Safety Data Sheet

acc. to Hazardous Products Regulations (HPR)

4G Remover

Version number: GHS 1.0 Date of compilation: 2019-04-11

SECTION 1: Identification

1.1 Product identifier

Trade name Bloomco 4G Remover

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses Cleaner/degreaser

1.3 Details of the supplier of the safety data sheet

Bloomco, Division of Double B Automotive Warehousing Inc.
5035 North Service Road, #B1
Burlington, Ontario, Canada L7L 5V2

Telephone: (905) 332-8070 OR
1-(800) 667-9168
Website: Bloomco.ca
Email: info@bloomco.ca

1.4 Emergency telephone number

Emergency information service CANUTEC 613-996-6666 OR *666 for cell phones

SECTION 2: Hazard(s) identification

2.1 Classification of the substance or mixture

Classification acc. to GHS

Section	Hazard class	Category	Hazard class and category	Hazard statement
2.6	flammable liquid	3	Flam. Liq. 3	H226
3.2	skin corrosion/irritation	2	Skin Irrit. 2	H315
3.3	serious eye damage/eye irritation	1	Eye Dam. 1	H318
3.4S	skin sensitization	1	Skin Sens. 1	H317
3.10	aspiration hazard	1	Asp. Tox. 1	H304

For full text of abbreviations: see SECTION 16.

The most important adverse physicochemical, human health and environmental effects

The product is combustible and can be ignited by potential ignition sources.

2.2 Label elements

Labeling

- Signal word danger
- Pictograms

GHS02, GHS05, GHS07, GHS08

- Hazard statements

H226 Flammable liquid and vapour.
H304 May be fatal if swallowed and enters airways.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction. H318 Causes serious eye damage.

- Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 Keep container tightly closed.
P240 Ground and bond container and receiving equipment.
P241 Use explosion-proof electrical/ventilating/lighting equipment.
P242 Use non-sparking tools.
P243 Take action to prevent static discharges.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P302+P352 IF ON SKIN: Wash with plenty of water.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P321 Specific treatment (see on this label).
P331 Do NOT induce vomiting.
P362+P364 Take off contaminated clothing and wash it before reuse.
P370+P378 In case of fire: Use sand, carbon dioxide or powder extinguisher to extinguish.
P403+P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- Hazardous ingredients for labelling d-limonene, Alcohols, C9-11 ethoxylated

2.3 Other hazards

Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not relevant (mixture)

3.2 Mixtures

Description of the mixture

Hazardous ingredients acc. to GHS

Name of substance	Identifier	Wt%	Classification acc. to GHS	Notes
d-limonene	CAS No 5989-27-5	≥ 85	Flam. Liq. 3 / H226 Skin Irrit. 2 / H315 Skin Sens. 1B / H317 Asp. Tox. 1 / H304	
Alcohols, C9-11 ethoxylated	CAS No 68439-46-3	12 – < 20	Acute Tox. 4 / H302 Acute Tox. 4 / H312 Eye Dam. 1 / H318	

For full text of abbreviations: see SECTION 16. Exact percentage of ingredients is withheld as a trade secret.

SECTION 4: First-aid measures

4.1 Description of first- aid measures

General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. In case of respiratory tract irritation, consult a physician. Provide fresh air.

Following skin contact

Wash with plenty of soap and water.

Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing.

Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water spray, Alcohol resistant foam, BC-powder, Carbon dioxide (CO_2)

Unsuitable extinguishing media

Water jet

5.2 Special hazards arising from the substance or mixture

In case of insufficient ventilation and/or in use, may form flammable/explosive vapor-air mixture. Solvent vapors are heavier than air and may spread along floors. Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures.

Hazardous combustion products

Nitrogen oxides (NOx), Carbon monoxide (CO), Carbon dioxide (CO2)

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety.

For emergency responders

Wear breathing apparatus if exposed to vapors/dust/aerosols/gases.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it. If substance has entered a water course or sewer, inform the responsible authority.

