

## SAFETY DATA SHEET



## 1. Product and Company Identification

<b>Product identifier</b>	<b>Evap-Green (4191-08, 4191-01)</b>
<b>Other means of identification</b>	Not available
<b>Recommended use</b>	Condenser Coil Cleaner / Degreaser
<b>Recommended restrictions</b>	None known.
<b>Manufacturer information</b>	Nu-Calgon 2611 Schuetz Road St. Louis, MO 63043 US Phone: 314-469-7000 / 800-554-5499 Emergency Phone: 1-800-424-9300 (CHEMTREC)
<b>Supplier</b>	See above.

## 2. Hazards Identification

<b>Physical hazards</b>	Not classified.	
<b>Health hazards</b>	Serious eye damage/eye irritation	Category 2
<b>Environmental hazards</b>	Not classified.	
<b>WHMIS 2015 defined hazards</b>	Not classified	
<b>Label elements</b>		



<b>Signal word</b>	Warning	
<b>Hazard statement</b>	Causes serious eye irritation.	
<b>Precautionary statement</b>		
<b>Prevention</b>	Wash thoroughly after handling. Wear eye/face protection.	
<b>Response</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.	
<b>Storage</b>	Store away from incompatible materials.	
<b>Disposal</b>	Dispose of waste and residues in accordance with local authority requirements.	
<b>WHMIS 2015: Health Hazard(s) not otherwise classified (HHNOC)</b>	None known	
<b>WHMIS 2015: Physical Hazard(s) not otherwise classified (PHNOC)</b>	None known	
<b>Hazard(s) not otherwise classified (HNOC)</b>	None known.	
<b>Supplemental information</b>	None.	

## 3. Composition/Information on Ingredients

## Mixture

Chemical name	Common name and synonyms	CAS number	%
Ethoxylated alcohols		Trade Secret	1 - 5
Glucopyranose, oligomeric, decyl octyl glycosides		68515-73-1	0.1 - 1

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

## 4. First Aid Measures

<b>Inhalation</b>	If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.
<b>Skin contact</b>	Flush with cool water. Wash with soap and water. Obtain medical attention if irritation persists.
<b>Eye contact</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

<b>Ingestion</b>	Rinse mouth. Do not induce vomiting. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Never give anything by mouth if victim is unconscious, or is convulsing. Obtain medical attention.
<b>Most important symptoms/effects, acute and delayed</b>	Symptoms may include stinging, tearing, redness, swelling, and blurred vision.
<b>Indication of immediate medical attention and special treatment needed</b>	Symptoms may be delayed.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. If you feel unwell, seek medical advice (show the label where possible). Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Wear rubber gloves and safety glasses with side shields. Keep out of reach of children.

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### 5. Fire Fighting Measures

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<b>Suitable extinguishing media</b>	Dry chemical. Alcohol foam. Carbon dioxide. Fog.
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	Not available.
<b>Special protective equipment and precautions for firefighters</b>	Firefighters should wear full protective clothing including self contained breathing apparatus.
<b>Fire-fighting equipment/instructions</b>	Move containers from fire area if you can do so without risk.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	No unusual fire or explosion hazards noted.
<b>Hazardous combustion products</b>	May include and are not limited to: Oxides of nitrogen. Oxides of carbon. Ammonia.

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### 6. Accidental Release Measures

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<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. Keep out of low areas. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
<b>Methods and materials for containment and cleaning up</b>	Stop leak if you can do so without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Never return spills to original containers for re-use. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water. Clean surface thoroughly to remove residual contamination. Prevent entry into waterways, sewers, basements or confined areas. For waste disposal, see section 13 of the SDS.
<b>Environmental precautions</b>	Do not discharge into lakes, streams, ponds or public waters.

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### 7. Handling and Storage

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<b>Precautions for safe handling</b>	Avoid contact with eyes, skin and clothing. Wear appropriate personal protective equipment. Avoid breathing vapors or mists of this product. Use only with adequate ventilation. Observe good industrial hygiene practices. Wash thoroughly after handling. When using do not eat or drink.
<b>Conditions for safe storage, including any incompatibilities</b>	Store away from incompatible materials (see Section 10 of the SDS). Keep out of reach of children.

