet is to the best of Purfresh's knowledge, as of the date indicated, believed to be accurate and reliable. However, no representation, warranty or guarantee is implied or expressed regarding the accuracy, reliability or completeness of this information of the use of the product. Nothing contained herein should be construed as a recommendation to use the product in conflict with national or local regulations or existing patents covering any material or its use.