6.3 Methods and material for containment and cleaning up

Advices on how to contain a spill

Covering of drains

Advices on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

Appropriate containment techniques

Use of adsorbent materials.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Recommendations

- Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Avoidance of ignition sources. Keep away from sources of ignition - No smoking. Take precautionary measures against static discharge. Use only in well-ventilated areas. Due to danger of explosion, prevent leakage of vapours into cellars, flues and ditches. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools.

- Specific notes/details

Places which are not ventilated, e.g. unventilated below ground level areas such as trenches, conduits and shafts, are particularly prone to the presence of flammable substances or mixtures. Vapors are heavier than air, spread along floors and form explosive mixtures with air. Vapors may form explosive mixtures with air.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Managing of associated risks

- Explosive atmospheres

Keep container tightly closed and in a well-ventilated place. Use local and general ventilation. Keep cool. Protect from sunlight.

- Flammability hazards

Keep away from sources of ignition - No smoking. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharge. Protect from sunlight.

- Ventilation requirements

Use local and general ventilation. Ground/bond container and receiving equipment.

- Packaging compatibilities

Only packagings which are approved (e.g. acc. to the Dangerous Goods Regulations) may be used.

7.3 Specific end use(s)

See section 16 for a general overview.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

This information is not available.

Relevant DNELs of components of the mixture

Name of substance	CAS No	Endpoint	Threshold level	Protection goal, route of exposure	Used in	Exposure time
d-limonene	5989-27-5	DNEL	33.3 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects
Alcohols, C9-11 ethoxylated	68439-46-3	DNEL	2,080 mg/kg	human, dermal	worker (industry)	chronic - systemic effects
Alcohols, C9-11 ethoxylated	68439-46-3	DNEL	294 mg/m³	human, inhalatory	worker (industry)	chronic - systemic effects

Relevant PNECs of components of the mixture

Name of substance	CAS No	Endpoint	Threshold level	Organism	Environmental compartment	Exposure time
d-limonene	5989-27-5	PNEC	5.4 µg/l	aquatic organisms	freshwater	short-term (single instance)
d-limonene	5989-27-5	PNEC	0.54 µg/l	aquatic organisms	marine water	short-term (single instance)
d-limonene	5989-27-5	PNEC	1.8 mg/l	microorganisms	sewage treatment plant (STP)	short-term (single instance)

d-limonene	5989-27-5	PNEC	1.32 mg/kg	benthic organisms	sediments	short-term (single instance)
d-limonene	5989-27-5	PNEC	0.13 mg/kg	pelagic organisms	sediments	short-term (single instance)
d-limonene	5989-27-5	PNEC	0.262 mg/kg	terrestrial organisms	soil	short-term (single instance)
d-limonene	5989-27-5	PNEC	3.33 mg/kg	(top) predators	water	short-term (single instance)
Alcohols, C9-11 ethoxylated	68439-46-3	PNEC	0.1038 mg/l	aquatic organisms	freshwater	short-term (single instance)
Alcohols, C9-11 ethoxylated	68439-46-3	PNEC	0.1038 mg/l	aquatic organisms	marine water	short-term (single instance)
Alcohols, C9-11 ethoxylated	68439-46-3	PNEC	1.4 mg/l	microorganisms	sewage treatment plant (STP)	short-term (single instance)
Alcohols, C9-11 ethoxylated	68439-46-3	PNEC	13.7 mg/kg	benthic organisms	sediments	short-term (single instance)
Alcohols, C9-11 ethoxylated	68439-46-3	PNEC	13.7 mg/kg	pelagic organisms	sediments	short-term (single instance)
Alcohols, C9-11 ethoxylated	68439-46-3	PNEC	1 mg/kg	terrestrial organisms	soil	short-term (single instance)
Alcohols, C9-11 ethoxylated	68439-46-3	PNEC	0.014 mg/l	aquatic organisms	water	intermittent release

8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Wear eye/face protection.