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### 8. Exposure Controls/Personal Protection

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<b>Occupational exposure limits</b>	No exposure limits noted for ingredient(s).
<b>Biological limit values</b>	No biological exposure limits noted for the ingredient(s).
<b>Exposure guidelines</b>	Chemicals listed in section 3 that are not listed here do not have established limit values for ACGIH.
<b>Appropriate engineering controls</b>	Ensure adequate ventilation.
<b>Individual protection measures, such as personal protective equipment</b>	
<b>Eye/face protection</b>	Wear safety glasses with side shields.

<b>Skin protection</b>	
<b>Hand protection</b>	Rubber gloves. Confirm with a reputable supplier first.
<b>Other</b>	Wear suitable protective clothing. As required by employer code.
<b>Respiratory protection</b>	In case of insufficient ventilation, wear suitable respiratory equipment. Where exposure guideline levels may be exceeded, use an approved NIOSH respirator.
<b>Thermal hazards</b>	Not applicable.
<b>General hygiene considerations</b>	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Wash hands before breaks and immediately after handling the product.

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## 9. Physical and Chemical Properties

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<b>Appearance</b>	Liquid
<b>Physical state</b>	Liquid.
<b>Form</b>	Liquid
<b>Color</b>	green
<b>Odor</b>	Characteristic
<b>Odor threshold</b>	Not available.
<b>pH</b>	9 (Concentrate)
<b>Melting point/freezing point</b>	Not available.
<b>Initial boiling point and boiling range</b>	Not available
<b>Pour point</b>	Not available.
<b>Specific gravity</b>	1
<b>Partition coefficient (n-octanol/water)</b>	This product has not been tested. Not available
<b>Flash point</b>	Not available.
<b>Evaporation rate</b>	Not available
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not available
<b>Flammability limit - upper (%)</b>	Not available.
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.
<b>Vapor pressure</b>	Not available
<b>Vapor density</b>	Not available
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	Not available
<b>Auto-ignition temperature</b>	Not available
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Water thin

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## 10. Stability and Reactivity

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<b>Reactivity</b>	May react with incompatible materials.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.
<b>Chemical stability</b>	Stable under recommended storage conditions.
<b>Conditions to avoid</b>	Do not mix with other chemicals.
<b>Incompatible materials</b>	Acids. Oxidizers.
<b>Hazardous decomposition products</b>	May include and are not limited to: Oxides of nitrogen. Oxides of carbon. Ammonia.

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## 11. Toxicological Information

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<b>Routes of exposure</b>	Eye, Skin contact, Inhalation, Ingestion.
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**Information on likely routes of exposure**

<b>Ingestion</b>	May cause stomach distress, nausea or vomiting.
<b>Inhalation</b>	No adverse effects due to inhalation are expected.
<b>Skin contact</b>	No adverse effects due to skin contact are expected.
<b>Eye contact</b>	Causes serious eye irritation.
<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Symptoms may include stinging, tearing, redness, swelling, and blurred vision.

**Information on toxicological effects****Acute toxicity**

Components	Species	Test Results
Glucopyranose, oligomeric, decyl octyl glycosides (CAS 68515-73-1)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rat	> 2000 mg/kg
<i>Inhalation</i>		
LC50	Not available	
<i>Oral</i>		
LD50	Rat	> 2000 mg/kg

**Skin corrosion/irritation** Prolonged skin contact may cause temporary irritation.

**Exposure minutes** Not available.

**Erythema value** Not available.

**Oedema value** Not available.

**Serious eye damage/eye irritation** Causes serious eye irritation.

**Corneal opacity value** Not available.

**Iris lesion value** Not available.

**Conjunctival reddening value** Not available.

**Conjunctival oedema value** Not available.

**Recover days** Not available.

**Respiratory or skin sensitization**

**Respiratory sensitization** Not available.

**Skin sensitization** This product is not expected to cause skin sensitization.

**Mutagenicity** Not classified.

**Carcinogenicity** Not classified.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

**Reproductive toxicity** Not classified.

**Teratogenicity** Not classified.

**Specific target organ toxicity - single exposure** Not classified.

**Specific target organ toxicity - repeated exposure** Not classified.

**Aspiration hazard** Not available.

**Chronic effects** Non-hazardous by WHMIS/OSHA criteria.

**12. Ecological Information**

**Ecotoxicity** Not available.

**Persistence and degradability** This product has not been tested. Alcohols, C9-11, ethoxylated (CAS# 68439-46-3) is readily biodegradable as per OECD 301D.

