

Section 1: PRODUCT & COMPANY IDENTIFICATION

Product Name: Crystal Simple Green® Industrial Cleaner/Degreaser
Simple Green® Safety Towels (fluid only)

Manufacturer's Product Code Numbers: *See page 4

Company: Sunshine Makers, Inc.
15922 Pacific Coast Highway
Huntington Harbour, CA 92649 USA

Telephone: 800-228-0709 • 562-795-6000 Fax: 562-592-3830

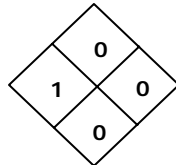
Emergency Phone: Chem-Tel 24-Hour Emergency Service: 800-255-3924

Use of Product: A specialized cleaner and degreaser for use in the industrial and institutional workplace. (Simple Green® Safety Towels contain diluted Crystal Simple Green®).

Section 2: HAZARDS IDENTIFICATION

Emergency Overview: CAUTION. Mild eye irritant.

Crystal Simple Green® is a clear liquid with no odor. Towels are infused with a clear liquid and lack an odor.



HMIS Rating:

Health = 1 = slight

Fire = 0

Reactivity, and Special = 0 = minimal

Eye Contact: Mild Eye Irritant.

Skin Contact: No adverse effects expected under typical use conditions. Prolonged exposure may cause dryness. Under this condition, use of gloves or skin moisturizer after washing may be indicated.

Ingestion: May cause stomach or intestinal upset if swallowed (due to deterative properties.)

Inhalation: No adverse effects expected under typical use conditions. Adequate ventilation should be present when using Crystal Simple Green® over a prolonged period of time. Open windows or ventilate via fan or other air-moving equipment if necessary.

Carcinogens: No ingredients are listed by OSHA, IARC, or NTP as known or suspected carcinogens.

Medical Conditions: No medical conditions are known to be aggravated by exposure to Crystal Simple Green®. Dermal-sensitive users may experience mild but reversible reactions.

UN Number: Not Required

Dangerous Goods Class: Non-hazardous

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

The only ingredient of Crystal Simple Green® with established exposure limits is undiluted 2-butoxyethanol (<6%) (Butyl Cellosolve; CAS No. 111-76-2); the ACGIH TLV-TWA is 20 ppm (97 mg/m³). Based upon chemical analysis, Crystal Simple Green® contains no known EPA priority pollutants, heavy metals or chemicals listed under RCRA, CERCLA, or CWA. Analysis by TCLP (Toxicity Characteristic Leaching Procedure) according to RCRA revealed no toxic organic or inorganic constituents.

All components of Crystal Simple Green® are listed on the TSCA Chemical Substance Inventory.

This product does not contain any ingredients covered by the provisions of 29 CFR 1910.1200.

Section 4: FIRST AID MEASURES

- Eye Contact: Reddening may develop. Immediately rinse the eye with large quantities of cool water; continue 10-15 minutes or until the material has been removed; be sure to remove contact lenses, if present, and to lift upper and lower lids during rinsing. Get medical attention if irritation persists.
- Skin Contact: Minimal effects, if any; rinse skin with water, rinse shoes and launder clothing before reuse. Reversible reddening may occur in some dermal-sensitive users; thoroughly rinse area and get medical attention if reaction persists.
- Swallowing: Essentially non-toxic. Give several glasses of water to dilute; do not induce vomiting. If stomach upset occurs, consult physician.
- Inhalation: Non-toxic. Exposure to concentrate may cause mild irritation of nasal passages or throat; remove to fresh air. Get medical attention if irritation persists.

Section 5: FIRE FIGHTING MEASURES

Crystal Simple Green® is stable, not flammable, and will not burn. No special procedures required.

- Flash Point/Auto-Ignition: Not flammable. Extinguishing Media: Not flammable/non-explosive.
Flammability Limits: Not flammable. Special Fire Fighting Procedures: None required.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Avoid contact with eyes. Do not rub eyes with hands during cleanup. No special precautions for dermal contact are needed. Wash hands thoroughly after cleaning up spill or leak.

