

CARBON CONDUCTIVE GREASE

846

Safety Data Sheet

Section 1: Identification

Product Identifier and Other Means of Identification

Product Name: Carbon Conductive Grease**SDS Code:** 846**Related Part #** 846-80G, 846-1P, 846-1G

Recommended Use and Restriction on Use

Use: electrically conductive lubricant for switches**Uses Advised Against:** Avoid uses that result in aerosolization

Details of Manufacturer or Importer

ManufacturerMG Chemicals
1210 Corporate Drive
Burlington, Ontario L7L 5R6
CANADAMG Chemicals (Head Office)
9347-193 Street
Surrey, British Columbia V4N 4E7
CANADA**☎** +1-800-340-0772**☎** +1-905-331-1396**FAX** +1-800-340-0773**FAX** +1-905-331-2682**E-MAIL** support@mgchemicals.com**E-MAIL** info@mgchemicals.com**WEB** www.mgchemicals.com**E-MAIL** (Competent Person): sds@mgchemicals.com

Emergency Phone Number

For hazardous material incidents ONLY—leaks, spills, fires, exposures or accidents
USA or CANADA: Call CHEMTREC ☎: **+1-800-424-9300****For emergencies involving dangerous goods;** Collect 24/7CANADA: Call CANUTEC ☎: **+1-613-996-6666** or ***666** on cellular phones

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Section 2: Hazards Identification

Classification of Hazardous Chemical

GHS Categories

Criteria	Category	Signal Word	Pictograms
Carcinogenicity	2	Warning	Health

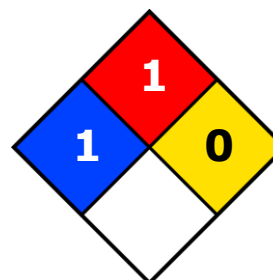
Note: The degree of severity in a category is ranked from 1 (Highest Severity) to 5 (Lowest Severity), which is opposite to HMIS and NFPA conventions.

Other Classifications

HMIS® RATING

HEALTH:	* 1
FLAMMABILITY:	1
PHYSICAL HAZARD:	0
PERSONAL PROTECTION:	


NFPA® 704 CODES



Approximate HMIS and NFPA Risk Ratings Legend:

0 (Low or none); 1 (Slight); 2 (Moderate); 3 (Serious); 4 (Severe)

Label Elements

Signal Word	WARNING
Pictograms	Hazard Statements
	H351: Suspected of causing cancer
Prevention	Precautionary Statements
P201 + P202	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood.
P280	Wear protective gloves/eye protection/face protection.

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Response	Precautionary Statements
P308 + P313	IF exposed or concerned: Get medical advice/attention.
Storage	Precautionary Statements
P405	Store locked up.
Disposal	Precautionary Statements
P501	Dispose of contents/container in accordance to local/regional/national/international regulations.

Other Hazards

Not applicable

Section 3: Hazardous Ingredients

CAS #	Chemical Name	Wt%
63148-62-9	dimethylpolysiloxane ^{a)}	80%
1333-86-4	carbon black	20%

a) Non-hazardous component

Section 4: First Aid Measures

<i>Exposure Condition</i>	<i>GHS Code: Precautionary Statement</i>
IF INHALED	P304 + P340, P308 + P313 (<i>Not a likely route of exposure under normal use</i>)
Immediate Symptoms	<i>None known or expected</i>
Response	Remove person to fresh air (out of the contaminated zone) and keep comfortable for breathing. If exposed or concerned: Get medical advice/attention
IF IN EYES	P305, P351+ P338, P337+P313
Immediate Symptoms	<i>mild irritation (discomfort)</i>
Response	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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IF ON SKIN

Immediate Symptoms *None expected.*

Response Clean with soap and water.

IF SWALLOWED

Immediate Symptoms *None known or expected*

Response Do NOT induce vomiting.
Get medical advice/attention if feeling unwell.