**Bioaccumulative potential** This product has not been tested.

**Mobility in soil** No data available.

**Mobility in general** Not available.

**Other adverse effects** This product has not been tested.

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### 13. Disposal Considerations

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<b>Disposal instructions</b>	Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Local disposal regulations</b>	Dispose in accordance with all applicable regulations.
<b>Hazardous waste code</b>	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Waste from residues / unused products</b>	Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
<b>Contaminated packaging</b>	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

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### 14. Transport Information

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**Transport of Dangerous Goods (TDG) Proof of Classification** In accordance with Part 2.2.1 (SOR/2014-152) of the Transportation of Dangerous Goods Regulations, we certify that the classification of this product is correct as of the SDS date of issue.

**U.S. Department of Transportation (DOT)**

Not regulated as dangerous goods.

**Transportation of Dangerous Goods (TDG - Canada)**

Not regulated as dangerous goods.

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### 15. Regulatory Information

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**Canadian federal regulations** This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

**Export Control List (CEPA 1999, Schedule 3)**

Not listed.

**Greenhouse Gases**

Not listed.

**Precursor Control Regulations**

Not regulated.

**WHMIS 2015 Exemptions**

Controlled

**US federal regulations**

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)**

Not regulated.

**CERCLA Hazardous Substance List (40 CFR 302.4)**

Not listed.

**US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

**Superfund Amendments and Reauthorization Act of 1986 (SARA)**

**Hazard categories**

Immediate Hazard - Yes  
Delayed Hazard - No  
Fire Hazard - No  
Pressure Hazard - No  
Reactivity Hazard - No

**SARA 302 Extremely hazardous substance**

No

**SARA 311/312 Hazardous chemical**

No

**SARA 313 (TRI reporting)**

Not regulated.

**Other federal regulations**

**Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**US state regulations**

See below

**US - Texas Effects Screening Levels: Listed substance**

Glucopyranose, oligomeric, decyl octyl glycosides Listed.  
(CAS 68515-73-1)

**US. Massachusetts RTK - Substance List**

Not regulated.

**US. New Jersey Worker and Community Right-to-Know Act**

Not regulated.

**US. Pennsylvania Worker and Community Right-to-Know Law**

Not listed.

**US. Rhode Island RTK**

Not regulated.

**US. California Proposition 65**

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

**Inventory status**

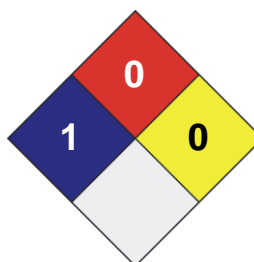
Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

**16. Other Information**

LEGEND	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

<b>HEALTH</b>	/ 1
<b>FLAMMABILITY</b>	0
<b>PHYSICAL HAZARD</b>	0
<b>PERSONAL PROTECTION</b>	X



**Disclaimer**

Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

**Issue date**

22-December-2016

**Version #**

01

**Effective date**

13-December-2016

**Prepared by**

Nu-Calgon Technical Service Phone: (314) 469-7000

**Other information**

For an updated SDS, please contact the supplier/manufacturer listed on the first page of the document.



# Safety Data Sheet

Issue Date: 23-Oct-2013

Revision Date: 28-Oct-2013

Version 1

## 1. IDENTIFICATION

### Product Identifier

**Product Name** Evap-Green

### Other means of identification

**Part Number** 4191-01, 4191-08.

### Recommended use of the chemical and restrictions on use

**Recommended Use** Coil cleaner/degreaser. For professional use only.

### Details of the supplier of the safety data sheet

#### **Supplier Address**

Nu-Calgon  
2008 Altom Court  
St. Louis, MO 63146  
www.nucalgon.com

### Emergency Telephone Number

**Company Phone Number** (314) 469-7000  
(800) 554-5499  
**Emergency Telephone (24 hr)** Chemtrec 1-800-424-9300

## 2. HAZARDS IDENTIFICATION

**Appearance** Clear green liquid                      **Physical State** Liquid                      **Odor** None

### Classification

This chemical does not meet the hazardous criteria set forth by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). However, this Safety Data Sheet (SDS) contains valuable information critical to the safe handling and proper use of this product. This SDS should be retained and available for employees and other users of this product.

