

View Section :	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
-----------------------	----------	----------	----------	----------	----------	----------	----------	----------	----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

SECTION 1: CHEMICAL PRODUCT and COMPANY IDENTIFICATION

(N/A)

Product Name: Simple Green All-Purpose Cleaner, Simple Green Concentrated Cleaner/Degreaser/Deodorizer, Simple Green Scrubbing Pad

Manufacturer Name: Sunshine Makers, Inc.

Address: 15922 Pacific Coast Highway
Huntington Harbour, CA 92649
USA

Website: www.simplegreen.com
For 24-hour emergency, call
Chem-Tel, Inc.: 800-255-3924

General Use: USE OF PRODUCT: An all purpose cleaner and degreaser used diluted in water for direct, spray, and dip tank procedures. (Scrubbing pad is used with water for manual scrubbing applications.)

Business Phone: 800-228-0709, 562-795-6000

Business Fax: 562-592-3034

Revision Date: January 2006
Version No.: 10012

Trade Names: SIMPLE GREEN® ALL-PURPOSE CLEANER
SIMPLE GREEN® CONCENTRATED CLEANER/DEGREASER/DEODORIZER
SIMPLE GREEN® SCRUBBING PAD

Comments: *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.

Hazard Rating (NFPA/HMIS):
0 = minimal
1 = slight
2 = moderate
3 = serious
4 = severe

Material Safety Data Sheet: Simple Green(R) also for: Simple Green(R) Scrubbing Pad.

Product Codes: 13012, 13005, 13006, 13016, 13008, Scrubbing Pad: 10224

[To Top of page](#)
**SECTION 2 : COMPOSITION, INFORMATION ON INGREDIENTS**

(N/A)

Ingredient Name	CAS#	Ingredient Percent
2-butoxyethanol	111-76-2	< 6%
ACGIH TLV TWA: 20 ppm (97 mg/m3). Comments: The only ingredient of Simple Green® with established exposure limits is undiluted 2-butoxyethanol (< 6%) (Butyl Cellosolve; CAS No. 111-76-2). 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. All components of Simple Green® are listed on the TSCA Chemical Substance Inventory.		

NJ TRADE SECRET REGISTRATION NUMBERS:

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

SECTION 3 : HAZARDS IDENTIFICATION

: (N/A)

UN Number: Not required
 Dangerous Goods Class: Nonhazardous

Hazard Rating (NFPA/HMIS):
 Health = 1*
 Fire = 0
 Reactivity = 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.

Applies to All Ingredients :**Potential Health Effects:**

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.

Signs/Symptoms:

SYMPTOMS OF OVEREXPOSURE:
 Eye Contact: Reddening may develop.
 Skin Contact: Minimal effects
 Inhalation: Non-toxic.
 Swallowing: Essentially non-toxic.

Aggravation of Pre-Existing Conditions:

No aggravation of existing medical conditions is expected; dermal sensitive users may react to dermal contact by Simple Green ®.

[To Top of page](#) **SECTION 4 : FIRST AID MEASURES**

: (N/A)

Eye Contact:

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:


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.

Inhalation:

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

Ingestion:

Swallowing: Give several glasses of water to dilute; do not induce vomiting. If stomach upset occurs, consult physician.

[To Top of page](#) **SECTION 5 : FIRE FIGHTING MEASURES**

: (N/A)

Fire:

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

Flammability Limits: Not flammable.

Flash Point:

Not flammable.

Auto Ignition Temperature:


Not flammable.

Extinguishing Media:

Not flammable/nonexplosive. No special procedures required.

Fire Fighting Instructions:

None required.

[To Top of page](#) **SECTION 6 : ACCIDENTAL RELEASE MEASURES**

: (N/A)


Spill Cleanup Measures:

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


: (N/A)

Handling:	No special precautions are required.
Storage:	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.
Hygiene Practices:	No special requirements. Wash or rinse hands before touching eyes or contact lenses. UN Number: Not required Dangerous Goods Class: Non-hazardous

[To Top of page](#) **SECTION 8 : EXPOSURE CONTROLS, PERSONAL PROTECTION**

: (N/A)


Engineering Controls:	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 4.).
Ventilation System:	No special ventilation is required during use.
Personal Protective Equipment Routine Handling:	Precautionary Measures: No special requirements under normal use conditions.
Skin Protection Description:	No special precautions required; rinse completely from skin after contact.
Eye/Face Protection:	Caution, including reasonable eye protection, should always be used to avoid eye contact where splashing may occur.
Respiratory Protection:	No special precautions required. 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 ®. Work and Hygienic Practices: No special requirements. Wash or rinse hands before touching eyes or contact lenses.

[To Top of page](#) **SECTION 9 : PHYSICAL and CHEMICAL PROPERTIES**

: (N/A)

Physical State/Appearance:	Liquid
Color:	Translucent green (Scrubber is green fibrous rectangle.)
Odor:	Characteristic sassafras odor.
pH:	of concentrate: 9.5
Vapor Pressure:	17 mm Hg @ 20 deg C; 22 mm Hg @ 25 deg C
Vapor Density:	1.3 (air = 1)
Boiling Point:	110 deg C (231 deg F)
Freezing Point:	-9 deg C (16 deg F) If product freezes, it will reconstitute without loss of efficacy when brought back to room temperature and agitated.
Solubility:	Water: 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.
Specific Gravity:	1.0257
Density:	8.5 lbs./gallon
Evaporation Point:	> 1 (butyl acetate = 1)
Volatile Organic Compound Content:	Composite Partial Pressure: 0.006 mm Hg @ 20 deg C Organic Compounds (VOCs): 7.96 g/L per ASTM Method 3960-90. Per EPA Method 24, VOCs are 5.9% and product must be diluted at least 1 part of water to 1 part Simple Green ® in order to meet CARB 2005 VOC regulations -or 1 part Simple Green to 3 parts water to meet SCAQMD Rule 1171 & Rule 1122 and BAAQMD Regulation 8-16 VOC requirements for solvent cleaning operations. Ash Content: At 600 deg F: 1.86% by weight. Nutrient Content:


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).
 Detection: Simple Green ® has a characteristic sassafras odor that is not indicative of any hazardous situation.