Section 5: Fire Fighting Measures

Auto-ignition Temperature	Not available	Flash Point ^{a)}	>300 °C [572 °F]	LFL [LEL] ^{b)}	Not available
				UFL [UEL]	available

In case of fire P370 +P378

Response Use dry chemical, carbon dioxide, chemical foam, or water spray to extinguish.

Specific Hazards At temperatures of 150 °C [302 °F] and above, formaldehyde can be generated in the presence of oxygen. Formaldehyde is classified as a human carcinogen, skin sensitizer, respiratory sensitizer, and eye and throat irritant.

Prevent fire-fighting wash from entering waterway or sewer system.

Combustion Products Produces carbon oxides (CO, CO₂), SiO₂ and formaldehyde

Fire-Fighter Wear self-contained breathing apparatus and full fire-fighting turn-out gear.

a) Cleveland open cup

b) LF[E]L = Lower Flammability [or Explosion] Limit (in volume %);

UF[E]L = Upper Flammability [or Explosion] Limit (in volume %)

CARBON CONDUCTIVE GREASE**846****Section 6: Accidental Release Measures**

Personal Protection	See personal protection recommendations in Section 8.
Precautions for Response	Do not breathe the mist/spray. Remove or keep away all sources of extreme heat or open flames.
Environmental Precautions	Avoid releasing to the environment.
Containment	Contain the spill and cover drains.
Cleaning	The material presents a slip hazard and must be cleaned thoroughly. Collect liquid in a sealable container. Scoop into the container. Wipe up further residue with paper towel and place dirty towels in container. Wash spill area with steam, solvents, or detergents to remove the last traces of residue.
Disposal	Dispose of spill waste according to Section 13.

Section 7: Handling and Storage

Prevention	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eye, on skin, or on clothing.
Handling	Wear protective gloves/eye protection.
Storage	Store locked up. RECOMMENDATION: Keep in a dry and clean area, away from incompatible substances.

Section 8: Exposure Controls/Personal Protection**Routes of Entry**

Skin contact, Eye contact, Ingestion, Inhalation

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Substances with Occupational Exposure Limit Values

Chemical Name	Country or Vendor	Long Term Exposure Limits (PEL)	Short Term Exposure Limits (STEL)
Carbon black ^{a)}	ACGIH	3.5 mg/m ³	—
	U.S.A. OSHA PEL	3.5 mg/m ³	—
	Canada AB	3.5 mg/m ³	—
	Canada BC	3 mg/m ³	—
	Canada ON	3.5 mg/m ³	—
	Canada QC	3.5 mg/m ³	—

Note: The ACGIH¹, OSHA (Table Z-1), and Canadian provinces exposure limits were consulted. Limits from by RTECS database² of the Canadian Centre for Occupational Health and Safety (CCOHS) a data from suppliers' SDS were also consulted.

a) Respirable airborne particles

Engineering Controls

Ventilation

Normal ventilation is generally adequate. The carbon black particles are bound in the grease matrix and are not available as a respiration hazard under normal conditions.

If the product is exposed to extreme heat or combustion conditions, see the advice in the PPE respiratory protection subsection.

Personal Protective Equipment

Eye protection

Wear appropriate protective eyeglasses or chemical safety goggles.

RECOMMENDATION: Use safety glasses with lateral protection (side shields).

Skin Protection

Wear appropriate protective clothing to prevent skin contact.

Respiratory Protection

If exposed to aerosols, wear oil resistant or oil proof particulate respirators or filter masks.

If the product is exposed to extreme heat or combustion conditions, wear a NIOSH approved self-contained breathing apparatus (SCBA) or supplied air respirator.

RECOMMENDATION: Consult your local safety supply store to ensure your respirator or mask.

General Hygiene Considerations

Wash hands thoroughly with water and soap after handling.