### Unknown Acute Toxicity

1.09% of the mixture consists of ingredient(s) of unknown toxicity

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

The product contains no substances which at their given concentration, are considered to be hazardous to health.

\*\*If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.\*\*

**4. FIRST-AID MEASURES**

**First Aid Measures**

<b>Eye Contact</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if necessary.
<b>Skin Contact</b>	Wash off immediately with plenty of water for at least 15 minutes. Consult a physician if necessary.
<b>Inhalation</b>	Remove to fresh air. Get medical attention if necessary.
<b>Ingestion</b>	IF SWALLOWED: rinse mouth. Get medical attention if necessary.

**Most important symptoms and effects**

<b>Symptoms</b>	Direct contact may cause skin or eye irritation.
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**Indication of any immediate medical attention and special treatment needed**

<b>Notes to Physician</b>	Treat symptomatically.
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**5. FIRE-FIGHTING MEASURES**

**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media** Not determined.

**Specific Hazards Arising from the Chemical**

None known.

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment and emergency procedures**

<b>Personal Precautions</b>	Use personal protective equipment as required.
<b>Environmental Precautions</b>	Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information. See Section 13: DISPOSAL CONSIDERATIONS.

**Methods and material for containment and cleaning up**

<b>Methods for Containment</b>	Prevent further leakage or spillage if safe to do so.
<b>Methods for Clean-Up</b>	Keep in suitable, closed containers for disposal.

**7. HANDLING AND STORAGE**

**Precautions for safe handling**

<b>Advice on Safe Handling</b>	Handle in accordance with good industrial hygiene and safety practice. Use personal protection recommended in Section 8. Avoid contact with skin, eyes or clothing.
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**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep container tightly closed and store in a cool, dry and well-ventilated place. Keep out of the reach of children.

**Incompatible Materials** Acids. Oxidizers. Bleach. Do not mix with other chemicals or cleaners.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Citric Acid 77-92-9	-	15 mg / m3 (Total)	-

**Appropriate engineering controls**

**Engineering Controls** Apply technical measures to comply with the occupational exposure limits. Eyewash stations. Showers.

**Individual protection measures, such as personal protective equipment**

**Eye/Face Protection** Wear approved safety goggles where a splash hazard exists.

**Skin and Body Protection** Wear suitable protective clothing.

**Respiratory Protection** Ensure adequate ventilation, especially in confined areas. In case of inadequate ventilation wear respiratory protection.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Information on basic physical and chemical properties**

<b>Physical State</b>	Liquid	<b>Odor</b>	None
<b>Appearance</b>	Clear green liquid	<b>Odor Threshold</b>	Not determined
<b>Color</b>	Clear green		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>pH</b>	8.40-8.90	
<b>Melting Point/Freezing Point</b>	Not determined	
<b>Boiling Point/Boiling Range</b>	100 °C / 212 °F	IBP
<b>Flash Point</b>	None to boiling	Tag Closed Cup
<b>Evaporation Rate</b>	Equal to water	
<b>Flammability (Solid, Gas)</b>	Liquid-not applicable	
<b>Upper Flammability Limits</b>	Not determined	
<b>Lower Flammability Limit</b>	Not determined	
<b>Vapor Pressure</b>	Not determined	
<b>Vapor Density</b>	Not determined	
<b>Specific Gravity</b>	1.00	
<b>Water Solubility</b>	Soluble in water	
<b>Solubility in other solvents</b>	Not determined	
<b>Partition Coefficient</b>	Not determined	
<b>Auto-ignition Temperature</b>	Not determined	

<b>Decomposition Temperature</b>	Not determined
<b>Kinematic Viscosity</b>	Not determined
<b>Dynamic Viscosity</b>	Water thin (<5 cps)
<b>Explosive Properties</b>	Not determined
<b>Oxidizing Properties</b>	Not determined
<b>VOC Content (%)</b>	None
<b>Density</b>	8.36 lb/gal

**10. STABILITY AND REACTIVITY**

**Reactivity**

Not reactive under normal conditions.

**Chemical Stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Hazardous Polymerization**      Hazardous polymerization does not occur.