Skin protection

- Hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

- Other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state	liquid
Color	transparent - colorless
Odor	characteristic

Other safety parameters

pH (value)	not determined
Melting point/freezing point	199.2 K
Initial boiling point and boiling range	176 °C
Flash point	52 °C at 1 atm 126 °F at 1 atm
Evaporation rate	not determined
Flammability (solid, gas)	not relevant, (fluid)
Explosive limits	not determined
Vapor pressure	200 Pa at 298 K
Density	0.8561 $^{g}/_{ml}$

Vapor density	this information is not available

Solubility(ies)

- Water solubility	miscible in any proportion

Partition coefficient

- n-octanol/water (log KOW)	this information is not available

Auto-ignition temperature	245 °C
Viscosity	not determined
Explosive properties	not explosive (GHS of the United Nations, annex 4)
Oxidizing properties	none

9.2 Other information

Temperature class (USA, acc. to NEC 500)	T2C (maximum permissible surface temperature on the equipment: 230°C)

SECTION 10: Stability and reactivity

10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials". The mixture contains reactive substance(s). Risk of ignition.

If heated:

Risk of ignition

10.2 Chemical stability

See below "Conditions to avoid".

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Hints to prevent fire or explosion

Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Take precautionary measures against static discharge.

10.5 Incompatible materials

Oxidizers

10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Test data are not available for the complete mixture.

Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification acc. to GHS

Acute toxicity

Shall not be classified as acutely toxic.

Acute toxicity estimate (ATE) of components of the mixture

Name of substance	CAS No	Exposure route	ATE
Alcohols, C9-11 ethoxylated	68439-46-3	oral	1,200 $^{mg}/_{kg}$
Alcohols, C9-11 ethoxylated	68439-46-3	dermal	2,000 $^{mg}/_{kg}$

Skin corrosion/irritation
Causes skin irritation.

Serious eye damage/eye irritation
Causes serious eye damage.

Respiratory or skin sensitization
May cause an allergic skin reaction.

Germ cell mutagenicity
Shall not be classified as germ cell mutagenic.

Carcinogenicity
Shall not be classified as carcinogenic.

Reproductive toxicity
Shall not be classified as a reproductive toxicant.

Specific target organ toxicity - single exposure
Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure
Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard
May be fatal if swallowed and enters airways.

SECTION 12: Ecological information

12.1 Toxicity
Very toxic to aquatic life. May cause long lasting harmful effects to aquatic life.

Aquatic toxicity (acute) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
d-limonene	5989-27-5	LC50	720 µg/l	fish	96 h
d-limonene	5989-27-5	EC50	688 µg/l	fish	96 h
Alcohols, C9-11 ethoxylated	68439-46-3	LC50	7 mg/l	fish	96 h
Alcohols, C9-11 ethoxylated	68439-46-3	EC50	2.5 mg/l	aquatic invertebrates	48 h

Aquatic toxicity (chronic) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
d-limonene	5989-27-5	EC50	0.85 mg/l	aquatic invertebrates	24 h

12.2 Persistence and degradability

Data are not available.

12.3 Bioaccumulative potential

Data are not available.

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

Data are not available.

12.6 Other adverse effects

Endocrine disrupting potential

None of the ingredients are listed.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste treatment-relevant information

Solvent reclamation/regeneration.

Sewage disposal-relevant information

Do not empty into drains. Avoid release to the environment. Refer to special instructions/safety data sheets.

Waste treatment of containers/packages

Only packagings which are approved (e.g. acc. to the Dangerous Goods Regulations) may be used. Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

SECTION 14: Transport information

14.1	UN number	1993
14.2	UN proper shipping name	FLAMMABLE LIQUID, N.O.S.
14.3	Transport hazard class(es)	
	Class	3 (flammable liquids)
14.4	Packing group	III (substance presenting low danger)
14.5	Environmental hazards	hazardous to the aquatic environment
	Environmentally hazardous substance (aquatic environment)	d-limonene

14.6 Special precautions for user

There is no additional information.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

The cargo is not intended to be carried in bulk.

