

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product name BioBlend Biodegradable Brake Cleaner (Aerosol)

Recommended use of the chemical and restrictions on use

Product code BL1000016-011

Product Type Extremely Flammable Aerosol
Synonyms None

Supplier's details

Recommended Use Biodegradable Contact / Break Cleaner.
Uses advised against No information available

Manufacturer
Bioblend Renewable Resources
2250 Arthur Ave
Elk Grove Village, IL 60007
Phone:(630) 227-1800

Emergency telephone number
Chemical Emergency Phone Number CHEMTREC: 1-800-262-8200 ID 1195 (UNITED STATES)

Bioblend CBC Biodegradable Contact / Brake Cleaner (Aerosol)


2. HAZARDS IDENTIFICATION

Classification

Serious eye damage/eye irritation	Category 2A
Specific target organ toxicity (single exposure)	Category 3
Flammable Aerosols	Category 1
Gases under pressure	Compressed Gas

**GHS Label elements, including
precautionary statements**

Emergency Overview

DANGER		
Hazard Statements Causes serious eye irritation. May cause respiratory irritation. May cause drowsiness or dizziness. Extremely Flammable Aerosol Contains gas under pressure; may explode if heated		
		
Appearance Clear	Physical state Aerosol	Odor Solvent

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling.
Wear eye protection, face protection.
Avoid breathing fumes, gas, mist, vapors, spray.
Use only outdoors or in a well-ventilated area.
Keep away from heat, sparks, open flames, hot surfaces - No smoking.
Do not spray on an open flame or other ignition source.
Pressurized container: Do not pierce or burn, even after use.

Precautionary Statements - Response

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
IF INHALED : Remove person to fresh air and keep comfortable for breathing.
Call a POISON CENTER or doctor, physician if you feel unwell.

Precautionary Statements - Storage

Store in a well-ventilated place. Keep container tightly closed.
Store locked up.
Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F

Precautionary Statements - Disposal

Dispose of contents, container to an approved waste disposal plant.

Hazards not otherwise classified (HNOC)

None

Bioblend CBC Biodegradable Contact / Brake Cleaner (Aerosol)**Other information**

0% of the mixture consists of ingredient(s) of unknown toxicity.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %*
METHYL ACETATE	79-20-9	80-90
ETHYL ACETIC ESTER	141-78-6	1-10
CARBON DIOXIDE	124-38-9	1-10
METHANOL	67-56-1	< 1
ACETALDEHYDE	75-07-0	< 0.1

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES**First aid measures for different exposure routes**

General advice	Avoid contact with eyes, skin, and clothing. Avoid breathing, vapors, mist, or gas.
Eye contact	Immediately flush with plenty of water for at least 15 minutes. After initial flushing, remove any contact lenses and continue flushing. If eye irritation persists, consult a doctor.
Skin contact	Wash off with soap and plenty of water. If skin irritation persists, call a physician. Take off contaminated clothing.
Inhalation	Move to fresh air. If not breathing, give artificial respiration. If breathing has stopped, contact emergency medical services immediately.
Ingestion	Call a physician or Poison Control Center immediately. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Risk of product entering the lungs on vomiting after ingestion.
Protection of First-aiders	Remove all sources of ignition.

Most important symptoms/effects, acute and delayed

Main Symptoms	Causes serious eye irritation. May cause respiratory irritation. May cause drowsiness or dizziness.
----------------------	---

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician	Treat symptomatically.
---------------------------	------------------------

5. FIRE-FIGHTING MEASURES**Suitable Extinguishing Media**

Water fog. Dry chemical. Foam. Carbon dioxide (CO₂). Cool containers/tanks with water spray.

Unsuitable Extinguishing Media Do not use a solid water stream as it may scatter and spread fire. Keep away from sources of ignition - No smoking.

Specific hazards arising from the chemical

Extremely Flammable / Flammable. In the event of fire and/or explosion do not breathe fumes. In the event of fire, cool tanks with water spray.

Bioblend CBC Biodegradable Contact / Brake Cleaner (Aerosol)**Explosion Data****Sensitivity to Mechanical Impact** none.**Sensitivity to Static Discharge** Yes.**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. Use shielding to protect fire-fighters from bursting containers. In the event of fire and/or explosion do not breathe fumes.

6. ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures**

Personal precautions Use with adequate ventilation to keep the exposure levels below the OELS. Follow safe handling advice and personal protective equipment recommendations.

Environmental precautions

Environmental precautions Vapors can accumulate in low areas. Report spills as required by local and federal regulations. Do not allow material to contaminate ground water system. Do not flush into surface water or sanitary sewer system. Should not be released into the environment.

