

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, 846-3.78L, 846-18.9L

Recommended Use and Restriction on Use

Use: Electrically conductive lubricant for switches

Uses Advised Against: Avoid uses that result in aerosolizing

Details of Manufacturer or Importer

Manufacturer

MG Chemicals
1210 Corporate Drive
Burlington, Ontario L7L 5R6
CANADA

MG Chemicals (Head Office)
9347-193 Street
Surrey, British Columbia V4N 4E7
CANADA

☎ +1-800-340-0772
FAX +1-800-340-0773
E-MAIL support@mgchemicals.com
WEB www.mgchemicals.com

☎ +1-905-331-1396
FAX +1-905-331-2682
E-MAIL info@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 at **+1-800-424-9300**

For emergencies involving the transport of dangerous goods; 24/7 service CANADA—Call CANUTEC collect at **+1-613-996-6666** or ***666** on cellular phones

CARBON CONDUCTIVE GREASE**846****Section 2: Hazard(s) Identification****Classification of Hazardous Chemical****GHS Categories**

Based on available data, this product does not meet the HCS 2012 or WHMIS 2015 classification criteria.

Label Elements

Signal Word	<i>No signal word</i>
Pictograms	Hazard Statements
None	None

Hazards Not Otherwise Classified

Other Criteria	Hazard Statements/Precautionary Statement	Signal Word	Pictograms
None	None	None	None

Section 3: Composition/Information on Ingredients

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

a) Non-hazardous component

CARBON CONDUCTIVE GREASE**846****Section 4: First-Aid Measures**

<i>Exposure Condition</i>	<i>GHS Code/Symptoms/Precautionary Statements</i>
IF ON SKIN	P302 + P352
Immediate Symptoms	<i>low toxicity: no symptoms known or expected</i>
Response	Wash with plenty of water.
IF INHALED	P304 + P340 <i>(Not a likely route of exposure under normal use)</i>
Immediate Symptoms	<i>low toxicity: no symptoms known or expected</i>
Response	Remove person to fresh air (out of the contaminated zone) and keep comfortable for breathing.
IF IN EYES	P305 + P351 + P338
Immediate Symptoms	<i>low toxicity: redness, mild irritation</i>
Response	Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF SWALLOWED	P301 + P330 + P331, P314
Immediate Symptoms	<i>low toxicity: no symptoms known or expected</i>
Response	Rinse mouth. Do NOT induce vomiting. Get medical advice/attention if feeling unwell.

Section 5: Fire-Fighting Measures

Extinguishing Media	In case of fire: Use material suitable for surrounding material.
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, CO ₂), SiO ₂ and formaldehyde
Fire-Fighter	Wear self-contained breathing apparatus and full fire-fighting turn-out gear.

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

Personal Protection	See personal protection recommendations in Section 8.
Precautions for Response	Avoid breathing fumes/vapors. 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 grease 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	Keep out of reach of children.
Handling	Wear protective gloves/clothing/eye protection. Wash hands thoroughly after handling.
Storage	RECOMMENDATION: Keep in a dry and clean area, away from incompatible substances.

CARBON CONDUCTIVE GREASE**846****Section 8: Exposure Controls/Personal Protection****Substances with Occupational Exposure Limit Values**

Chemical Name	Country	Long Term Exposure Limits (PEL)	Short Term Exposure Limits (STEL)
carbon black ^{a)}	ACGIH	3.5 mg/m ³	Not established
	U.S.A. OSHA PEL	3.5 mg/m ³	Not established
	Canada AB	3.5 mg/m ³	Not established
	Canada BC	3 mg/m ³	Not established
	Canada ON	3.5 mg/m ³	Not established
	Canada QC	3.5 mg/m ³	Not established

Note: The ACGIH¹, OSHA (Table Z-1), and Canadian provinces exposure limits were consulted. Limits from the RTECS database² and from suppliers' SDS were also consulted. Short term exposure limits (STEL) are for 15 min and long term permissible exposure limits (PEL) for 8 h.

a) Respirable airborne particles

Engineering Controls**Ventilation**

Keep airborne concentrations below the occupational exposure limits (OEL).

Because the carbon black is bound to the liquid mixture, it does not present an airborne hazard under normal use. Ensure adequate ventilation if the product is mechanically misted or aerosolized.

Personal Protective Equipment**Eye protection**

Wear appropriate protective eyeglasses or chemical safety goggles.

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

Skin Protection

For likely contacts, use of protective butyl rubber, neoprene, or other chemically resistant gloves.

For incidental contacts, use nitrile, polyvinyl alcohol (PVA) or other chemically resistant gloves.

Section continued on the next page

CARBON CONDUCTIVE GREASE**846**

Respiratory Protection For over-exposures up to 10 x OEL of vapors, wear respirator such as a half-mask respirator with organic vapor cartridges.

Above 10 x OEL, use a positive-pressure, air-supplied respirator or a self-contained breathing apparatus.

RECOMMENDATION: Consult your local safety supply store to ensure that your respirator has a NIOSH (U.S.) approved filter cartridges appropriate for the ingredients listed in Section 3. The respirator should be fitted to the employee by a professional. Ensure vapor cartridges are stored in sealed plastic bags when not being used.

General Hygiene Considerations

Wash hands thoroughly with water and soap after handling.

