Material Safety Data Sheet: I	Extreme Simple Green <sup>®</sup> Aircraft & Precision Cleaner
Version No. 1340608B	Date of Issue: August, 2008

### Section 1: PRODUCT & COMPANY IDENTIFICATION

Product Name: Extreme Simple Green<sup>®</sup> Aircraft & Precision Cleaner Additional Product Name: Simple Green<sup>®</sup> Stencil Cleaner & Solder Paste Remover

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Manufacturer's Product Code Numbers:				$\frac{\text{Stencil Cleaner Part Numbers:}}{13432 = 12 \times 32 \text{ oz. trigger-spray}} \\ 13436 = 4 \times 1 \text{ gal.} \qquad 13435 = 1 \times 5 \text{ gal.} \\ 13438 = 1 \times 55 \text{ gal.} \end{aligned}$
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	Heavy Duty Exterior Commercial & Private Aircraft Cleaner, Aircraft Engine Wash, Specialized Industrial Cleaner/Degreaser, and Precision Stencil Cleaner. Can be manually applied (spray or wash-on,) used with pressure washing equipment, parts washing equipment, and in wash racks.			
Performance Certifications:	• Passed <b>Boeing D6-17487</b> (rev P = Release 22-APR-2003) <u>Evaluation of Materials for Exterior and</u> <u>General Cleaners.</u>			
	· Passed <b>Pratt &amp; Whitney PWA 36604r</b> <u>Effects of Cleaning Agents on Aircraft Engine Materials</u> (revC=20-JUN-2001 & D=26-JAN-2005) @1:5 dilution.			
	Above testing was performed by Scientific Materials International, Inc.			

## Section 2: HAZARDS IDENTIFICATION

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

Extreme Simple Green Aircraft 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:

	<b>1 0</b> Health = $I = \text{slight}$
Eye Contact:	Eye Irritant (due to defatting effects.) Fire, Reactivity, and Special = $0$ = minimal
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 detersive 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 Condi	tions: No medical conditions are known to be aggravated by exposure to Extreme Simple Green.

### Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Substances & SARA Reportable Substances Present: None – See Page 4 of 4

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

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### 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 detersive properties.

### Section 5: FIRE FIGHTING MEASURES

This product is non-flammable, non combustible, 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:	OS	HA	ACG	IH	
Component	TWA	STEL	TWA	STEL	Units
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.	$5 \text{ mg/m}^3$	N.E.	ppm

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 There are no known hazards associated with this material when used as recommended.

# conditions: 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.

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## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear Liquid	Vapor Pressure:	20.7 mm Hg	
Odor:	Very faint detergent-like odor	Density:	8.546 lbs/gal. // 1.024 gm/L	
Specific Gravity:	$1.025 \pm 0.015$	Water Content:	>70%	
pH:	$10.9 \pm 0.8$	Water Solubility:	100%	
<b>Boiling Point:</b>	210°F	<b>Evaporation Rate:</b>	9.54% per hour	
Flash Point:	None (ASTM D-93)	Solubility:	Miscible with water	
Flame Extension:	N/A	Insoluble Matter: <0.01%		
Freezing Point:	Approx 0°C	Percent Volatiles: 85.26% (ASTM-D2369)		
Nutrient Content:	Nitrogen: <0.1% (0% by formula)	Volatile Organic Compounds (VOCs):		
	Phosphorous: <0.25% (by formula)	EPA Method 24: 8.00% (80 g/L)		
	Sulfur: <0.1% (0% by formula)	SCAQMD Method 313 2.04%		

Cleaner must be diluted 1:1 with water to meet CARB & BAAQMD regulations. Cleaner must be diluted 1:3 with water to Meet SCAQMD Rule 1171 & Rule 1122 VOC requirements for solvent cleaning operations.

## 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) Dermal LD <sub>50</sub> (rabbit)	>10 g/kg body weight >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:		ation may occur based on r tch did not produce irritatio	elevant laboratory studies. A 6-hour exposure	
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:		•	18-week fertility assessment continuous ty, or health of offspring are expected.	
Note:		<b>3</b> 1	taste. This is expected to minimize the risks of nimals or by wild animals or birds.	

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## Section 12: ECOLOGICAL INFORMATION

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Hazard to wild mammals:	Low, based on toxicology profile
Hazard to avian species:	Low, based on toxicology profile
Hazard to aquatic organisms:	Low, $LC_{50}$ 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 <b>readily biodegradable</b> , 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).

All ingredients are listed on:	EINECS, Canadian DSL, 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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