Section 1: IDENTIFICATION

Product Name: Simple Green® Heavy Duty Precision Cleaner
Additional Names:

Manufacturer's Part Number: **Please refer to Section 16*

Recommended Use: Cleaner and degreaser formulated to safely remove, oil, grease, and grime.
Restrictions on Use: Do not use on non-rinseable or asphalt surfaces

Company: Sunshine Makers, Inc.
15922 Pacific Coast Highway
Huntington Beach, CA 92649 USA
Telephone: 800-228-0709 ● 562-795-6000 *Mon – Fri, 8am – 5pm PST*
Fax: 562-592-3830
Email: info@simplegreen.com
Emergency Phone: Chem-Tel 24-Hour Emergency Service: 800-255-3924

Section 2: HAZARDS IDENTIFICATION

This product is considered hazardous under 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200).
OSHA HCS 2012 Classification : Eye Corrosive / Irritant 2B

OSHA HCS 2012
Label Elements
Signal Word: Warning **Hazard Symbol(s)/Pictogram(s):** None required
Hazard Statements: Causes Eye Irritation.
Precautionary Statements: Wash hands thoroughly after handling. 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.
Hazards Not Otherwise Classified (HNOC): No hazards not otherwise classified were identified
Other Information: None Known.

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	CAS Number	Percent Range
Water	7732-18-5	> 72.99%*
Triethanolamine	102-71-6	< 10.00%*
Surfactant	Proprietary Mixture	< 10.00%*
Propylene Glycol Butyl Ether	5131-66-8	< 5.00%*
Tetrapotassium Pyrophosphate	7320-34-5	< 1.00%*
Potassium Silicate	1312-76-1	< 1.00%*
Diethanolamine	111-42-2	< 0.01%*

**specific percentages of composition are being withheld as a trade secret*

Section 4: FIRST-AID MEASURES

Inhalation: Not expected to cause respiratory irritation. If adverse effect occurs, move to fresh air.
Skin Contact: Not expected to cause skin irritation. If adverse effect occurs, rinse skin with water.
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.
Ingestion: May cause upset stomach. Drink plenty of water to dilute. See section 11.

Most Important Symptoms/Effects, Acute and Delayed: None known.

Indication of Immediate Medical Attention and Special Treatment Needed, if necessary: Treat symptomatically

Section 5: FIRE-FIGHTING MEASURES

Suitable & Unsuitable Extinguishing Media: Use Dry chemical, CO2, water spray or "alcohol" foam. Avoid high volume jet water.
Specific Hazards Arising from Chemical: In event of fire, fire created carbon oxides and oxides of phosphorus may be formed.
Special Protective Actions for Fire-Fighters: Wear positive pressure self-contained breathing apparatus; Wear full protective clothing.

This product is non-flammable. See Section 9 for Physical Properties.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:
For non-emergency personnel: See section 8 – personal protection.
For emergency responders: Avoid eye contact. *S*afety goggles suggested if splashing or misting is likely to occur.

Environmental Precautions: Do not allow into open waterways and ground water systems.

Methods and Materials for Containment and Clean Up: Dike or soak up with inert absorbent material. See section 13 for disposal considerations.

Section 7: HANDLING AND STORAGE

Precautions for Safe Handling: Ensure adequate ventilation. Keep out of reach of children. Keep away from heat, sparks, open flame and direct sunlight. Do not pierce any part of the container. Do not mix or contaminate with any other chemical. Do not eat, drink or smoke while using this product.

Conditions for Safe Storage including Incompatibilities: Keep container tightly closed. Keep in cool dry area. Avoid prolonged exposure to sunlight. Do not store at temperatures above 109°F (42.7°C). If separation occurs, mix the product for reconstitution.