Method for cleaning up: Recover usable material by convenient method, residual may be removed by wipe or wet mop. If necessary, unrecoverable material may be washed to drain with large quantities of water.

Section 7: HANDLING AND STORAGE

No Special precautions are required. **This product is non-hazardous for storage and transport according to the U.S. Department of Transportation Regulations.** Crystal Simple Green® requires no special labeling or placarding to meet U.S. Department of Transportation requirements.

- UN Number:** Not Required **Dangerous Goods Class:** Non-hazardous

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

- Exposure Limits: The Crystal Simple Green® formulation presents no health hazards to the user when used according to label directions for its intended purposes. Mild skin and eye irritation is possible (please see Eye contact and Skin contact in section IV.) No special precautionary measures required under normal use conditions.
- Ventilation: No special ventilation, precautions or respiratory protection is required during normal use. Large-scale use indoors should provide an increased rate of air exchange.
- Human Health Effects or Risks From Exposure: Adverse effects on human health are not expected from Crystal Simple Green®, based on 20 years of use of Simple Green® without reported adverse health incidence in diverse population groups, including extensive use by inmates of U.S. Federal prisons in cleaning operations.
- Eye protection: Crystal Simple Green® is a mild eye irritant; mucous membranes may become irritated by concentrate. Eye protection not generally required. Wash hands after using wipes.
- Skin protection: Crystal Simple Green® is not likely to irritate the skin in the majority of users. Repeated daily application to the skin without rinsing, or continuous contact on the skin may lead to temporary, but reversible, irritation. Rinse completely from skin after contact.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION – continued –

General hygiene conditions: There are no known hazards associated with this material when used as recommended. The following general hygiene considerations are recognized as common good industrial hygiene practices:

- Avoid breathing vapor or mist.
- Avoid contact with eyes.
- Wash thoroughly after handling and before eating, drinking, or smoking.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance & Odor: Both cleaner and towels contain a clear liquid with no odor.			
Specific Gravity:	1.020	Vapor Pressure:	18 mm Hg @ 20°C; 23.5 mmHg @ 26°C
Evaporation:	>1 (butyl acetate = 1)	Vapor Density:	1.3 (air = 1)
Water Solubility:	100%	Density:	8.5 lbs/gallon
Boiling Point:	100.6°C (212°F)	pH:	9.35; Safety Towel pH is 8.1 - 8.8
Ash Content:	At 600°F: 1.86% by weight	Nutrient Content:	
Freezing Point:	Approx -9 °C (16 °F) <i>If product freezes, it will reconstitute without loss of efficacy when brought back to room temperature and agitated.</i>	Phosphorus: 0.3% by formula Nitrogen <1.0% by weight (fusion and qualitative test for ammonia) Sulfur: 0.6% by weight (barium chloride precipitation method)	
VOC Composite Partial Pressure: 0.006 mmHg @ 20°C			
Volatile Organic Compounds (VOCs):			
SPRAY TRIGGERS ONLY CARB Method 310 4.0%			
Cleaner must be diluted approximately 1 part Crystal Simple Green® to 1 part water to meet SCAQMD. Dilution to meet other area air quality standards may be necessary. Users in restricted areas should dilute accordingly.			
1 GALLON OR GREATER EPA Method 24 5.9% CARB Method 310 5.8% SCAQMD Method 313 6.6%			
Cleaner must be diluted approximately 1 part Crystal Simple Green® to 1 part water to meet CARB and 1 part Crystal Simple Green® to 2 part water to meet SCAQMD. Dilution to meet other area air quality standards may be necessary. Users in restricted areas should dilute accordingly.			

Section 10: STABILITY AND REACTIVITY

Stability: Stable
 Materials to Avoid: None known
 Hazardous Decomposition Products: None expected

Section 11: TOXICOLOGICAL INFORMATION

The information and conclusions cited in this section are based on data and testing of Simple Green® because, except for fragrance and dyes which have been removed, it contains the same ingredients as Simple Green®.