Methods and materials for containment and cleaning up

Methods for Containment Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Prevent further leakage or spillage if safe to do so. Do not allow material to contaminate ground water system. Prevent product from entering drains.

Methods for cleaning up Soak up with inert absorbent material. Contain liquid and collect with an inert, non-combustible material. Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly. After cleaning, flush away traces with water. Prevent product from entering drains. Take precautionary measures against static discharges.

7. HANDLING AND STORAGE**Precautions for safe handling**

Advice on safe handling Avoid breathing vapors or mists. Avoid contact with skin, eyes and clothing. Keep away from open flames, hot surfaces and sources of ignition. Contents under pressure. Do not puncture or incinerate cans. Handle in accordance with good industrial hygiene and safety practice. Take precautionary measures against static discharges.

Conditions for safe storage, including any incompatibilities

Technical measures/Storage conditions Keep container tightly closed in a dry and well-ventilated place. Keep away from open flames, hot surfaces, and sources of ignition. Keep in properly labeled containers. Keep out of the reach of children. Store locked up.

Incompatible products Strong acids, alkalis, oxidizing agents.

Aerosol Level 1

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Control parameters****Exposure Guidelines**

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
METHYL ACETATE 79-20-9	STEL: 250 ppm TWA: 200 ppm	TWA: 200 ppm TWA: 610 mg/m ³	IDLH: 3100 ppm TWA: 200 ppm

Bioblend CBC Biodegradable Contact / Brake Cleaner (Aerosol)

		(vacated) TWA: 200 ppm (vacated) TWA: 610 mg/m ³ (vacated) STEL: 250 ppm (vacated) STEL: 760 mg/m ³	TWA: 610 mg/m ³ STEL: 250 ppm STEL: 760 mg/m ³
ETHYL ACETIC ESTER 141-78-6	TWA: 400 ppm	TWA: 400 ppm TWA: 1400 mg/m ³ (vacated) TWA: 400 ppm (vacated) TWA: 1400 mg/m ³	IDLH: 2000 ppm TWA: 400 ppm TWA: 1400 mg/m ³
CARBON DIOXIDE 124-38-9	STEL: 30000 ppm TWA: 5000 ppm	TWA: 5000 ppm TWA: 9000 mg/m ³ (vacated) TWA: 10000 ppm (vacated) TWA: 18000 mg/m ³ (vacated) STEL: 30000 ppm (vacated) STEL: 54000 mg/m ³	IDLH: 40000 ppm TWA: 5000 ppm TWA: 9000 mg/m ³ STEL: 30000 ppm STEL: 54000 mg/m ³
METHANOL 67-56-1	STEL: 250 ppm TWA: 200 ppm Skin - potential significant contribution to overall exposure by the cutaneous route	TWA: 200 ppm TWA: 260 mg/m ³ (vacated) TWA: 200 ppm (vacated) TWA: 260 mg/m ³ (vacated) STEL: 250 ppm (vacated) STEL: 325 mg/m ³ (vacated) S*	IDLH: 6000 ppm TWA: 200 ppm TWA: 260 mg/m ³ STEL: 250 ppm STEL: 325 mg/m ³
ACETALDEHYDE 75-07-0	Ceiling: 25 ppm	TWA: 200 ppm TWA: 360 mg/m ³ (vacated) TWA: 100 ppm (vacated) TWA: 180 mg/m ³ (vacated) STEL: 150 ppm (vacated) STEL: 270 mg/m ³	IDLH: 2000 ppm

ACGIH: (American Conference of Governmental Industrial Hygienists)

OSHA: (Occupational Safety & Health Administration)

NIOSH IDLH: Immediately Dangerous to Life or Health

Other Exposure Guidelines

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

Exposure controls**Engineering Measures**

Showers
Eyewash stations
Ventilation systems. Ventilation systems. Use adequate ventilation to keep the exposure levels below the occupational exposure limits.

Individual protection measures, such as personal protective equipment**Eye/Face Protection**

Safety glasses with side-shields.

Skin and body protection

Chemical resistant apron. Protective gloves.