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limit Values:	Triethanolamine (102-71-6)	5 mg/m^3 PEL	California
	Diethanolamine (111-42-2)	3 ppm TWA; 15 mg/m^3 TWA	Connecticut, Michigan, Minnesota, OSHA, Tennessee, Vermont, Washington
		0.46 ppm PEL; 2 mg/m^3 PEL	California
		6 ppm STEL	Washington

Appropriate Engineering Controls: Showers, eyewash stations, ventilation systems

Individual Protection Measures / Personal Protective Equipment (PPE)
Eye Contact: Use protective glasses or safety goggles if splashing or spray-back is likely.
Respiratory: Use in well ventilated areas or local exhaust ventilations when cleaning small spaces.
Skin Contact: Use protective gloves (any material) when used for prolonged periods or dermally sensitive.
General Hygiene Considerations: Wash thoroughly after handling and before eating or drinking.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear Liquid	**Partition Coefficient: n-octanol/water:**	Not determined
Odor:	No added odor	**Autoignition Temperature:**	Non-flammable
Odor Threshold:	Not determined	**Decomposition Temperature:**	109°F
pH:	10 – 11.5	**Viscosity:**	Like water
Freezing Point:	0°C (32°F)	**Specific Gravity :**	1.01 – 1.04

Section 9: PHYSICAL AND CHEMICAL PROPERTIES – continued

Boiling Point & Range:	98°C (210°F)	**VOCs:**	***Water & fragrance exemption in calculation*
Flash Point:	> 212°F	CARB Method 310**:	20 g/L / 0.1667 lb/gal / 2.0%
Evaporation Rate:	Not determined	**VOC Composite Partial Pressure:**	0.102207135
Flammability (solid, gas):	Not applicable		
Upper/Lower Flammability or Explosive Limits:	Not applicable	**Nutrient Content:**	
Vapor Pressure:	20.7 mmHg	Nitrogen -	< 0.1% (0% by formula)
Vapor Density:	Not determined	Phosphorous -	< 0.25% (by formula)
Relative Density:	8.34 – 8.67 lb/gal	Sulfur -	< 0.1% (0% by formula)
Solubility:	100% in water		

Section 10: STABILITY AND REACTIVITY

Reactivity: Non-reactive.
Chemical Stability: Stable under normal conditions 70°F (21°C) and 14.7 psig (760 mmHg).
Possibility of Hazardous Reactions: None known.
Conditions to Avoid: Excessive heat or cold.
Incompatible Materials: Do not mix with oxidizers, acids, bathroom cleaners, or disinfecting agents.
Hazardous Decomposition Products: Normal products of combustion - CO, CO2, oxides of phosphorus.

Section 11: TOXICOLOGICAL INFORMATION

Likely Routes of Exposure:
Inhalation - Overexposure may cause headache.
Skin Contact - Not expected to cause irritation.
Eye Contact - Causes eye irritation.
Ingestion - May cause upset stomach.

Symptoms related to the physical, chemical and toxicological characteristics: no symptoms expected under typical use conditions.
Delayed and immediate effects and or chronic effects from short term exposure: no symptoms expected under typical use conditions.
Delayed and immediate effects and or chronic effects from long term exposure: headache, dry skin, or skin irritation may occur.
Interactive effects: Not known.

Numerical Measures of Toxicity
Acute Toxicity: Oral LD_{50} (rat) > 5 g/kg body weight
Dermal LD_{50} (rabbit) > 5 g/kg body weight
Calculated via OSHA HCS 2012 / Globally Harmonized System of Classification and Labelling of Chemicals

Skin Corrosion/Irritation: Non-irritant per Dermal Irritection® assay modeling. *No animal testing performed.*
Eye Damage/Irritation: Irritant per Ocular Irritection® assay modeling. *No animal testing performed.*
Germ Cell Mutagenicity: Mixture does not classify under this category.
Carcinogenicity: Volume of ingredients does not trigger or classify under this category. This product contains trace amounts of Diethanolamine (IARC 2B and ACGIH A3)
Reproductive Toxicity: Mixture does not classify under this category.
STOT-Single Exposure: Mixture does not classify under this category.
STOT-Repeated Exposure: Mixture does not classify under this category.
Aspiration Hazard: Mixture does not classify under this category.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity: Volume of ingredients used does not trigger toxicity classifications under the Globally Harmonized System of Classification and Labelling of Chemicals.
Aquatic: Not tested on finished formulation.
Terrestrial: Not tested on finished formulation.