**Conditions to Avoid**

Keep out of reach of children.

**Incompatible Materials**

Acids. Oxidizers. Bleach. Do not mix with other chemicals or cleaners.

**Hazardous Decomposition Products**

None known based on information supplied.

**11. TOXICOLOGICAL INFORMATION**

**Information on likely routes of exposure**

**Product Information**

- Eye Contact**                                      Avoid contact with eyes.
- Skin Contact**                                    Avoid contact with skin.
- Inhalation**                                        Avoid breathing vapors or mists.
- Ingestion**                                        Do not taste or swallow.

**Component Information**

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Water 7732-18-5	> 90 mL/kg ( Rat )	-	-
Citric Acid 77-92-9	= 3000 mg/kg ( Rat )	-	-

**Information on physical, chemical and toxicological effects**

**Symptoms**    Please see section 4 of this SDS for symptoms.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Carcinogenicity** This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

**Numerical measures of toxicity**

Not determined

**Unknown Acute Toxicity** 1.09% of the mixture consists of ingredient(s) of unknown toxicity.

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

**Component Information**

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Citric Acid 77-92-9		1516: 96 h Lepomis macrochirus mg/L LC50 static		120: 72 h Daphnia magna mg/L EC50

**Persistence/Degradability**

Biodegradable.

**Bioaccumulation**

Not determined.

**Mobility**

Not determined

**Other Adverse Effects**

Not determined

**13. DISPOSAL CONSIDERATIONS**

**Waste Treatment Methods**

**Disposal of Wastes** Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated Packaging** Disposal should be in accordance with applicable regional, national and local laws and regulations.

**14. TRANSPORT INFORMATION**

**Note** Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

**DOT** Not regulated

**IATA** Not regulated

**IMDG** Not regulated

**15. REGULATORY INFORMATION**

**International Inventories**

Not determined

**Legend:**

- TSCA - United States Toxic Substances Control Act Section 8(b) Inventory*
- DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List*
- EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances*
- ENCS - Japan Existing and New Chemical Substances*
- IECSC - China Inventory of Existing Chemical Substances*
- KECL - Korean Existing and Evaluated Chemical Substances*
- PICCS - Philippines Inventory of Chemicals and Chemical Substances*

**US Federal Regulations**

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**US State Regulations**

**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

**U.S. State Right-to-Know Regulations**

This product does not contain any substances regulated under applicable state right-to-know regulations

**16. OTHER INFORMATION**

<b><u>NFPA</u></b>	<b>Health Hazards</b>	<b>Flammability</b>	<b>Instability</b>	<b>Special Hazards</b>
	1	0	0	None
<b><u>HMIS</u></b>	<b>Health Hazards</b>	<b>Flammability</b>	<b>Physical Hazards</b>	<b>Personal Protection</b>
	1	0	0	B

**Issue Date:** 23-Oct-2013  
**Revision Date:** 28-Oct-2013  
**Revision Note:** New format

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**

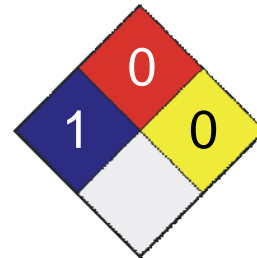
# MATERIAL SAFETY DATA SHEET

## 1. Product and Company Identification

**Product Name** Evap-Green (4191)  
**CAS #** Mixture  
**Product use** Evaporator Coil Cleaner / Degreaser  
**Manufacturer** Nu-Calgon  
 2008 Altom Court  
 St. Louis, MO 63146 US  
 Phone: 314-469-7000 / 800-554-5499  
 Emergency Phone: 1-800-424-9300 (CHEMTREC)

LEGEND HMIS/NFPA	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

Health	/ 1
Flammability	0
Physical Hazard	0
Personal Protection	X



## 2. Hazards Identification

**Emergency overview** CAUTION  
 EYE AND SKIN IRRITANT.

**Potential short term health effects**

**Routes of exposure** Eye, Skin contact, Inhalation, Ingestion.

**Eyes** May cause irritation.

**Skin** May cause irritation.

**Inhalation** May cause respiratory tract irritation.

**Ingestion** May cause stomach distress, nausea or vomiting.

**Target organs** Eyes. Skin.

**Chronic effects** Prolonged or repeated exposure can cause drying, defatting and dermatitis.

**Signs and symptoms** Symptoms may include redness, edema, drying, defatting and cracking of the skin. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

## 3. Composition / Information on Ingredients

Ingredient(s)	CAS #	Percent
Alcohols, C9-11, ethoxylated	68439-46-3	0.5 - 1.5

## 4. First Aid Measures

**First aid procedures**

**Eye contact** Flush with cool water. Remove contact lenses, if applicable, and continue flushing. Obtain medical attention if irritation persists.

