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Safety Data Sheet

Section 1: Product and Company Identification

Product Identifier and Other Means of Identification

Product Name: Premium Carbon Conductive Grease **Related Part #:** 8481-80G, 8481-1P **SDS Code:** 8481

Recommended Use and Restriction on Use

Use: Improves connections between electrical contacts without oil bleeding.

Uses Advised Against: Do not process in a manner the material to form mist or dust

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: <u>support@mgchemicals.com</u>
WEB <u>www.mgchemicals.com</u>

1-905-331-1396
Fax 1-905-331-2682
E-мац: info@mgchemicals.com

E-маі (Competent Person): <u>sds@mgchemicals.com</u>

Emergency Phone Number

For hazardous material incidents ONLY—leaks, spills, fires, exposures or accidents USA or CANADA: Call CHEMTREC 2: 1-800-424-9300

For emergencies involving dangerous goods; Collect 24/7 CANADA: Call CANUTEC **2**: *1-613-996-6666* or **666* on cellular phones



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Section 2: Hazards Identification

Classification of Hazardous Chemical

WHMIS Classification

Not applicable

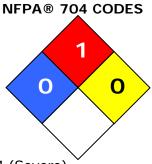
GHS Categories

Criteria		Category	Signal Word	Pictograms
Aquatic environmental hazard	Chronic	4	none	No Symbol Mandated

Other Classifications

HMIS® RATING

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



Approximate HMIS and NFPA Risk Ratings Legend: 0 (Low or none); 1 (Slight); 2 (Moderate); 3 (Serious); 4 (Severe)

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Label Elements

Signal Word	Not applicable
Pictograms	Hazard Statements
No Symbol Mandated	H413: May cause long lasting harmful effects to aquatic life
	Precautionary Statements
Prevention	P273: Avoid release to the environment.
Disposal	P501: Dispose of contents/container in accordance to local/regional/national/international regulations.

Other Hazards

Not applicable

CAS #	Chemical Name	Wt%
Non-hazardous ^{a)}	Synthetic oil	80-90%
1333-86-4	carbon black, non-respirable	15-25%
TBD	zinc compound	1-3%
112945-52-5	Amorphous fumed silica	0.1-1%

a) Non-hazardous component under the U.S. OSHA HazCom 2012, the Canadian Controlled Product Regulations (SOR 88-66)



PREMIUM CARBON CONDUCTIVE GREASE

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Section 4: First Aid Measures		
Exposure Condition	GHS Code/Symptoms/Precautionary Statements	
IF IN EYES	P305, P351, P338, P313, P337+P338	
Immediate Symptoms	irritation, redness, pain	
Response	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.	
If eye irritation persists	Get medical attention.	
IF ON SKIN	P302, P353, P362+P364, P308+P313	
Immediate Symptoms	None known	
Response	Wash with plenty of water and soap.	
If skin irritation occurs	Get medical advice.	
IF SWALLOWED	P301, P330, P331, P314 (<i>Not a likely route of exposure under normal use</i>)	
Immediate Symptoms	none known	
Response	Rinse mouth. Do NOT induce vomiting.	
If you feel unwell	Get medical attention.	
IF INHALED	P304, P340, P332, P314 (<i>Not a likely route of exposure under normal use</i>)	
Immediate Symptoms	none known	
Response	Remove person to fresh air and keep comfortable for breathing.	
If you feel unwell	Get medical attention.	



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Section 5: Fire Fighting Measures				
Auto-ignition Not Temperature establish	Flash Point ^{a)}	>285 °C [>545 °F]	LFL [LEL] ^{b)} UFL [UEL]	Not applicable
In case of fire	P370 + P378			
Response	Use dry chemical, ca to extinguish. Do no	,	,	or water spray
Combustion Products	Produces carbon ox	ides (CO, CO ₂)), oxide of sulfur	, and smoke.
General Information	Will burn if involved	in a fire.		
a) Cleveland Open Cup				

b) LFL = Lower Flammability [or Explosion] Limit (in volume %);

UFL = Upper Flammability [or Explosion] Limit (in volume %)

Section 6: Accidental Release Measures

Personal Protection	See Section 8.
Containment	Not applicable
Cleaning	Collect liquid in a sealable, oil-resistant container. Sprinkle inert absorbent compound onto spill, then sweep into the container. Wipe up further residue with paper towel and place in container. Wash spill area with soap and water to remove the last traces of residue.
Disposal	Dispose of spill waste according to Section 13.

Section 7: Handling and Storage

Prevention	Do not eat, drink, or smoke when using this product.
Handling	Wear protective gloves/clothing/eye protection. Wash thoroughly after handling.
Storage	No special storage instructions needed.



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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 U.S.A. OSHA PEL Canada AB Canada BC Canada ON Canada QC	3.5 mg/m ³ 3.5 mg/m ³ 3.5 mg/m ³ 3.5 mg/m ³ 3.5 mg/m ³ 3.5 mg/m ³	

Note: Ingredients are listed in descending order of weight contribution (from greatest to least). The ACGIH², OSHA, and Canadian provinces exposure limits were consulted. Limits from by RTECS database¹ of the Canadian Centre for Occupational Health and Safety (CCOHS) a data from suppliers' SDS were also consulted. Short term exposure limits (STEL) are usually for 15 min and long term permissible exposure limits (PEL) for 8 h. a) Respirable airborne particles

Engineering Controls Ventilation Not Applicable Under normal conditions of use or emergency situations, the carbon black is not available as an airborne respiratory hazard because it is inextricably bound in the grease matrix. **Personal Protective Equipment** Eye protection Even when not mandated, it is good practice to wear appropriate protective eyeglasses or chemical safety goggles. **Skin Protection** Not required, but wearing appropriate protective gloves/clothing to prevent carbon black soiling. **RECOMMENDATION:** Use butyl rubber, Latex, neoprene, or other chemically resistant gloves. While the product is of low toxicity, it is hard to clean. **Respiratory Protection** If dust/mist is generated under extreme conditions, wear oil resistant or oil proof particulate respirators or filter masks. **RECOMMENDATION:** Consult your local safety supply store to ensure your respirator or mask. Continued on the next page



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General Hygiene Considerations

Wash hands with water and soap after use.

