

**Section 1: PRODUCT & COMPANY IDENTIFICATION**

Product Name: Extreme Simple Green® Aircraft & Precision Cleaner  
 Additional Names: Simple Green Commercial Aircraft Cleaner  
 Extreme Simple Green Commercial Aircraft Cleaner

Manufacturer's Product Code Numbers: 13412 = 32 oz. trigger-spray bottles  
 13406 = 1 gallon bottles 13405 = 5 gallon containers  
 13455 = 55 gallon containers 13475 = 275 gallon totes

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: 800-225-3924

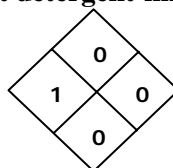
Use of Product Heavy Duty Exterior Commercial & Private Aircraft Cleaner, Engine Wash and Specialized Industrial Cleaner/Degreaser. Can be manually applied (spray or wash-on,) used with pressure washing equipment, parts washing equipment, and in wash racks.

Performance Certifications: · Passed **Boeing D6-17487** (rev P = Release 22-APR-2003) Evaluation of Materials for Exterior and General Cleaners.  
 · Passed **Pratt & Whitney PWA 36604r** Effects of Cleaning Agents on Aircraft Engine Materials (revC=20-JUN-2001 & D=26-JAN-2005) @1:5 dilution.  
 Above testing was performed by Scientific Materials, Inc.

**Section 2: HAZARDS IDENTIFICATION****NONHAZARDOUS**

**Emergency Overview: CAUTION. Mild eye irritant.**

**Extreme Simple Green is a colorless liquid with a very faint detergent-like odor. It is non-flammable, non-combustible, non-explosive, and non-reactive.**



NFPA/HMIS Rating:

Health = 1 = slight

Fire, Reactivity, and Special = 0 = minimal

**Eye Contact:** Eye Irritant (due to defatting effects.)

**Skin Contact:** No adverse effects expected under typical use conditions. Prolonged exposure to concentrate 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 Extreme 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 Extreme Simple Green.

**Section 3: COMPOSITION/INFORMATION ON INGREDIENTS**

Hazardous Substances Present: None  
 SARA Substances Present: None \*see page 4 of 4

<u>Organic Compounds Present:</u>	<u>Percent by wt:</u>
Proprietary ethoxylated fatty alcohol	< 5%
Proprietary fatty alkyl cocoamide	< 5%
Propylene glycol	< 1%
Propylene glycol butyl ether	< 5%
Triethanolamine	< 11%

**Section 4: FIRST AID MEASURES**

If in eyes: Flush with plenty of water. After 5 minutes of flushing, remove contact lenses, if present. Continue flushing for at least 10 more minutes, moving lower and upper eyelids away from eye to flush out all product. If irritation persists beyond 12 hours after contact, seek medical attention.

If ingested: Drink plenty of water to dilute. Stomach or intestinal upset may occur due to deterative properties.

**Section 5: FIRE FIGHTING MEASURES**

This product is non-flammable, non combustibile, and non-explosive. Any form of extinguishing media may be used on and around Extreme Simple Green. Please refer to Personal Protective Equipment information found in Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTIVE EQUIPMENT.

**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. Cover remaining spill with inert absorbent material to soak up spill. Dispose absorbent material as non-hazardous waste. 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 or stainless steel container. Store at ambient temperature. Avoid excessive heat.

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

Eye contact: 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.

Inhalation: Use exhaust ventilation if necessary to keep airborne concentrations below exposure limits.

Exposure guidelines:

Component	OSHA		ACGIH		Units
	TWA	STEL	TWA	STEL	
Proprietary ethoxylated fatty alcohol	N.E.	N.E.	N.E.	N.E.	ppm
Proprietary fatty alkyl cocoamide	N.E.	N.E.	N.E.	N.E.	ppm
Propylene glycol	N.E.	N.E.	N.E.	N.E.	ppm
Propylene glycol n-butyl ether	N.E.	N.E.	N.E.	N.E.	ppm
Triethanolamine	N.E.	N.E.	5 mg/m <sup>3</sup>	N.E.	ppm

N.E. = not established

Eye protection: Wear chemical splash goggles or face shield when eye contact is possible due to splashing or spraying Extreme Simple Green.