**Skin contact** Flush with cool water. Wash with soap and water. Obtain medical attention if irritation persists.

**Inhalation** If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.

**Ingestion** Do not induce vomiting. Rinse mouth with water, then drink one or two glasses of water. Obtain medical attention. Never give anything by mouth if victim is unconscious, or is convulsing.

**Notes to physician** Symptoms may be delayed.

**General advice**

If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Keep out of reach of children.

## 5. Fire Fighting Measures

<b>Flammable properties</b>	Not flammable by WHMIS/OSHA criteria.
<b>Extinguishing media</b>	
<b>Suitable extinguishing media</b>	Dry chemical. Alcohol foam. Carbon dioxide. Fog.
<b>Unsuitable extinguishing media</b>	Not available
<b>Protection of firefighters</b>	
<b>Specific hazards arising from the chemical</b>	Not available
<b>Protective equipment for firefighters</b>	Firefighters should wear full protective clothing including self contained breathing apparatus.
<b>Hazardous combustion products</b>	May include and are not limited to: Oxides of nitrogen. Oxides of carbon. Ammonia.
<b>Explosion data</b>	
<b>Sensitivity to mechanical impact</b>	Not available
<b>Sensitivity to static discharge</b>	Not available

## 6. Accidental Release Measures

<b>Personal precautions</b>	Keep unnecessary personnel away. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak.
<b>Methods for containment</b>	Stop leak if you can do so without risk. Prevent entry into waterways, sewers, basements or confined areas.
<b>Methods for cleaning up</b>	Before attempting clean up, refer to hazard data given above. Small spills may be absorbed with non-reactive absorbent and placed in suitable, covered, labelled containers. Prevent large spills from entering sewers or waterways. Contact emergency services and supplier for advice. Never return spills in original containers for re-use.

## 7. Handling and Storage

<b>Handling</b>	Use good industrial hygiene practices in handling this material.
<b>Storage</b>	Keep out of reach of children. Store in a closed container away from incompatible materials.

## 8. Exposure Controls / Personal Protection

<b>Exposure limits</b>	
<b>Ingredient(s)</b>	<b>Exposure Limits</b>
Alcohols, C9-11, ethoxylated	<b>ACGIH-TLV</b> Not established <b>OSHA-PEL</b> Not established
<b>Engineering controls</b>	General ventilation normally adequate.
<b>Personal protective equipment</b>	
<b>Eye / face protection</b>	Wear safety glasses with side shields.
<b>Hand protection</b>	Rubber gloves. Confirm with a reputable supplier first.
<b>Skin and body protection</b>	As required by employer code.
<b>Respiratory protection</b>	Where exposure guideline levels may be exceeded, use an approved NIOSH respirator.
<b>General hygiene considerations</b>	Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. Wash hands before breaks and immediately after handling the product.

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## 9. Physical & Chemical Properties

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Appearance	liquid.
Color	Colorless
Form	Liquid
Odor	Characteristic, Mild
Odor threshold	Not available
Physical state	Liquid
pH	8.5 (Concentrate)
Melting point	Not available
Freezing point	Not available
Boiling point	Not available
Flash point	Not available
Evaporation rate	Not available
Flammability limits in air, lower, % by volume	Not available
Flammability limits in air, upper, % by volume	Not available
Vapor pressure	Not available
Vapor density	Not available
Specific gravity	1.34
Octanol/water coefficient	Not available
Solubility (H <sub>2</sub> O)	Not available
Auto-ignition temperature	Not available
Viscosity	Not available
Percent volatile	Not available

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## 10. Chemical Stability & Reactivity Information

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Chemical stability	Stable under recommended storage conditions.
Conditions to avoid	Do not mix with other chemicals.
Incompatible materials	Acids. Oxidizers.
Hazardous decomposition products	May include and are not limited to: Oxides of nitrogen. Oxides of carbon. Ammonia.
Possibility of hazardous reactions	Hazardous polymerization does not occur.

