

**Section 1: PRODUCT & COMPANY IDENTIFICATION**

Product Name:      Simple Green® Heavy-Duty Cleaner and Degreaser

Additional Names:    Simple Green® Heavy-Duty Cleaner and Degreaser (Pressure Washer Concentrate)

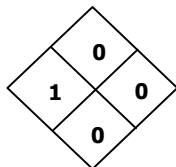
Manufacturer's Product Code Numbers:    18203 = 1 gallon bottles

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 concentrated cleaner used in pressure washing equipment or manual scrubbing for the removal of grease and grime of any hard non-porous outdoor washable surface.

**Section 2: HAZARDS IDENTIFICATION****NONHAZARDOUS****Emergency Overview: CAUTION. Mild eye irritant. Simple Green® Heavy-Duty Cleaner/Degreaser is a turquoise liquid with a faint detergent-like odor. It is non-flammable, non-combustible, non-explosive, and non-reactive.**Hazard Rating (NFPA/HMIS)Health = 1\*      Reactivity = 0  
Fire = 0            Special = 0Rating Scale0 = minimal      1 = slight  
2 = moderate    3 = serious  
4 = severe**Eye Contact:**      \* Mild Eye Irritant.**Skin Contact:**    No adverse effects expected under typical use conditions.**Ingestion:**        May cause stomach or intestinal upset if swallowed.**Inhalation:**        No adverse effects expected under typical use conditions.**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 Simple Green® Heavy-Duty Cleaner/Degreaser.**Section 3: COMPOSITION/INFORMATION ON INGREDIENTS**The only ingredient of Simple Green® Heavy-Duty Cleaner/Degreaser with established exposure limits is undiluted 2-butoxyethanol (<4%) (Butyl Cellosolve; CAS No. 111-76-2: the ACGIH TLV-TWA is 20 ppm (97 mg/m<sup>3</sup>).

Based upon chemical analysis, Simple Green® Heavy-Duty Cleaner/Degreaser 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® Heavy-Duty Cleaner/Degreaser are listed on the TSCA Chemical Substance Inventory.

**Section 4: FIRST AID MEASURES**

If in eyes:            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.

If swallowed:        Essentially non-toxic. Give several glasses of water to dilute; do not induce vomiting. If stomach upset occurs, consult physician.

**Section 4: FIRST AID MEASURES – continued –**

If on skin: Minimal effects, if any. Rinse skin with water, rinse shoes and laundry clothing before reuse. Reversible reddening may occur in some dermal-sensitive users; thoroughly rinse area and get medical attention if reaction persists.

If inhaled: 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.

**Section 5: FIRE FIGHTING MEASURES**

Simple Green® Heavy-Duty Cleaner/Degreaser is stable, not flammable, and will not burn.

Flash Point/Auto-Ignition: Not flammable.  
Flammability Limits: Not flammable.  
Extinguishing Media: Not flammable / non-explosive. No special procedures required.  
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.

**Procedure to follow in case of spill or leak:** Evacuate area. Identify source of leak or spill and contain with sand, earth, or containment bin. Then proceed to clean up spill or leak.

**Method for cleaning up:** Recover all reusable material. Rinse area with plenty of water and mop to sanitary sewer.

**Section 7: HANDLING AND STORAGE**

No special handling is required. Avoid contact with eyes. Wash hands thoroughly after handling.

Keep in a closed plastic container. Store at ambient temperature. Avoid excessive heat.

**Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Exposure Limits:** The Simple Green® Heavy-Duty Cleaner/Degreaser 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.

Eye protection: Access to eye bath or water source is recommended in case of eye contact. Thoroughly wash hands after contact to prevent hand to eye transference. Wear chemical splash goggles or face shield when eye contact is possible due to splashing or spraying.

Skin protection: Gloves or other skin protection are generally not needed under normal use conditions. Prolonged soaking in the product, repeated skin exposure over long periods of time, pre-existing skin conditions such as dermatitis, or allergic response to contact with the product may warrant the use of gloves, barrier creams, chemical aprons or other skin protection. Prolonged exposure to concentrate may cause dryness.

