

# MATERIAL SAFETY DATA SHEET:

## SIMPLE GREEN® MULTI-PURPOSE CLEANER (RTU)

## SIMPLE GREEN® MULTI-PURPOSE CLEANING WIPES

### I. PRODUCT & COMPANY INFORMATION

**PRODUCT NAME:** *SIMPLE GREEN® MULTI-PURPOSE CLEANER – (READY-TO-USE)*  
*SIMPLE GREEN® MULTI-PURPOSE CLEANING WIPES*

**COMPANY NAME:** **SUNSHINE MAKERS, INC.**  
15922 Pacific Coast Highway  
Huntington Harbour, CA 92649 USA  
Telephone: 800-228-0709 • 562-795-6000  
Fax: 562-592-3034  
Website: www.simplegreen.com

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Pg. 1 of 4  
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For 24-hour emergency, call Chem-Tel, Inc.: 800-255-3924

**USE OF PRODUCT:** Simple Green Multi-Purpose Cleaner is a ready-to-use cleaning product and can be used undiluted on any water-safe surfaces. UNLESS NOTED, ALL INFORMATION GIVEN BELOW FOR SIMPLE GREEN ALSO APPLIES TO SIMPLE GREEN MULTI-PURPOSE CLEANER. DIFFERENCES FOR SIMPLE GREEN MULTI-PURPOSE RTU WILL BE NOTED WITH A DOUBLE-ASTERISK. (\*\*) THIS MSDS PERTAINS ONLY TO THE FLUID, NOT THE WIPE SUBSTRATE.

### II. INGREDIENT INFORMATION

The only ingredient of Simple Green® with established exposure limits is undiluted 2-butoxyethanol (\*\*< 0.75% in RTU) (Butyl Cellosolve; CAS No. 111-76-2): the ACGIH TLV-TWA is 20 ppm (97 mg/m<sup>3</sup>). Note, however, that Butyl Cellosolve is only one of the raw material ingredients that undergo processing and dilution during the manufacture of Simple Green®. Upon completion of the manufacturing process, Simple Green® does not possess the occupational health risks associated with exposure to undiluted Butyl Cellosolve. Verification of this is contained in the independent test results detailed under "Toxicological Information" on Page 3 of this MSDS. Based upon chemical analysis, 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.

**\*\* Simple Green® Multi-Purpose contains less than 1% 2-butoxyethanol and therefore is exempt from reporting requirements.** All components of Simple Green® and Simple Green Multi-Purpose are listed on the TSCA Chemical Substance Inventory.

### III. HAZARDS IDENTIFICATION

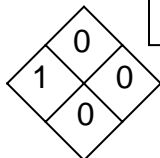
UN Number: Not required  
Dangerous Goods Class: Nonhazardous

#### NJ TRADE SECRET REGISTRATION NUMBERS

80100235-5000p	80100235-5003p	80100235-5006p	80100235-5009p
80100235-5001p	80100235-5004p	80100235-5007p	
80100235-5002p	80100235-5005p	80100235-5008p	

#### Hazard Rating (NFPA/HMIS)

Health = 1\*      Reactivity = 0  
Fire = 0          Special = 0



#### Rating Scale

0 = minimal      1 = slight  
2 = moderate    3 = serious  
4 = severe

\*Mild eye irritant, non-mutagenic and non-carcinogenic. **None of the ingredients in Simple Green® are regulated or listed as cancer agents by Federal OSHA, NTP, or IARC.**

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## IV. FIRST AID MEASURES

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### **SYMPTOMS OF OVEREXPOSURE AND FIRST AID TREATMENT**

- 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. Exposures to concentrate-mist may cause mild irritation of nasal passages or throat; remove to fresh air. Get medical attention if irritation persists.

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## V. FIRE FIGHTING MEASURES

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Simple Green® is stable, not flammable, and will not burn.

- Flash Point/Auto-Ignition: Not flammable.
- Flammability Limits: Not flammable.
- Extinguishing Media: Not flammable/nonexplosive. No special procedures required.
- Special Fire Fighting Procedures: None required.

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## VI. ACCIDENTAL RELEASE MEASURES

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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.

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## VII. HANDLING, STORAGE & TRANSPORT INFORMATION

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No special precautions are required. **This product is non-hazardous for storage and transport according to the U.S. Department of Transportation Regulations.** 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

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## VIII. EXPOSURE CONTROLS

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**Exposure Limits:** The 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.).

**Ventilation:** No special ventilation is required during use.

**Human Health Effects or Risks from Exposure:** Adverse effects on human health are not expected from Simple Green®, based upon twenty years of use without reported adverse health incidence in diverse population groups, including extensive use by inmates of U.S. Federal prisons in cleaning operations.

Simple Green® is a mild eye irritant; mucous membranes may become irritated by concentrate-mist. 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 of Simple Green® on the skin may lead to temporary, but reversible, irritation.

**Medical Conditions Aggravated by Exposure:** No aggravation of existing medical conditions is expected; dermal sensitive users may react to dermal contact by Simple Green®.

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**IX. PERSONAL PROTECTION**

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Precautionary Measures:	No special requirements under normal use conditions.
Eye Protection:	Caution, including reasonable eye protection, should always be used to avoid eye contact where splashing may occur.
Skin Protection:	No special precautions required; rinse completely from skin after contact.
Respiratory Protection:	No special precautions required.
Work and Hygienic Practices:	No special requirements. Wash or rinse hands before touching eyes or contact lenses.

