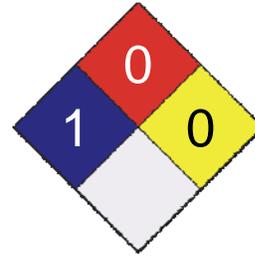


1. Product and Company Identification

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

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. 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.

5. Fire Fighting Measures

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

6. Accidental Release Measures

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.

7. Handling and Storage

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.

8. Exposure Controls / Personal Protection

Exposure limits

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

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

Pour point	Not available
Evaporation rate	Not available
Flash point	Not available
Auto-ignition temperature	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	Not available
Octanol/water coefficient	Not available
Solubility (H2O)	Not available
VOC (Weight %)	Not available
Viscosity	Not available
Bulk density	8.63
Percent volatile	Not available

10. Stability and Reactivity

Reactivity	This product may react with strong oxidizing agents.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Chemical stability	Stable under recommended storage conditions.
Conditions to avoid	Do not mix with other chemicals. Do not mix with chlorinated products.
Incompatible materials	Oxidizers. Acids.
Hazardous decomposition products	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

Eye	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.
Sensitization	Non-hazardous by WHMIS/OSHA criteria.
Chronic effects	Non-hazardous by WHMIS/OSHA criteria.
Carcinogenicity	Non-hazardous by WHMIS/OSHA criteria.
Mutagenicity	Non-hazardous by WHMIS/OSHA criteria.
Reproductive effects	Non-hazardous by WHMIS/OSHA criteria.
Teratogenicity	Non-hazardous by WHMIS/OSHA criteria.
Name of Toxicologically Synergistic Products	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

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

13. Disposal Considerations

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

14. Transport Information

U.S. Department of Transportation (DOT)	Not regulated as dangerous goods.
Transportation of Dangerous Goods (TDG - Canada)	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 %

WHMIS status	Controlled
WHMIS classification	Class D - Division 2B
WHMIS labeling	



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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