Safety Data Sheet: **Simple Green® Lime Scale Remover**

Version No. 50128-14A Issue Date: October 7, 2014 Supersedes Date: April 25, 2014 *OSHA HCS-2012 / GHS*

Section 1: IDENTIFICATION

Product Name: Simple Green® Lime Scale Remover
Additional Names:

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

Recommended Use: Acid based cleaner for the removal of lime, scale, and mineral buildup
Restrictions on Use: Do not use in conjunction with other chemicals OR with on surfaces not resistant to acids.

Company: Sunshine Makers, Inc.
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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 classified as hazardous (Skin Corrosive – 1C) under 2012 OSHA Hazard Communication Standards (29 CFR 1910.1200).

OSHA HCS 2012
Label Elements
Signal Word: DANGER

Hazard Symbol(s)/Pictogram(s):

Hazard Statements:
H314 – Causes severe skin burns and eye damage
Precautionary Statements:
P260 – Do not breathe dusts or mists.
P264 – Wash hands thoroughly after handling.
P280 – Wear protective gloves/eye protection.
P301 + P330 + P331 – IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 – IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P363 – Wash contaminated clothing before reuse.
P304 + P340 – IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P310 – Immediately call a POISON CENTER.
P321 – Specific treatment (see first aid on this label).
P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P405 – Store locked up.
P501 – Dispose of contents/container in accordance with local/regional/national regulations.
Hazards Not Otherwise Classified (HNOC): None
Other Information: None Known

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	CAS Number	Percent Range
Water	7732-18-5	> 81%*
Urea Hydrochloride	506-89-8	≤ 6%*
Sodium Citrate	6132-04-3	< 5%*
Ethoxylated Alcohol	68439-46-3	< 5%*
Potassium Iodide	7681-11-0	< 1%*
Fragrance	Proprietary Mixture	< 1%*
Colorant	Proprietary Mixture	< 1%*

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

Section 4: FIRST-AID MEASURES

Inhalation: IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER.
Skin Contact: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. Immediately call a POISON CENTER.
Eye Contact: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER.
Ingestion: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER.

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 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 and emergency personnel:* See section 8 – personal protection. Avoid eye contact. Safety goggles required.

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^{o}F (42.7^{o}C). If separation occurs, mix the product for reconstitution.

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limit Values: No components listed with TWA or STEL values under OSHA or ACGIH.

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: Turquoise Liquid
Odor: Added wintergreen odor
Odor Threshold: Not determined
pH: 1.0 – 1.5
Freezing Point: 0-3.33^{o}C (32-38^{o}F)
Partition Coefficient: n-octanol/water: Not determined
Autoignition Temperature: Non-flammable
Decomposition Temperature: 109^{o}F
Viscosity: Like water
Specific Gravity: 1.00 – 1.03

Section 9: PHYSICAL AND CHEMICAL PROPERTIES - continued

Boiling Point & Range: 101°C (213.8°F)
Flash Point: > 212°F
Evaporation Rate: Not determined
Flammability (solid, gas): Not applicable
Upper/Lower Flammability or Explosive Limits: Not applicable
Vapor Pressure: Not determined
Vapor Density: Not determined
Reactivity: Non-reactive.

VOCs: ***Water & fragrance exemption in calculation*
SCAQMD 304-91 / EPA 24: Not tested
CARB Method 310**: 0.001 g/L 0.000 lb/gal 0.01%
SCAQMD Method 313: Not tested
VOC Composite Partial Pressure: Not determined
Relative Density ASTM D-4017**:** 8.34 – 8.59 lb/gal
Solubility: 100% in water

Section 10: STABILITY AND REACTIVITY

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, disinfecting agents or ammonia.
Hazardous Decomposition Products: Normal products of combustion - CO, CO2.

Section 11: TOXICOLOGICAL INFORMATION

Likely Routes of Exposure:
Inhalation - Overexposure may cause headache.
Skin Contact - Up to four hours of contact with no rinsing may lead to corrosion.
Eye Contact - Up to four hours of contact with no rinsing may lead to corrosion.
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: Mild Corrosive per Corrositex-In Vitro Dermal Corrosivity testing.
Eye Damage/Irritation: Mild Corrosive per Corrositex-In Vitro Dermal Corrosivity testing.
Germ Cell Mutagenicity: Mixture does not classify under this category.
Carcinogenicity: Mixture does not classify under this category.
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 OCED 302B
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:	UN 3265	**U.N. Proper Shipping Name:**	Corrosive liquid, acidic, organic, n.o.s. (urea hydrochloride),
Transport Hazard Class(es):	Not applicable	**NMFC Number:**	
Packing Group:	III	**Class:**	8
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:	UN 3265 Corrosive liquid, acidic, organic, n.o.s. (urea hydrochloride), III, 8
ICAO/ IATA:	UN 3265 Corrosive liquid, acidic, organic, n.o.s. (urea hydrochloride), III, 8
IMO / IDMG:	UN 3265 Corrosive liquid, acidic, organic, n.o.s. (urea hydrochloride), III, 8
ADR/RID:	UN 3265 Corrosive liquid, acidic, organic, n.o.s. (urea hydrochloride), III, 8

Section 15: REGULATORY INFORMATION

All components are listed on: TSCA and DSL Inventory.

SARA Title III: Sections 311/312 Hazard Categories – Not applicable.
Sections 313 Superfunds Amendments and Reauthorizations Act of 1986 – Not applicable.
Sections 302 – Not applicable.

Clean Air Act (CAA): Not applicable
Clean Water Act (CWA): Not applicable

State Right To Know Lists: No ingredients listed
California Proposition 65: No ingredients listed
Texas ESL: No ingredients listed

Section 16: OTHER INFORMATION

Size	Part Number	UPC
2 oz.	1700000150001	043318500015
2 oz., 48 per case	15001 & 1710004850001	043318500015
32 oz.	1700000150032	043318500329
32 oz., 6 per case	1710000650032	043318500329
32 oz., 12 per case	1710001250032 & 1780101250032	043318500329
1 Gallon	1700000150128	043318501289
1 Gallon, 6 per case	15128 & 1780100650128	043318501289
1 Gallon, 6 per case	1710000650128	043318501289
5 Gallon	50005 & 1700000150005	043318500053

Section 16: OTHER INFORMATION - continued

55 Gallon 50155 & 1700000150155 043318501555

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

NFPA:

Health – Corrosive to skin and eyes
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: Revised SDS layout

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.