Respiratory protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical and chemical properties

Physical state
Appearance
Color

Aerosol
Clear
Colorless

Odor
Odor Threshold

Solvent

Property
pH

Values
No information available

Remarks • Methods

Bioblend CBC Biodegradable Contact / Brake Cleaner (Aerosol)

Melting/freezing point	No information available	
Boiling point/boiling range		
Flash Point	-15.6_-10 °C / 3.9-14 °F	Based on lowest flashpoint of the products constituents. Additionally, propellant has no flashpoint.
Evaporation rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limits in Air		
upper flammability limit		
lower flammability limit		
Vapor pressure		
Vapor density		
Specific Gravity	0.949	
Water solubility	No information available	
Partition coefficient: n-octanol/water		
Autoignition temperature	No information available	
Decomposition temperature		
Viscosity	No information available	
Explosive properties		
<u>Other information</u>		
VOC Content(%)	9.21	

10. STABILITY AND REACTIVITY**Reactivity**

Stable under recommended storage conditions

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to Avoid

Extremes of temperature and direct sunlight.

Incompatible Materials

Strong acids, alkalis, oxidizing agents.

Hazardous Decomposition Products

Carbon oxides , Hydrocarbons, Fumes.

11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure****Product Information**

Inhalation	May cause respiratory irritation. May cause drowsiness or dizziness.
Eye contact	Causes serious eye irritation.
Skin contact	Skin irritation may occur if person excessively exposes product to the skin.
Ingestion	May be harmful if swallowed .

Component Information

Bioblend CBC Biodegradable Contact / Brake Cleaner (Aerosol)

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
METHYL ACETATE 79-20-9	> 5 g/kg (Rat)	> 5 g/kg (Rabbit)	> 49000 mg/m ³ (Rat) 4 h
ETHYL ACETIC ESTER 141-78-6	= 5620 mg/kg (Rat)	> 18000 mg/kg (Rabbit)	= 4000 ppm (Rat) 4 h
METHANOL 67-56-1	= 6200 mg/kg (Rat)	= 15840 mg/kg (Rabbit)	= 22500 ppm (Rat) 8 h
ACETALDEHYDE 75-07-0	= 660 mg/kg (Rat)	= 3540 mg/kg (Rabbit)	= 13000 ppm (Rat) 4 h

Information on toxicological effects

Symptoms Causes serious eye irritation. May cause respiratory irritation. May cause drowsiness or dizziness.

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

Eye damage/irritation Irritating to eyes.
Sensitization Not a known sensitizer.
Germ cell mutagenicity Not a germ cell mutagen.
Carcinogenicity The table below indicates whether each agency has evaluated a listed ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
ACETALDEHYDE 75-07-0	A2	Group 2B	Reasonably Anticipated	X

ACGIH: (American Conference of Governmental Industrial Hygienists)

A3 - Animal Carcinogen

IARC: (International Agency for Research on Cancer)

Group 2B - Possibly Carcinogenic to Humans

Group 3 - Not Classifiable as to Carcinogenicity in Humans

OSHA: (Occupational Safety & Health Administration)

X - Present

Reproductive toxicity This product does not contain any known or suspected reproductive hazards.
Specific target organ systemic toxicity (single exposure) May cause respiratory irritation. May cause drowsiness and dizziness.
Specific target organ systemic toxicity (repeated exposure) No known effect based on information supplied.
Chronic toxicity Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal. Chronic hydrocarbon abuse has been associated with irregular heart rhythms and potential cardiac arrest.
Target Organ Effects Skin, Eyes, Respiratory System, and Central Nervous System.
Neurological effects Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal.
Aspiration hazard No known effect based on information supplied.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity 0% of the mixture consists of ingredient(s) of unknown toxicity.

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 30163 mg/kg

ATEmix (dermal) 90490 mg/kg

ATEmix (inhalation-dust/mist) 151.1 mg/l

ATEmix (inhalation-vapor) 271.5 mg/l

12. ECOLOGICAL INFORMATION**Ecotoxicity**

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates
METHYL ACETATE 79-20-9	120 mg/L EC50 Desmodesmus subspicatus 72h	295 - 348 mg/L LC50 Pimephales promelas 96h flow-through 250 - 350 mg/L	-	1026.7 mg/L EC50 Daphnia magna 48h