Nonhuman Toxicity (Data for Simple Green®)

Acute Toxicity: Oral LD₅₀ (rat): >5.0 g/kg body weight Dermal LD₅₀ (rabbit) >2.0 g/kg body weight

Eye Irritation: With or without rinsing with water, the irritation scores in rabbits at 24 hours did not exceed 15 (mild irritant) on a scale of 0-110.

Dermal Irritation: Only mild, but reversible, irritation was found in a standard 72 hour test on rabbits. A value of 0.2 (non-irritating) was found on a scale of 0-8.

Subchronic Dermal effects: No adverse effects, except reversible dermal irritation, were found in rabbits exposed to Simple Green (up to 2.0 g/kg/day for 13 weeks) applied to the skin of 25 males and 25 females. Only female body weight gain was affected.

Fertility Assessment by Continuous Breeding: The Simple Green® formulation had no adverse effect on fertility and reproduction in Cd-1 mice with continuous administration for 18 weeks, and had no adverse effect on the reproductive performance of their offspring.

Section 12: ECOLOGICAL INFORMATION

Biodegradability: Like Simple Green®, Crystal Simple Green® is readily decomposed by naturally occurring microorganisms. The biological oxygen demand (BOD), as a percentage of the chemical oxygen demand (COD), after 4, 7, and 11 days was 56%, 60% and 70%, respectively. Per OECD Closed Bottle Test, Crystal Simple Green® meets OECD and EPA recommendations for ready biodegradability.

In a standard biodegradation test with soils from three different countries, Butyl Cellosolve reached 50% degradation in 6 to 23 days, depending upon soil type, and exceeded the rate of degradation for glucose which was used as a control for comparison.

Environmental Toxicity Information: Crystal Simple Green® is considered practically non-toxic per EPA's Aquatic toxicity scale.

Section 13: DISPOSAL CONSIDERATIONS

Dispose of in accordance with all applicable local, state and federal laws. Dispose of used or unused product, and empty containers in accordance with the local, State, Provincial, and Federal regulations for your location. Never dispose of used degreasing rinsates into lakes, streams, and open bodies of water or storm drains.

Section 14: TRANSPORT INFORMATION

This product is non-hazardous for transport according to the U.S. Department of Transportation Services
UN Number: Not required Dangerous Goods Class: Non-hazardous

Section 15: REGULATORY INFORMATION

All components are listed on: EINECS and TSCA Inventory
SARA: This material contains 2-Butoxyethanol, <4%, (CAS# 111-76-2) which is subject to the reporting requirements of Section 313 of SARA Title III and 49 CFR Part 373.
*Reportable components: None. No components listed under: Clean Air Act Section 112
RCRA Status: Not a hazardous waste. CERCLA Status: No components listed
TSCA TRI Reporting: Not required / Not listed CA PROP. 65 Status: No components listed

Section 16: OTHER INFORMATION

Questions about the information found on this MSDS should be directed to:
SUNSHINE MAKERS, INC. – TECHNICAL DEPARTMENT
15922 Pacific Coast Hwy. Huntington Harbour, CA 92649

Phone: 800/228-0709 [8am-5pm Pacific time, Mon-Fri] Fax: 562/592-3830 Email: infoweb@simplegreen.com

Nat'l Part No. Crystal	Part Number	NSN	Size
	19024	7930-01-418-1151	24 oz. spray (12/cs)
	19128	7930-01-418-1152	1 Gal. (6/cs)
	19005	7930-01-418-1153	5 Gal.
	19055	7930-01-418-1155	55 Gal.

Safety Towels	Part Number	Size
	13353	5 count pouch (50/cs)
	13351	75-count canister (6/cs)

DISCLAIMER: The information provided with this MSDS is furnished in good faith and without warranty of any kind. Personnel handling this material must make independent determinations of the suitability and completeness of information from all sources to assure proper use and disposal of this material and the safety and health of employees and customers. Sunshine Makers, Inc. assumes no additional liability or responsibility resulting from the use of, or reliance on this information.