[To Top of page](#) 

SECTION 10 : STABILITY and REACTIVITY

: (N/A)

Chemical Stability:	Simple Green ® is stable
Conditions to Avoid:	Simple Green ® is stable, even under fire conditions.
Reactivity:	Nonreactive. Simple Green ® is will not react with water or oxidizers
Hazardous Polymerization:	Hazardous polymerization will not occur.


[To Top of page](#) 

SECTION 11 : TOXICOLOGICAL INFORMATION

: (N/A)

2-butoxyethanol :

Skin Effects:	Nonhuman Toxicity Acute Mortality Studies: Dermal LD50 (rabbit): > 2.0 g/kg body weight
Ingestion Effects:	Nonhuman Toxicity Acute Mortality Studies: Oral LD50 (rat): > 5.0 g/kg body weight
Subchronic Effects:	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.
Reproductive Toxicity:	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.
Irritation:	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.

[To Top of page](#) 


SECTION 12 : ECOLOGICAL INFORMATION

: (N/A)

Environmental Fate:	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%). The below data shows the Simple Green ® concentrations that are likely to be lethal to 50% of the exposed organisms.
	Marine Fish: Mud minnow (<i>Fundulus heteroclitus</i>) LC50 in mg/L (ppm): 48-hour: 1690 96-hour: 1574
	Marine Fish: Whitebait (<i>Galaxias maculatus</i>) LC50 in mg/L (ppm): 48-hour: 210 96-hour: 210
	Marine/Estuarine Invertebrates: Brine Shrimp (<i>Artemia salina</i>) LC50 in mg/L (ppm): 48-hour: 610 96-hour: 399
	Marine/Estuarine Invertebrates: Grass Shrimp (<i>Palaemonetes pugio</i>) LC50 in mg/L (ppm): 48-hour: 270 96-hour: 220
	Marine/Estuarine Invertebrates: Green-lipped Mussel (<i>Perna canaliculus</i>) LC50 in mg/L (ppm): 48-hour: 220 96-hour: 220
	Marine/Estuarine Invertebrates: Mud Snail (<i>Potamopyrgus estuarinus</i>) LC50 in mg/L (ppm): 48-hour: 410 96-hour: 350

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 OECD Closed Bottle Test, 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.


[To Top of page](#) 

SECTION 13 : DISPOSAL CONSIDERATIONS

: (N/A)

Waste Disposal:

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.

[To Top of page](#) 

SECTION 14 : TRANSPORT INFORMATION


: (N/A)

UN Number:

Not required

RID/ADR Class:

Nonhazardous

[To Top of page](#) 

SECTION 15 : REGULATORY INFORMATION

: (N/A)

Applies to all ingredients:**TSCA 8(b): Inventory Status:**

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

State:

NJ TRADE SECRET REGISTRATION NUMBERS:

80100235-5000p, 80100235-5005p

80100235-5001p, 80100235-5006p


80100235-5002p, 80100235-5007p

80100235-5003p, 80100235-5008p

80100235-5004p, 80100235-5009p

Regulatory Paragraph:

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.

[To Top of page](#) 

SECTION 16 : ADDITIONAL INFORMATION

: (N/A)

HMIS:**Health Hazard:**

1* = Slight

Fire Hazard:

0 = Minimal

Reactivity:

0 = Minimal

Personal Protection:

0 = Minimal

NFPA:**Health:**

1 = Slight

Fire Hazard:

0 = Minimal

Reactivity:

0 = Minimal

Specific Hazard:

0 = Minimal

MSDS Revision Date:

January 2006
Version No.: 10012

MSDS Author:

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

Disclaimer:**NOTICE**

All information appearing herein is based upon data obtained by the manufacturer & 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.

OTHER INFORMATION

Containers: Simple Green® residues can be completely removed by rinsing with water; the container may be recycled or applied to other uses.

Electrical Wiring Compatibility: Polyimide insulated wiring is not affected by exposure to Simple Green

®. After immersion in Simple Green ® for 14 days at 74 deg F, the 61 cm piece of polyamide insulated wire passed a one minute dielectric proof test at 2500 volts (ASTM D-149).

National Stock Numbers:

PART##: 13012

NSN: 7930-01-342-5315

SIZE: 24 oz. spray (12/cs)

PART##: 13005

NSN: 7930-01-306-8369

SIZE: 1 gal. (6/cs)

PART##: 13006

NSN: 7930-01-342-5316

SIZE: 5 gal.

PART##: 13016

NSN: 7930-01-342-5317

SIZE: 15 gal.

PART##: 13008

NSN: 7930-01-342-4145

SIZE: 55 gal.

PART##: Scrubbing Pad: 10224

NSN: 7930-01-346-9148

SIZE: Each (24/cs)

Hazard Rating (NFPA/HMIS):

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.

Copyright© 1996-2007 Actio Corporation. All Rights Reserved.

[To Top of page](#)