Section 9: Physical and Chemical Properties

Physical State	Liquid	Lower Flammability Limit	Not available
Appearance	Black grease	Upper Flammability Limit	Not available
Odor	Not available	Vapor Pressure @25 °C	0.13 kPa [1 mmHg]
Odor Threshold	Not available	Vapor Density	>1 (Air =1)
pH	Not available	Specific Gravity @25 °C	1.1
Freezing/Melting Point	Not available	Solubility in Water	Insoluble
Boiling Point	>200 °C [>392 °F]	Partition Coefficient	Not available
Flash Point ^{a)}	>300 °C [572 °F]	Auto-ignition Temperature	Not available
Evaporation Rate	<1 (ButAc = 1)	Decomposition Temperature	Not available
Flammability (solid, gas)	Not available	Viscosity @25 °C	570 000 cSt

a) Cleveland open cup

CARBON CONDUCTIVE GREASE**846****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.

Section 11: Toxicological Information**Summary of Effects and Symptoms by Routes of Exposure**

Eyes	Low toxicity: may cause mild eye irritation, redness.
Skin	Low toxicity: no symptoms known or expected
Inhalation	Low toxicity: no symptoms known or expected
Ingestion	Low toxicity: no symptoms known or expected
Chronic	Low toxicity: no symptoms known or expected

Acute Toxicity (Lethal Exposure Concentrations)

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

Note: Toxicity data from the RTECS² and ECHA were consulted. The data from supplier (M)SDS were also consulted.

Section continued on the next page

CARBON CONDUCTIVE GREASE**846****Other Toxicological Effects**

Skin corrosion/irritation	Based on available data, the classification criteria are not met.
Serious eye damage/irritation	May cause mild eye irritation.
Sensitization (allergic reactions)	Based on available data, the classification criteria are not met.
Carcinogenicity (risk of cancer)	<p>The carbon black [1333-86-4] is possibly carcinogenic by airborne routes of exposures under WHMIS.</p> <p>Because the carbon black is bound in the liquid mixture, it is not available as an airborne hazard (dust) under normal use.</p> <p>Carbon Black [1333-86-4]</p> <p>IARC Group 2B: Possibly carcinogenic to humans</p> <p>ACGIH A4: Not classified as a human carcinogen</p> <p>CA Prop 65: Listed as a carcinogen (airborne, as unbound particles of respirable size)</p> <p>NTP: Not listed</p>
Mutagenicity (risk of heritable genetic effects)	Based on available data, the classification criteria are not met.
Reproductive Toxicity (risk to sex functions)	Based on available data, the classification criteria are not met.
Teratogenicity (risk of fetus malformation)	Based on available data, the classification criteria are not met.
STOT-single exposure	Based on available data, the classification criteria are not met.
STOT-repeated exposure	Based on available data, the classification criteria are not met.
Aspiration hazard	There is no category 1 components, and the kinematic viscosity is $>20.5 \text{ mm}^2/\text{s}$ at 40°C .

CARBON CONDUCTIVE GREASE**846****Section 12: Ecological Information**

Ecological classifications are based on the IMDG/GHS criteria in conjunction with ecotoxicological data from our suppliers, the European Chemical Agency database (<http://echa.europa.eu>), and other reliable sources.

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

Chronic Ecotoxicity

Available toxicity data does not meet classification thresholds.

Biodegradability

Not readily biodegradable

Other Effects

Regulated VOC (Volatile Organic Compound) 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.

CARBON CONDUCTIVE GREASE**846****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 IMDG regulations.

Not Regulated

Note: Shipper must be appropriately trained and certified before involvement with the transport of dangerous goods.

Section 15: Regulatory Information**Canada****Domestic Substance List (DSL) / Non-Domestic Substance Lists (NDSL)**

All hazardous ingredients are listed on the DSL/NDSL.

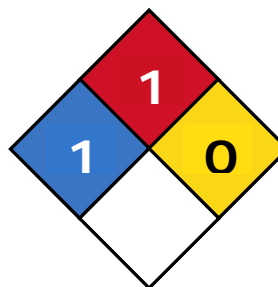
Hazardous Products Act (R.S.C., 1985, c. H-3)

The safety data sheet and label comply with the Hazardous Product Act and WHMIS 2015.

Section continued on the next page

CARBON CONDUCTIVE GREASE**846****USA****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)

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 does not contain ingredients that 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.

California Proposition 65 (Chemicals known to cause cancer or reproductive toxicity, June 06, 2014 revision, USA).

This product contains carbon black, but it is bound and exposures during normal conditions of uses are below the Safe Harbor Threshold.

Europe**RoHS** (Restriction of Hazardous Substances Directive)

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

WEEE (Waste Electrical and Electronic Equipment Directive)

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

CARBON CONDUCTIVE GREASE**846****Section 16: Other Information**

SDS Prepared by Michel Hachey
Date of Revision 29 August 2017
Supersedes 16 May 2017
Reason for Changes: Added new part number in Section 1 and other minor changes.

References

1) ACGIH 2017 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 (2017).

2) All toxicological data were checked against the RTECS (Registry of Toxic Effects of Chemical Substances®), MDL Information Systems, Inc.

Abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists (USA)
EC50	Half maximal effective concentration
EL50	Half maximal effective loading
NOELR	No observable effect loading ratio
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
STEL	Short-Term Exposure Limit
TCLo	Lowest published toxic concentration
TWA	Time Weighted Average
VOC	Volatile Organic Content

Section continued on the next page

CARBON CONDUCTIVE GREASE**846**

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

Disclaimer This material safety data sheet is provided as an information resource only. *M.G. Chemicals, Ltd.* believes the information contained herein is accurate and compiled from reliable sources. It is the responsibility of the user to query and verify any information seeming suspect where doubt on the validity may exist. The buyer assumes all responsibility of using and handling the product in accordance with local, regional, national, and international regulations.