		LC50 Brachydanio rerio 96h static		
ETHYL ACETIC ESTER 141-78-6	-	220 - 250 mg/L LC50 Pimephales promelas 96h flow-through 484 mg/L LC50 Oncorhynchus mykiss 96h flow-through 352 - 500 mg/L LC50 Oncorhynchus mykiss 96h semi-static	-	560 mg/L EC50 Daphnia magna 48h Static
CARBON DIOXIDE 124-38-9	-	0.46 mg/L LC50 Oncorhynchus mykiss	-	-
METHANOL 67-56-1	-	28200 mg/L LC50 Pimephales promelas 96h flow-through 100 mg/L LC50 Pimephales promelas 96h static 19500 - 20700 mg/L LC50 Oncorhynchus mykiss 96h flow-through 18 - 20 mL/L LC50 Oncorhynchus mykiss 96h static 13500 - 17600 mg/L LC50 Lepomis macrochirus 96h flow-through	-	-
ACETALDEHYDE 75-07-0	-	28.0 - 34.0 mg/L LC50 Pimephales promelas 96h flow-through 53 mg/L LC50 Lepomis macrochirus 96h static 1.8 - 2.4 mg/L LC50 Oncorhynchus mykiss 96h static 39.8 - 46.8 mg/L LC50 Pimephales promelas 96h static	-	3.64 - 6.15 mg/L EC50 Daphnia magna 48h Static 48.3 mg/L EC50 Daphnia magna 48h

Persistence and degradability

.

Bioaccumulation

Chemical Name	log Pow
METHYL ACETATE 79-20-9	0.18
ETHYL ACETIC ESTER 141-78-6	0.6
METHANOL 67-56-1	-0.77
ACETALDEHYDE 75-07-0	0.5

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment

Waste Disposal Methods

This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261). Dispose of in accordance with federal, state, and local regulations. Dispose of contents/container in accordance with local regulation. Dispose of in accordance with federal, state, and local regulations.

Contaminated packaging

Do not re-use empty containers.

Bioblend CBC Biodegradable Contact / Brake Cleaner (Aerosol)

14. TRANSPORT INFORMATION

DOT Ground	CONSUMER COMMODITY ORM-D or LIMITED QUANTITY
IATA	UN1950, AEROSOLS, FLAMMABLE, 2.1, LTD.QTY.
IMDG	UN1950, AEROSOLS, 2.1, LTD.QTY

15. REGULATORY INFORMATION

SCHEDULE B CODE: 2914.11.0000.

International Inventories

Chemical Name	TSCA	DSL/NDSL	EINECS/ELINCS	ENCS	IECSC	KECL	PICCS	AICS
METHYL ACETATE	X	X	X	X	X	X	X	X
ETHYL ACETIC ESTER	X	X	X	X	X	X	X	X
CARBON DIOXIDE	X	X	X	X	X	X	X	X
METHANOL	X	X	X	X	X	X	X	X
ACETALDEHYDE	X	X	X	X	X	X	X	X

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 Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

CHINA - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

U.S. Federal RegulationsSARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does contain a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	CAS-No	Weight %*	SARA 313 - Threshold Values %
METHANOL - 67-56-1	67-56-1	< 1	1.0
ACETALDEHYDE - 75-07-0	75-07-0	< 0.1	0.1

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Star Hazard	Yes
Fire Hazard	Yes
Sudden Release of Pressure Hazard	Yes
Reactive Hazard	No

Bioblend CBC Biodegradable Contact / Brake Cleaner (Aerosol)**Clean Water Act**

This product does contain the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42):

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
ACETALDEHYDE 75-07-0	1000 lb			X

CERCLA

This material, as supplied, does contain substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302):

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
ETHYL ACETIC ESTER 141-78-6	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ
METHANOL 67-56-1	5000 lb		RQ 5000 lb final RQ RQ 2270 kg final RQ
ACETALDEHYDE 75-07-0	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ

U.S. State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals:



This product can expose you to chemicals including those listed below, which is [are] known to the State of California to cause cancer, birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

Chemical Name	California Prop. 65
METHANOL - 67-56-1	Developmental / <1%
ACETALDEHYDE - 75-07-0	Cancer <0.1%

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
METHYL ACETATE 79-20-9	X	X	X
ETHYL ACETIC ESTER 141-78-6	X	X	X
CARBON DIOXIDE 124-38-9	X	X	X
METHANOL 67-56-1	X	X	X
ACETALDEHYDE 75-07-0	X	X	X

EPA Pesticide Registration Number Not applicable

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the SDS contains all the information required by the CPR.

Bioblend CBC Biodegradable Contact / Brake Cleaner (Aerosol)

16. OTHER INFORMATION

NFPA	Health Hazard 2	Flammability 4	Instability 0	Physical and chemical hazards -
HMIS	Health Hazard 2*	Flammability 4	Physical Hazard 0	Personal protection B
<i>Chronic Hazard Star Legend</i>		<i>Repeated or prolonged exposure may cause central nervous system damage</i>		

Prepared By Bioblend Renewable Resources
1500 Jarvis Ave
Elk Grove Village , IL 60007

Issuing date
Revision Date 02-May-2019
Revision Note

Disclaimer

The information provided on this SDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

End of Safety Data Sheet