Skin protection: Gloves or other skin protection are generally not needed under normal use conditions of Extreme Simple Green. 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.

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>	Clear Liquid	<b>Vapor Pressure:</b>	20.7 mm Hg
<b>Odor:</b>	Very faint detergent-like odor	<b>Density:</b>	8.546 lbs/gal. // 1.024 gm/L
<b>Specific Gravity:</b>	1.025 ± 0.015	<b>Water Content:</b>	> 70%
<b>pH:</b>	10.9 ± 0.8	<b>Water Solubility:</b>	100%
<b>Boiling Point:</b>	210°F	<b>Evaporation Rate:</b>	9.54% per hour
<b>Flash Point:</b>	None (ASTM D-93)	<b>Solubility:</b>	Miscible with water
<b>Flame Extension:</b>	N/A	<b>Insoluble Matter:</b>	<0.01%
<b>Freezing Point:</b>	Approx 0°C	<b>Percent Volatiles:</b>	85.26% (ASTM-D2369)
<b>Nutrient Content:</b>	Nitrogen: <0.1% (0% by formula) Phosphorous: <0.25% (by formula) Sulfur: <0.1% (0% by formula)	<b>VOC:</b>	80 g/L per EPA Method 24 test results. <i>Dilution at 1:3 or greater complies with SCAQMD regulations for solvent cleaning operations. CARB regulation met via exemption of ingredient for LVP-VOC classification.</i>

**Section 10: STABILITY AND REACTIVITY**

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

**Section 11: TOXICOLOGICAL INFORMATION**

Acute Toxicity: Oral LD<sub>50</sub> (rat) >10 g/kg body weight  
 Dermal LD<sub>50</sub> (rabbit) >10 g/kg body weight

Toxicity extrapolated from ingredients. Animal testing not conducted.
--

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.

Note: Extreme Simple Green has an extremely unpleasant taste. This is expected to minimize the risks of substantial oral ingestion by humans and domestic animals or by wild animals or birds.

**Section 12: ECOLOGICAL INFORMATION**

Hazard to wild mammals: Low, based on toxicology profile  
Hazard to avian species: Low, based on toxicology profile  
Hazard to aquatic organisms: Low, LC<sub>50</sub> for freshwater fish and Daphnia estimated to be > 200 ppm  
Chemical Fate Information: When tested by OECD 301D, Closed Bottle Test for Biodegradability, Extreme Simple Green was found to be **readily biodegradable**, achieving an estimated 100% degradation rate at the target concentration of 2 mg/L. More than 70% degradation occurred within two weeks of testing.  
Based on formula and ready biodegradability, the bioaccumulation potential is low.

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

**Section 13: DISPOSAL CONSIDERATIONS**

Appropriate Method for Disposal of Extreme Simple Green:

Unused Product: \*Dilute with water to use concentration (1:10) and dispose by sanitary sewer.  
Used Product: \*This product can enter into clarifiers and oil/water separators. 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**

IATA Proper Shipping Name: Detergent solution

Hazard Class: Nonhazardous

**Section 15: REGULATORY INFORMATION**

\*Reportable components: None. The U.S. Environmental Protection Agency (EPA) has determined that propylene glycol ethers are not included within the listed category "glycol ethers" under either EPCRA §313 Toxic Release Inventory or Clean Air Act §112 Hazardous Air Pollutants (both lists include only ethylene glycol ethers). Nor are propylene glycol ethers included in the various EPA Resource Conservation and Recovery Act, and Clean Water Act lists, nor the California Proposition 65 lists.

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 TIR 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

**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.