Section 9: Physical and Chemical Properties

Physical State	Liquid	Appearance	Black, grease
Odor	Odorless	Odor Threshold	Not applicable
рН	Not available	Specific Gravity	1.03
Solubility in Water	Slightly soluble	Melting/Freezing Point	Not available
Boiling Point	Not available	Evaporation Rate	Not available
Flash Point ^{a)}	>285 °C [>545 °F]	Vapor Pressure @ 20 °C	Not available
Lower Flammability Limit	Not available	Upper Flammability Limit	Not available
Auto-ignition Temperature	Not available	Decomposition Temperature	Not available
Viscosity	610 000 cSt	Vapor Density	Not available
Partition Coefficient	Not available		

a) Cleveland Open Cup

Section 10: Stability and Reactivity

Stabilities	Chemically stable at normal temperatures and pressures
Conditions to Avoid	Ignition sources, and incompatible substances
Incompatibilities	Strong oxidizing agents
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 Entry

Eyes, ingestion, inhalation, and skin

SkinMay cause mild skin irritation.InhalationNot a likely route of exposure. None known or expected.
Inhalation Not a likely route of exposure Nene known or exported
initial attor were a likely foure of exposure. Note known of expected.
Ingestion Not a likely route of exposure. It may cause gastrointestinal discomfort.
Chronic None known

Acute Toxicity (Lethal Exposure Concentrations)

Chemical Name	LD50 oral	LD50 dermal	LC50 inhalation	TCLo inhalation
carbon black	>15 g/kg Rat	>3 g/kg Rabbit	Not available	1.6 mg/m ³ 7 h Rat
Amorphous fumed silica	3 160 mg/kg Rat	≥2 000 mg/kg Rabbit ^{b)}	Not available	154 mg/m ³ 6 h 4 w 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. b) Value from supplier MSDS

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Skin corrosion/irritation	Does not meet classification criteria. Slight irritation possible.
Serious eye damage/irritation	Does not meet classification criteria. May cause light eye irritation. Contains abrasive particles.
Sensitization (allergic reactions)	Not known or expected
Carcinogenicity (risk of cancer)	The 8481 grease is not classified as carcinogenic. Because the carbon black is inextricably bound in a highly viscous grease mixture, it is not available as an airborne hazard (dust, mist, or spray) under normal and foreseeable use or emergency conditions.
	Respirable carbon black [1333-86-4] would be classified as possibly carcinogenic by airborne routes of exposures.
	Carbon Black [1333-86-4], respirable
	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
Reproductive Toxicity (risk to sex functions)	Not available
Teratogenicity (risk of fetus malformation)	Not available
Mutagenicity (risk of heritable genetic effects)	Not available
STOT-single exposure	Not available
STOT-repeated exposure	Not available
Aspiration hazard	Not applicable. There is no evidence of aspiration hazard toxicity for the mixture. The material doesn't contain any known class 1 aspiration hazard components and the viscosity is >20.5 mm ² /s.



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Section 12: Ecological Information

Acute Ecotoxicity

Does not meet classification criteria.

The synthetic oil used has highest environmental impact among listed components according to fish, daphnia magna, and algae data provided by oil suppliers. The acute fish toxicity has a LL50 (Lethal Loading Levels) >100 mg/L. Similarly, its daphnia magna acute toxicity is given as EL50 (Effective Load) >100 mg/L. And for the algae, it occurs at a EL50 > 100 mg/L. Other components have higher threshold values from 1,000 mg/L to 10,000 mg/L.

Chronic Ecotoxicity

Does not meet classification criteria

Biodegradability

Not readily biodegradable

Section 13: Disposal Information

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

Section 14: Transport Information

Ground

Not regulated by Canadian TDG or U.S. DOT

Air

Not regulated by ICAO-IATA

Sea

Not regulated by IMDG



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Section 15: Regulatory Information

Canada

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

All hazardous ingredients are listed on the DSL/NDSL.

Health Canada

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

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.

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 hazardous air pollutants.

SARA (Superfund Amendments and Reauthorization Act of 1986, USA, 40 CFR 372.4)

None of the chemicals in this product have a reportable quantity.

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

This product does not contains substances 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, Sept 2, 2011 revision, USA).

This product contains carbon black (airborne, unbound particles of respirable size), which is listed as a carcinogen.

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.

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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

Date of Preparation 02 October 2013

Revision Date Not applicable

Reason for Changes: Not applicable.

Reference

1) All toxicological data were checked against the RTECS (Registry of Toxic Effects of Chemical Substances®)

2) ACGIH 2011 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 (2011).

Abbreviations

ACGIH American Conference of Governmental Industrial Hygienists

GHS: Globally Harmonized System of Classification of Labeling of Chemicals

- LC50 Lethal Concentration 50%
- 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

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

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