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Section 9: Physical and Chemical Properties

Physical State	Liquid	Appearance	Black grease
Odor	None	Odor Threshold	Not applicable
pH	Not available	Specific Gravity	1.1
Solubility in Water @ 25 °C	Insoluble	Melting/Freezing Point	Not available
Boiling Point	>200°C [>392 °F]	Evaporation Rate	<1 (ButAc = 1)
Flash Point ^{a)}	>300°C [572 °F]	Vapor Pressure @ 25 °C	0.13 kPa [1 mmHg]
Lower Flammability Limit	Not available	Upper Flammability Limit	Not available
Auto-ignition Temperature	Not available	Decomposition Temperature	Not available
Viscosity @25 °C	570 000 cSt	Vapor Density	>1 (Air = 1)
Partition Coefficient	Not available		

a) Cleveland open cup

Section 10: Stability and Reactivity

Reactivity	Not available
Chemical Stability	Chemically stable at normal temperatures and pressures
Conditions to Avoid	Ignition sources, excessive heat, and incompatible substances.
Incompatibilities	Strong oxidizing agents, strong acids
Polymerization	Will not occur
Decomposition	Will not decompose under normal conditions. For thermal decomposition, see combustion products in Section 5

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Section 11: Toxicological Information

Routes of Exposure

Eye contact, Inhalation, and Skin contact

Symptoms Summary

- Eyes** May cause mild eye irritation, redness.
- Skin** No known significant effects.
- Inhalation** No known significant effects.
- Ingestion** No known significant effects.
- Chronic** No known long term effect.

Acute Toxicity (Lethal Exposure Concentrations)

Chemical Name	LD50 oral	LD50 dermal	LC50 inhalation	TCLo inhalation
dimethylpolysiloxane	>5 000 mg/kg Rat	>10 000 mg/kg Rabbit	>535 mg/L Rat	Not available
carbon black	>15 g/kg Rat	>3 g/kg Rabbit	Not established	1.6 mg/m ³ 7 h Rat

Note: Representative toxicity data from by RTECS database of the Canadian Centre for Occupational Health and Safety (CCOHS)¹ data from supplier MSDS were also consulted.

Other Toxicological Effects

- Skin corrosion/irritation** No known effects
- Serious eye damage/irritation** May cause mild eye irritation.
- Sensitization** Not available
(allergic reactions)

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CARBON CONDUCTIVE GREASE**846****Carcinogenicity**

(risk of cancer)

The carbon black [1333-86-4] is possibly carcinogenic by airborne routes of exposures. Because the carbon black is bound in the highly viscous grease matrix, it is not expected to be available as an airborne hazard (dust, mist, or spray) under normal and foreseeable uses.

Carbon Black [1333-86-4]

IARC Group 2B: Possibly carcinogenic to humans

ACGIH A4: Not classified as a human carcinogen

CA Prop 65: Listed as a carcinogen

NTP: Not listed

Mutagenicity

(risk of heritable genetic effects)

Not available

Reproductive Toxicity

(risk to sex functions)

Not available

Teratogenicity (risk of

fetus malformation)

Not available

STOT-single exposure

Not available

STOT-repeated exposure

Not available

Aspiration hazard

Not classified as aspiration hazard: the mixture does not contain Class 1 aspiration toxicant and its viscosity is $>20.5 \text{ mm}^2/\text{s}$ at $40 \text{ }^\circ\text{C}$

Section 12: Ecological Information

The IMDG Code criteria and the raw-material MSDS along with supporting data for the classification of registered substances from the European Chemical Agency database (<http://echa.europa.eu>) were used.

The polydimethyl siloxane fluid and carbon black are not classifiable as ecotoxic hazards under GHS criteria.

Acute Ecotoxicity

Available toxicity data does not meet classification thresholds

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CARBON CONDUCTIVE GREASE**846****Chronic Ecotoxicity**

Not data available

Biodegradability

Not readily biodegradable

Global Warming Potential

No data available

Other Effects

VOC (Regulated Volatile Organic Content) = 0% [0 g/L]

All components are VOC exempt in Canada and the USA.

