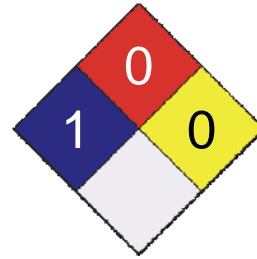


## 1. Product and Company Identification

**Product Name** Green Clean (4186)  
**CAS #** Mixture  
**Product use** 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** WARNING  
 CAUSES EYE IRRITATION. CAUSES SKIN IRRITATION.

**Potential short term health effects**

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

**Eyes** Causes irritation.

**Skin** Causes irritation.

**ACGIH - Threshold Limit Values - Skin Notations**  
 Dipropylene glycol methyl ether 34590-94-8 Skin - potential significant contribution to overall exposure by the cutaneous route

**NIOSH - Pocket Guide - Skin Notations**  
 Dipropylene glycol methyl ether 34590-94-8 Potential for dermal absorption

**Inhalation** May cause respiratory tract irritation.

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

**Target organs** Eyes. Respiratory system. 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.

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

**Potential environmental effects** See section 12.

## 3. Composition / Information on Ingredients

Ingredient(s)	CAS #	Percent
2-Propanol, 1-butoxy- Alcohols,	5131-66-8	1 - 5
C7-21, ethoxylated Dipropylene glycol methyl ether Sodium carbonate	68991-48-0	1 - 5
	34590-94-8	1 - 5
	497-19-8	1 - 5
Sodium lauriminodipropionate	14960-06-6	1 - 5
Alcohols, C9-11, ethoxylated	68439-46-3	0.5 - 1.5

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## 4. First Aid Measures

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### First aid procedures

<b>Eye contact</b>	Flush with cool water. Remove contact lenses, if applicable, and continue flushing. Obtain medical attention if irritation persists.
<b>Skin contact</b>	Flush with cool water. Wash with soap and water. Obtain medical attention if irritation persists.
<b>Inhalation</b>	If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.
<b>Ingestion</b>	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.

### 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.

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## 5. Fire Fighting Measures

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### Flammable properties

Not flammable by WHMIS/OSHA criteria.

### Extinguishing media

**Suitable extinguishing media** Water spray. Dry chemical. Carbon dioxide.

**Unsuitable extinguishing media** Not available

### Protection of firefighters

**Specific hazards arising from the chemical** Not available

**Protective equipment for firefighters** Firefighters should wear full protective clothing including self contained breathing apparatus.

### Hazardous combustion products

May include and are not limited to: Oxides of carbon.

### Explosion data

**Sensitivity to mechanical impact** Not available

**Sensitivity to static discharge** Not available

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## 6. Accidental Release Measures

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### Personal precautions

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.

### Environmental precautions

Do not discharge into lakes, streams, ponds or public waters.

### Methods for containment

Stop leak if you can do so without risk. Prevent entry into waterways, sewers, basements or confined areas.

### Methods for cleaning up

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 to original containers for re-use.

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## 7. Handling and Storage

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### Handling

Do not get in eyes, on skin or on clothing.  
Use good industrial hygiene practices in handling this material.  
When using do not eat or drink.  
Wash hands before breaks and immediately after handling the product.

### Storage

Keep out of reach of children. Store in a closed container away from incompatible materials.

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## 8. Exposure Controls / Personal Protection

### Exposure limits

Ingredient(s)	Exposure Limits
2-Propanol, 1-butoxy-	<b>ACGIH-TLV</b> Not established <b>OSHA-PEL</b> Not established
Alcohols, C7-21, ethoxylated	<b>ACGIH-TLV</b> Not established <b>OSHA-PEL</b> Not established
Alcohols, C9-11, ethoxylated	<b>ACGIH-TLV</b> Not established <b>OSHA-PEL</b> Not established
Dipropylene glycol methyl ether	<b>ACGIH-TLV</b> TWA: 100 ppm STEL: 150 ppm Skin: 100 ppm  <b>OSHA-PEL</b> TWA: 100 ppm
Sodium carbonate	<b>ACGIH-TLV</b> Not established <b>OSHA-PEL</b> Not established
Sodium lauriminodipropionate	<b>ACGIH-TLV</b> Not established <b>OSHA-PEL</b> Not established

### Engineering controls

General ventilation normally adequate.

### Personal protective equipment

#### Eye / face protection

Wear safety glasses with side shields.

#### Hand protection

Rubber gloves. Confirm with a reputable supplier first.

#### Skin and body protection

As required by employer code.

#### Respiratory protection

Where exposure guideline levels may be exceeded, use an approved NIOSH respirator. Avoid breathing mists or vapors.

#### General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink.

## 9. Physical and Chemical Properties

<b>Appearance</b>	Clear
<b>Color</b>	Green
<b>Form</b>	Liquid
<b>Odor</b>	Lime.
<b>Odor threshold</b>	Not available
<b>Physical state</b>	Liquid
<b>pH</b>	10.5
<b>Melting point</b>	Not available
<b>Freezing point</b>	Not available
<b>Boiling point</b>	Not available

<b>Pour point</b>	Not available
<b>Evaporation rate</b>	Not available
<b>Flash point</b>	Not available
<b>Auto-ignition temperature</b>	Not available
<b>Flammability limits in air, lower, % by volume</b>	Not available
<b>Flammability limits in air, upper, % by volume</b>	Not available
<b>Vapor pressure</b>	Not available
<b>Vapor density</b>	Not available
<b>Specific gravity</b>	Not available
<b>Octanol/water coefficient</b>	Not available
<b>Solubility (H2O)</b>	Not available
<b>VOC (Weight %)</b>	Not available
<b>Viscosity</b>	Not available
<b>Bulk density</b>	8.63
<b>Percent volatile</b>	Not available

## 10. Stability and Reactivity

<b>Reactivity</b>	This product may react with strong oxidizing agents.
<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. Do not mix with chlorinated products.
<b>Incompatible materials</b>	Oxidizers. Acids.
<b>Hazardous decomposition products</b>	May include and are not limited to: Oxides of carbon.