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**X. PHYSICAL AND CHEMICAL PROPERTIES**

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<b>Appearance/odor:</b>	<b>**Simple Green Multi-Purpose:</b> Translucent liquid that is: Green with apple odor -or- Purple with lilac odor -or- Pink with floral odor -or- Orange with citrus odor -or- Yellow with lemon odor. Fluid in Wipes has no added color.		
<b>Specific Gravity:</b>	1.0257	<b>Vapor Pressure:</b>	17 mm Hg @ 20 °C; 22 mm Hg @ 25 °C
<b>pH of concentrate:</b>	9.5	<b>Vapor Density:</b>	1.3 (air = 1)
<b>**pH of RTU:</b>	8.8	<b>Density:</b>	8.5 lbs./gallon
<b>Boiling Point:</b>	110 °C (231 °F)	<b>Evaporation:</b>	>1 (butyl acetate = 1)
<b>Freezing Point:</b>	-9 °C (16 °F) If product freezes, it will reconstitute without loss of efficacy when brought back to room temperature and agitated.		
<b>VOC Composite Partial Pressure:</b>	0.006 mm Hg @ 20 °C		
<b>Volatile Organic Compounds (VOCs):</b>	<b>** Simple Green Multi-Purpose</b> contains less than 1% VOC per EPA Method 24 and does not require dilution to comply with CARB, SCAQMD and BAAQMD Rules.		
<b>Water Solubility:</b>	Completely soluble in water. The higher salt concentrations in marine ecosystems will lead to complexes with Simple Green® that may become visible at ratios above one part Simple Green® to 99 parts seawater.		
<b>Ash Content:</b>	At 600 °F: 1.86% by weight.		
<b>Nutrient Content:</b>	Nitrogen: <1.0% by weight (fusion and qualitative test for ammonia). Phosphorus: 0.3% by formula. Sulfur: 0.6% by weight (barium chloride precipitation method).		
<b>Detection:</b>	Simple Green® Multi-Purpose has the characteristic odors listed above which are not indicative of any hazardous situation.		

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**XI. STABILITY AND REACTIVITY INFORMATION**

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Nonreactive. Simple Green® is stable, even under fire conditions, and will not react with water or oxidizers. Hazardous polymerization will not occur.

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**XII. TOXICOLOGICAL INFORMATION**

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**Nonhuman Toxicity****Acute Mortality Studies:**

Oral LD<sub>50</sub> (rat): >5.0 g/kg body weight // Dermal LD<sub>50</sub> (rabbit): >2.0 g/kg body weight

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

**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 110.

**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. Detailed microscopic examination of all major tissues showed no adverse changes.

**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.

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### XIII. BIODEGRADABILITY AND ENVIRONMENTAL TOXICITY INFORMATION

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**Biodegradability:**

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 PRO FT CBT-AC 014-7 "Ready Biodegradability: Closed Bottle Test" OECD, Simple Green® meets OECD and EPA recommendations for ready biodegradability.

**Environmental Toxicity Information:**

Simple Green® is considered practically non-toxic per EPA's aquatic toxicity scale. Simple Green® is non-lethal to any of the marine and estuarine test animals listed in the following table at concentrations below 200 mg/L (0.02%). This table shows the Simple Green® concentrations that are likely to be lethal to 50% of the exposed organisms.

	<b>LC<sub>50</sub> in mg/L (ppm)</b>	
	<b>48-hour</b>	<b>96-hour</b>
<u>Marine Fish:</u>		
Mud minnow ( <i>Fundulus heteroclitus</i> )	1690	1574
Whitebait ( <i>Galaxias maculatus</i> )	210	210
<u>Marine/Estuarine Invertebrates:</u>		
Brine Shrimp ( <i>Artemia salina</i> )	610	399
Grass Shrimp ( <i>Palaemonetes pugio</i> )	270	220
Green-lipped Mussel ( <i>Perna canaliculus</i> )	220	220
Mud Snail ( <i>Potamopyrgus estuarinus</i> )	410	350

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### XIV. DISPOSAL CONSIDERATIONS

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Simple Green® is fully water soluble and biodegradable and will not harm sewage-treatment microorganisms if disposal by sewer or drain is necessary. Dispose of in accordance with all applicable local, state, and federal laws.

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### XV. OTHER INFORMATION

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Containers: Simple Green® residues can be completely removed by rinsing with water; the container may be recycled or applied to other uses. Containers meet or exceed the California Integrated Waste Management Board's Rigid Plastic Packaging Container (RPPC) law.

Contact Point: Sunshine Makers, Inc., Research and Development Division: 562-795-6000.

**\*\*\* NOTICE \*\*\***

All information appearing herein is based upon data obtained by the manufacturer and recognized technical sources. Judgments as to the suitability of information herein for purchaser's purposes are necessarily purchaser's responsibility. Therefore, although reasonable care has been taken in the preparation of this information, Sunshine Makers, Inc. or its distributors extends no warranties, makes no representations and assumes no responsibility as to the suitability of such information for application to purchaser's intended purposes or for consequences of its use.