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## 11. Toxicological Information

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Acute effects	Information in this section is based on individual component information and not based on overall formula testing data. Please note that the below values are calculated. Acute LD50: 11067 mg/kg estimated, Rat, Oral Acute LD50: 58824 mg/kg estimated, Rat, Dermal Acute LC50: 455 mg/l/4h estimated, Rat, Inhalation
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### Component analysis - LC50

Ingredient(s)	LC50
Alcohols, C9-11, ethoxylated	5 mg/l/4h rat

### Component analysis - Oral LD50

Ingredient(s)	LD50
Alcohols, C9-11, ethoxylated	1200 mg/kg rat

### Effects of acute exposure

Eye	May cause irritation.
Skin	May cause irritation.
Inhalation	May cause respiratory tract irritation.
Ingestion	May cause stomach distress, nausea or vomiting.
Sensitization	Non-hazardous by WHMIS/OSHA criteria.
Chronic effects	Non-hazardous by WHMIS/OSHA criteria.

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<b>Carcinogenicity</b>	Non-hazardous by WHMIS/OSHA criteria.
<b>Mutagenicity</b>	Non-hazardous by WHMIS/OSHA criteria.
<b>Reproductive effects</b>	Non-hazardous by WHMIS/OSHA criteria.
<b>Teratogenicity</b>	Non-hazardous by WHMIS/OSHA criteria.

## 12. Ecological Information

<b>Ecotoxicity</b>	Components of this product have been identified as having potential environmental concerns. Information in this section is based on individual component information and not based on overall formula testing data.
	Alcohols, C9-11, ethoxylated (CAS# 68439-46-3) has an LC50 of; 70,7 mg/l, Rainbow Trout, 96.00 Hours
<b>Environmental effects</b>	This product has not been tested.
<b>Aquatic toxicity</b>	This product has not been tested.
<b>Persistence / degradability</b>	This product has not been tested. Alcohols, C9-11, ethoxylated (CAS# 68439-46-3) is readily biodegradable as per OECD 301D.
<b>Bioaccumulation / accumulation</b>	This product has not been tested.
<b>Partition coefficient</b>	This product has not been tested.
<b>Mobility in environmental media</b>	This product has not been tested.
<b>Chemical fate information</b>	This product has not been tested.

## 13. Disposal Considerations

<b>Waste codes</b>	Not available
<b>Disposal instructions</b>	Dispose in accordance with all applicable regulations.
<b>Waste from residues / unused products</b>	Not available
<b>Contaminated packaging</b>	Not available

## 14. Transport Information

<b>U.S. Department of Transportation (DOT)</b>	Not regulated as dangerous goods.
<b>Transportation of Dangerous Goods (TDG - Canada)</b>	Not regulated as dangerous goods.

## 15. Regulatory Information

<b>Canadian federal regulations</b>	This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.
<b>US Federal regulations</b>	This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List.  CERCLA/SARA Hazardous Substances - Not applicable.
<b>Occupational Safety and Health Administration (OSHA)</b>	
29 CFR 1910.1200 hazardous chemical	Yes
<b>CERCLA (Superfund) reportable quantity</b>	None
<b>Superfund Amendments and Reauthorization Act of 1986 (SARA)</b>	
<b>Hazard categories</b>	Immediate Hazard - Yes Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No
<b>Section 302 extremely hazardous substance</b>	No



**Section 311 hazardous chemical** Yes

**Clean Air Act (CAA)** Not available  
**Clean Water Act (CWA)** This product does not contain any CWA hazardous ingredients.  
**Safe Drinking Water Act (SDWA)** Not available  
**Drug Enforcement Agency (DEA)** Not available  
**Food and Drug Administration (FDA)** Not available  
**WHMIS status** Controlled  
**WHMIS classification** Class D - Division 2B  
**WHMIS labeling**



**State regulations** This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

**Inventory name**

<b>Country(s) or region</b>	<b>Inventory name</b>	<b>On inventory (yes/no)*</b>
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

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## 16. Other Information

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**Disclaimer**

Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

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**Prepared by** Nu-Calgon Technical Service (314) 469-7000