Section 13: Disposal Information

Dispose of contents in accordance with all local, regional, national, and international regulations.

Section 14: Transport Information**Ground****Refer to TDG regulations** (Canadian Transportation of Dangerous Goods regulations) and **USA 49CFR Regulations** (Parts 100 to 185).

Not Regulated

Air**Refer to ICAO-IATA Dangerous Goods Regulations.**

Not Regulated

Sea**Refer to ICAO-IATA Dangerous Goods Regulations.**

Not Regulated

CARBON CONDUCTIVE GREASE**846****Section 15: Regulatory Information****Canada****WHMIS Classification**

D2A – Very Toxic Material (Carcinogen IARC: 2B)

Note: The carcinogenic warning applies with respect to dust inhalation. Because the carbon black is inextricably bound in the grease matrix, it is not an expected route of entry during usages and processing of this product.

Domestic Substance List (DSL) / Non-Domestic Substance Lists (NDSL)

All hazardous ingredients are listed on the DSL/NDSL.

Industry and Science Canada

MG Labels products intended for the workplace to conform to WHMIS labeling regulations. Product identification, net quantity declaration, minimum printing type size heights, and packaging of this product are in compliance.

Health Canada

Products produced by MG Chemicals intended for retail display conform to the Canadian Consumer Labeling Regulations.

USA**CAA** (Clean Air Act, USA)

This product does not contain any class 1 ozone depleting substances.

This product does not contain any class 2 ozone depleting substances.

This product does not contain substances that are listed as hazardous air pollutants.

EPCRA (Emergency Planning and Right to Know Act, USA, 40 CFR 372.45)

This product contains does not contain substances which are subject to the reporting requirements of section 313 Title III of the SARA of 1986 and 40 CFR part 372.

TSCA (Toxic Substances Control Act of 1976, USA)

All substances are TSCA listed.

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California Proposition 65 (Chemicals known to cause cancer or reproductive toxicity, Sept 2, 2011 revision, USA).

This product does not contain any of the listed substances.

Europe**RoHS**

This product does not contain any lead, cadmium, mercury, hexavalent chromium, PBB's, or PBDE's, and complies with European RoHS regulations.

WEEE

This product is not a piece of electrical or electronics equipment, and is therefore not governed by this regulation.

Section 16: Other Information

MSDS Prepared by Michel Hachey
Date of Issue 07 April 2015
Supersedes 04 February 2014

Reason for Changes: Correction to section 5 and review with respect to WHMIS 2015 regulations.

Reference

- 1) ACGIH 2013 TLVs and BEIs: Based on the documentation of the threshold limit values for chemical substances and physical agents & biological exposure indices, American Conference of Governmental of Industrial Hygienist Cincinnati, OH (2013).
- 2) All toxicological data were checked against the RTECS (Registry of Toxic Effects of Chemical Substances®)

Abbreviations

ACGIH American Conference of Governmental Industrial Hygienists (USA)
GHS Globally Harmonized System of Classification of Labeling of Chemicals
LC50 Lethal Concentration 50%
LCLo Lowest published lethal concentration
LD50 Lethal Dose 50%
PEL Permissible Exposure Limit
PPE Personal Protection Equipment
STEL Short-Term Exposure Limit
TCLo Lowest published toxic concentration
TWA Time Weighted Average
VOC Volatile Organic Content

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Technical Queries Contact us regarding any questions, improvement suggestions, or problems with this product. Application notes, instructions, and FAQs are located at www.mgchemicals.com.

Email: support@mgchemicals.com

Mailing Addresses *Manufacturing & Support*
1210 Corporate Drive
Burlington, Ontario, Canada
L7L 5R6

Head Office
9347-193rd Street
Surrey, British Columbia, Canada
V4N 4E7

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