## 11. Toxicological Information

### Component analysis - LC50

Ingredient(s)	LC50
2-Propanol, 1-butoxy-	Not available
Alcohols, C7-21, ethoxylated	Not available
Alcohols, C9-11, ethoxylated	5 mg/l/4h rat
Dipropylene glycol methyl ether	Not available
Sodium carbonate	400 mg/m3 guinea pig
Sodium lauriminodipropionate	Not available

### Component analysis - Oral LD50

Ingredient(s)	LD50
2-Propanol, 1-butoxy-	3300 mg/kg rat
Alcohols, C7-21, ethoxylated	1410 mg/kg rat
Alcohols, C9-11, ethoxylated	1200 mg/kg rat
Dipropylene glycol methyl ether	5400 mg/kg rat
Sodium carbonate	4090 mg/kg rat
Sodium lauriminodipropionate	31300 mg/kg rat

### Effects of acute exposure

<b>Eye</b>	Causes irritation.
<b>Skin</b>	Causes irritation.

### ACGIH - Threshold Limit Values - Skin Notations

Dipropylene glycol methyl ether 34590-94-8 Skin - potential significant contribution to overall exposure by the cutaneous route

### NIOSH - Pocket Guide - Skin Notations

Dipropylene glycol methyl ether 34590-94-8 Potential for dermal absorption

**Inhalation** May cause respiratory tract irritation.

<b>Ingestion</b>	May cause stomach distress, nausea or vomiting.
<b>Sensitization</b>	Non-hazardous by WHMIS/OSHA criteria.
<b>Chronic effects</b>	Non-hazardous by WHMIS/OSHA criteria.
<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.
<b>Name of Toxicologically Synergistic Products</b>	Not available

## 12. Ecological Information

**Ecotoxicity** Components of this product have been identified as having potential environmental concerns.

**Ecotoxicity - Freshwater Algae - Acute Toxicity Data**

Sodium carbonate 497-19-8 120 Hr EC50 Nitzschia: 242 mg/L

**Ecotoxicity - Freshwater Fish - Acute Toxicity Data**

Dipropylene glycol methyl ether 34590-94-8 96 Hr LC50 Pimephales promelas: >10000 mg/L [static]  
 Sodium carbonate 497-19-8 96 Hr LC50 Lepomis macrochirus: 300 mg/L [static]; 96 Hr LC50 Pimephales promelas: 310 - 1220 mg/L [static]

**Ecotoxicity - Water Flea - Acute Toxicity Data**

Dipropylene glycol methyl ether 34590-94-8 48 Hr LC50 Daphnia magna: 1919 mg/L  
 Sodium carbonate 497-19-8 48 Hr EC50 Daphnia magna: 265 mg/L

<b>Persistence / degradability</b>	Not available
<b>Bioaccumulation / accumulation</b>	Not available
<b>Mobility in environmental media</b>	Not available
<b>Environmental effects</b>	Not available
<b>Aquatic toxicity</b>	Not available
<b>Partition coefficient</b>	Not available
<b>Chemical fate information</b>	Not available
<b>Other adverse effects</b>	Not available

## 13. Disposal Considerations

<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

**Canadian federal regulations** 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.

**Canada - WHMIS - Ingredient Disclosure List**

Dipropylene glycol methyl ether 34590-94-8 1 %  
 Sodium carbonate 497-19-8 1 %

<b>WHMIS status</b>	Controlled
<b>WHMIS classification</b>	Class D - Division 2B
<b>WHMIS labeling</b>	



**Occupational Safety and Health Administration (OSHA)**

29 CFR 1910.1200 hazardous chemical Yes

**US Federal regulations**

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 (Superfund) reportable quantity**

None

**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

**Section 302 extremely hazardous substance** No

**Section 311 hazardous chemical** Yes

**Clean Air Act (CAA)** Not available

**Clean Water Act (CWA)** Not available

**State regulations**

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

**U.S. - California - 8 CCR Section 339 - Director's List of Hazardous Substances**

Dipropylene glycol methyl ether 34590-94-8 Present

**U.S. - Massachusetts - Right To Know List**

Dipropylene glycol methyl ether 34590-94-8 Present

**U.S. - Minnesota - Hazardous Substance List**

Dipropylene glycol methyl ether 34590-94-8 Present

**U.S. - New Jersey - Right to Know Hazardous Substance List**

Dipropylene glycol methyl ether 34590-94-8 sn 0804

**U.S. - Pennsylvania - RTK (Right to Know) List**

Dipropylene glycol methyl ether 34590-94-8 Present

**U.S. - Rhode Island - Hazardous Substance List**

Dipropylene glycol methyl ether 34590-94-8 Toxic

**Inventory name**

Country(s) or region	Inventory name	On inventory (yes/no)*
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)

**16. Other Information****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