Persistence and Degradability: Readily Biodegradable per OECD 301D, Closed Bottle Test.
Bioaccumulative Potential: No data available.
Mobility in Soil: No data available.
Other Adverse Effects: No data available.

Section 13: DISPOSAL CONSIDERATIONS

Unused or Used Liquid: May be considered hazardous in your area depending on usage and tonnage of disposal – check with local, regional, and or national regulations for appropriate methods of disposal.

Empty Containers: May be offered for recycling.

Never dispose of used degreasing rinsates into lakes, streams, and open bodies of water or storm drains.

Section 14: TRANSPORT INFORMATION

U.N. Number: Not applicable
U.N. Proper Shipping Name: Cleaning Compound, Liquid NOI
Transport Hazard Class(es): Not applicable
Packing Group: Not applicable
Environmental Hazards: Marine Pollutant - NO
Transport in Bulk (according to Annex II of MARPOL 73/78 and IBC Code): Unknown.
Special precautions which user needs to be aware of/comply with, in connection with transport or conveyance either within or outside their premises: None known.

U.S. (DOT) / Canadian TDG: Not Regulated for shipping.
IMO / IDMG: Not classified as Hazardous
ICAO/ IATA: Not classified as Hazardous
ADR/RID: Not classified as Hazardous

Section 15: REGULATORY INFORMATION

All components are listed on: TSCA and DSL Inventory.

SARA Title III: Sections 311/312 – Not applicable.
Sections 313 Superfunds Amendments and Reauthorizations Act of 1986 – Diethanolamine (111-42-2) < 0.01%
Sections 302 – Not applicable.

Clean Air Act (CAA): Triethanolamine (102-71-6), Diethanolamine (111-42-2), Propylene Glycol Butyl Ether (5131-66-8)
Clean Water Act (CWA): Not applicable
CERCLA: Diethanolamine (111-42-2) 100 lb RQ

State Right To Know Lists:	Triethanolamine (102-71-6)	Massachusetts, New Jersey, Pennsylvania
	Diethanolamine (111-42-2)	Massachusetts, New Jersey, Pennsylvania
CA Proposition 65:	Diethanolamine (111-42-2)	< 0.01%

This product has been classified as “classifiable as hazardous” in accordance with Consumer Product Safety Commission (16 CFR Chapter 2), and labelled and packaged accordingly.

Section 15: REGULATORY INFORMATION – continued

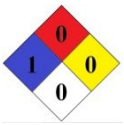
US Consumer Product Safety Commission Regulations
This product is labeled in accordance with regulations administered by the Consumer Product Safety Commission (CPSC). However, the use pattern and exposure in the workplace are generally not consistent with those experienced by consumers. Therefore, the requirements of the Occupational Safety and Health Administration applicable to this SDS differ from the labeling requirements of the CPSC, and this SDS may contain additional health hazard information not pertinent to consumer use and not found on the product label.

Section 16: OTHER INFORMATION

Size	**UPC**
5 Gallon	043318060052
55 Gallon	043318060557
275 Gallon	043318062759

USA part numbers listed only. Not all part numbers listed. USA part numbers may not be valid for international sale.

NFPA:
Health – Eye Irritant
Flammability – Non-flammable
Stability – Stable
Special - None



Acronyms

NTP	National Toxicology Program	IARC	International Agency for Research on Cancer
OSHA	Occupational Safety and Health Administration	CPSC	Consumer Product Safety Commission
TSCA	Toxic Substances Control Act	DSL	Domestic Substances List

Prepared / Revised By: Sunshine Makers, Inc., Regulatory Department.
This SDS has been revised in the following sections: SDS created

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 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.