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**

|  |                           |  |                                    |
|--|---------------------------|--|------------------------------------|
| <b>Appearance:</b>   | Turquoise Liquid          | <b>Vapor Pressure:</b>   | 18 mm Hg @ 20°C; 23.5 mm Hg @ 26°C |
| <b>Odor:</b>   | Faint detergent-like odor | <b>Vapor Density:</b>  | 1.3 (air = 1)                      |
| <b>Specific Gravity:</b>   | 1.020 ± 0.015             | <b>Density:</b>  | 8.5 pounds/gallon                  |
| <b>pH:</b>   | 9.35 ± 0.8                | <b>Water Solubility:</b>   | 100%                               |
| <b>Boiling Point:</b>  | 100.6 °C (212 °F)         | <b>Evaporation Rate:</b>   | > 1 (butyl acetate = 1)            |
| <b>Freezing Point:</b>   | Approx -9 °C (16 °F)      | <b>Flash Point:</b>  | To boiling (ASTM D-93)             |
| <i>If product freezes, it will reconstitute without loss of efficacy when brought back to room temperature and agitated.</i> |                           | <b>Flame Extension:</b>  | N/A                                |
| <b>VOC Composite Partial Pressure:</b> 0.006 mmHg @ 20°C   |                           |  |                                    |
| <b>Volatile Organic Compounds (VOCs):</b>  |                           | Cleaner meets CARB & BAAQMD regulations. Cleaner must be diluted 1:1 with water to Meet SCAQMD Rule 1171 & Rule 1122 VOC requirements for solvent cleaning operations. |                                    |
| CARB Method 310  | 4.1%                      |  |                                    |
| SCAQMD Method 313  | 2.8%                      |  |                                    |

**Section 10: STABILITY AND REACTIVITY**

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

**Section 11: TOXICOLOGICAL INFORMATION**

Toxicology information is based on chemical profile of ingredients and extrapolation of data from similar formulas. No animal testing has been conducted on this product.

|                                   |  |  |
|-----------------------------------|--|--|
| Acute Toxicity:                   | Oral LD <sub>50</sub> (rat) >5 g/kg body weight*<br>Dermal LD <sub>50</sub> (rabbit) >2 g/kg body weight   | *Calculation from OECD series on testing and assessment number 33, Chapter 3.2 |
| Eye Irritation:                   | Moderate / Mild reversible eye irritation may occur based on relevant laboratory studies. This potential is reduced by immediate rinsing of eyes in case of eye contact.   |  |
| Dermal Irritation:                | Mild, reversible skin irritation may occur based on relevant laboratory studies. A 6-hour exposure to human skin under a patch did not produce irritation  |  |
| Repeat Exposure Via Skin Contact: | Based on relevant laboratory studies, no toxic effects are expected to be associated with daily skin exposures (with up to 2 g/kg/day tested for 13 weeks on rabbits). Skin irritation may, however, occur with repeated or prolonged exposures. |  |
| Reproductive Effects Assessment:  | Based on Relevant laboratory studies (CD-1 mouse 18-week fertility assessment continuous breeding), no adverse effects on reproduction, fertility, or health of offspring are expected.  |  |

**Section 12: ECOLOGICAL INFORMATION**

**Hazard to wild animals & aquatic organisms:** Low, based on toxicological profile.

**Biodegradability:** Readily biodegradable based on biodegradation profile.

**Environmental Toxicity Information:** It is important not to allow the runoff from cleaning into closed systems such as decorative ponds. Always protect closed systems with tarps or dikes if necessary.

**Section 12: ECOLOGICAL INFORMATION – continued –****Environmental Toxicity Information:**

It is important not to allow the runoff from cleaning into closed systems such as decorative ponds. Always protect closed systems with tarps or dikes if necessary.

Additional information can be found in Section 15: REGULATORY INFORMATION.

**Section 13: DISPOSAL CONSIDERATIONS**

Appropriate Method for Disposal of Simple Green® Heavy-Duty Cleaner/Degreaser:

- Unused Product:      \*Dilute with water to use concentration (1:10 or greater) and dispose by sanitary sewer.
- Used Product:        \* Used product may be hazardous depending on the cleaning application and resulting contaminants.
- Empty Containers:   \*Triple-rinse with water and offer for recycling if available in your area. Otherwise, dispose as non-hazardous waste.

\*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 storage and transport according to the U.S. Department of Transportation Regulations.** Simple Green® Heavy-Duty Cleaner/Degreaser requires no special labeling or placarding to meet U.S. Department of Transportation requirements.

IATA Proper Shipping Name: Detergent solution      Hazard Class: Non-hazardous      UN Number: Not Required.

**Section 15: REGULATORY INFORMATION**

- Reportable components:      None.
- VOC Reporting:              5% per gallon (0.425 pounds/gallon)
- 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.
- All components are listed on:      EINECS and TSCA Inventory
- 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

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