Information for each of the UN Model Regulations

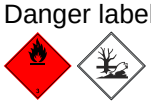
Transport information - National regulations - Additional information (UN RTDG)

UN number	1993
Proper shipping name	FLAMMABLE LIQUID, N.O.S.
Class	3
Environmental hazards	yes (hazardous to the aquatic environment)
Packing group	III
Danger label(s)	3, fish and tree

Special provisions (SP)	223, 274 (UN RTDG)
Excepted quantities (EQ)	E1 (UN RTDG)
Limited quantities (LQ)	5 L (UN RTDG)

International Maritime Dangerous Goods Code (IMDG)

UN number	1993
Proper shipping name	FLAMMABLE LIQUID, N.O.S.
Class	3
Marine pollutant	yes (hazardous to the aquatic environment)
Packing group	III
Danger label(s)	3, fish and tree



Special provisions (SP)	223, 274, 955
Excepted quantities (EQ)	E1
Limited quantities (LQ)	5 L
EmS	F-E, S-E

Stowage category	A

International Civil Aviation Organization (ICAO-IATA/DGR)

UN number	1993
Proper shipping name	Flammable liquid, n.o.s.
Class	3
Environmental hazards	yes (hazardous to the aquatic environment)
Packing group	III
Danger label(s)	3

Special provisions (SP)	A3
Excepted quantities (EQ)	E1
Limited quantities (LQ)	10 L

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

National regulations (United States)

15.1.5 Toxic Substance Control Act (TSCA) 0.1 — all ingredients are listed

Superfund Amendment and Reauthorization Act (SARA TITLE III)

- The List of Extremely Hazardous Substances and Their Threshold Planning Quantities (EPCRA Section 302, 304)

none of the ingredients are listed

- Specific Toxic Chemical Listings (EPCRA Section 313)

none of the ingredients are listed

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

- List of Hazardous Substances and Reportable Quantities (CERCLA section 102a) (40 CFR 302.4)

none of the ingredients are listed

Clean Air Act

none of the ingredients are listed

15.1.5 New Jersey Worker and Community Right to Know Act 0.5

none of the ingredients are listed

15.1.5 California Environmental Protection Agency (Cal/EPA): Proposition 65 - Safe Drinking Water and 0.6 Toxic Enforcement Act of 1987

none of the ingredients are listed

Industry or sector specific available guidance(s)

NPCA-HMIS® III

Hazardous Materials Identification System. American Coatings Association.

Category	Rating	Description

Chronic	/	none
Health	3	major injury likely unless prompt action is taken and medical treatment is given
Flammability	2	material that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur
Physical hazard	0	material that is normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non-explosive
Personal protection	-	

Chronic: chronic hazard
Flammability: flammability hazard
Health: health hazard
Personal protection: personal protective equipment (PPE) for normal use
Physical hazard: reactivity

NFPA® 704

National Fire Protection Association: Standard System for the Identification of the Hazards of Materials for Emergency Response (United States).

Category	Degree of hazard	Description
Flammability	2	material that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur
Health	3	material that, under emergency conditions, can cause serious or permanent injury
Instability	0	material that is normally stable, even under fire conditions
Special hazard		

National regulations (Canada)

15.1.5 Domestic Substances List (DSL)

1.2

All ingredients are listed.

National inventories

Country	Inventory	Status
CA	DSL	all ingredients are listed
EU	REACH Reg.	all ingredients are listed
US	TSCA	all ingredients are listed

Legend

DSL Domestic Substances List (DSL)
REACH Reg. REACH registered substances
TSCA Toxic Substance Control Act

15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information, including date of preparation or last revision

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
Acute Tox.	Acute toxicity
Asp. Tox.	Aspiration hazard
ATE	Acute Toxicity Estimate
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
DGR	Dangerous Goods Regulations (see IATA/DGR)
DNEL	Derived No-Effect Level
EmS	Emergency Schedule
Eye Dam.	Seriously damaging to the eye
Eye Irrit.	Irritant to the eye
Flam. Liq.	Flammable liquid
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
NPCA-HMIS® III	National Paint and Coatings Association: Hazardous Materials Identification System - HMIS® III, Third Edition
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration
Skin Corr.	Corrosive to skin
Skin Irrit.	Irritant to skin
Skin Sens.	Skin sensitization
vPvB	Very Persistent and very Bioaccumulative

Key literature references and sources for data

Hazardous Products Regulations (HPR).

UN Recommendations on the Transport of Dangerous Good. International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

Classification procedure

Physical and chemical properties: The classification is based on tested mixture.
Health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

List of relevant phrases (code and full text as stated in chapter 2 and 3)

Code	Text
H226	Flammable liquid and vapor.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.