

PREMIUM CARBON CONDUCTIVE GREASE

8481

Safety Data Sheet

Section 1: Product and Company Identification**Product Identifier and Other Means of Identification****Product Name:** Premium Carbon Conductive Grease**SDS Code:** 8481**Related Part #** 8481-1, 8481-2, 8481-3, 8481-80G, 8481-1P**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
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CANADAMG Chemicals (Head Office)
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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 24/7
CANADA: Call CANUTEC ☎: **+1-613-996-6666** or ***666** on cellular phones

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Section 2: Hazard(s) Identification
Classification of Hazardous Chemical
GHS Categories

Criteria	Category	Signal Word	Pictograms
Environmental Hazard Chronic Aqua. Tox.	3	None	none

Note: The degree of severity is ranked within each hazard class from 1 (Highest Severity) to up to 5 (Lowest Severity), which is opposite to HMIS and NFPA conventions. Severity category rankings do not allow comparisons between classes.

Label Elements

Signal Word	<i>None Mandated</i>
Pictograms	Hazard Statements
<i>No Symbol Mandated</i>	H412: Harmful to aquatic life with long lasting effects
Prevention	Precautionary Statements
P273	Avoid release to the environment.
Disposal	Precautionary Statements
P501	Dispose of contents/container in accordance to local/regional/international regulations.

Hazards Not Otherwise Classified

Not applicable

Section 3: Composition/Information on Ingredients

CAS #	Chemical Name	%(weight)
non-hazardous ^{a)}	synthetic oil	82%
1333-86-4	carbon black	12%
12001-85-3	naphthenic acids, zinc salts	2%
112945-52-5	amorphous fumed silica	0.3%

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

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<i>Exposure Condition</i>	<i>GHS Code/Symptoms/Precautionary Statements</i>
IF INHALED	P304 + P340
Immediate Symptoms	<i>none known</i>
Response	Remove person to fresh air and keep comfortable for breathing.
IF IN EYES	P305 + P351 + P338
Immediate Symptoms	<i>none known</i>
Response	Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF ON SKIN	P302 + P352, P332 + P313
Immediate Symptoms	<i>none known</i>
Response	Wash with plenty of water. If skin irritation occurs: Get medical advice/attention.
IF SWALLOWED	P301 + P330, P331
Immediate Symptoms	<i>none known</i>
Response	Rinse mouth. Do NOT induce vomiting.

Section 5: Fire Fighting Measures

Extinguishing Media	Use dry chemical, carbon dioxide, chemical foam, or water spray to extinguish. Do not use water jet.
Specific Hazards	Not flammable or combustible, but burns if involved in a fire. Avoid breathing combustion products.
Combustion Products	Produces carbon oxides (CO, CO ₂), oxide of sulfur, and smoke.
Fire-Fighter	Wear self-contained breathing apparatus and full fire-fighting turn-out gear.

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Section 6: Accidental Release Measures

- Personal Protection** Use personal protection recommended in Section 8.
- Precautions for Response** Avoid breathing the fumes. Remove or keep away all sources of extreme heat.
- Environmental Precautions** Prevent spill from entering drains and waterways.
- Containment Methods** Not applicable
- Cleaning Methods** Collect paste in a sealable, solvent-resistant container. Sprinkle inert absorbent compound onto spill, then sweep into the container. Wipe up further residue with paper towel and place dirty towels in container. Wash spill area with soap and water to remove the last traces of residue.
- Disposal Methods** Dispose of spill waste according to Section 13.

Section 7: Handling and Storage

- Prevention** Avoid breathing fumes.
Avoid release to the environment.
- Handling** Wear protective gloves/eye protection.
Wash hands thoroughly after handling.
- Storage** No special storage instructions needed.
Recommendation: Keep in a dry and clean area, away from incompatible substances.

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

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Note: Ingredients are listed in descending weight contribution order (from greatest to least). The ACGIH¹, OSHA (Table Z-1), and Canadian provinces exposure limits were consulted. Limits from by RTECS database² and data 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).

Note: Since all particles are inextricably bound in the grease, no respirable airborne particles are possible during normal use.

Personal Protective Equipment**Eye protection**

Wear appropriate protective eyeglasses or chemical safety goggles.

Recommendation: Ensure that glasses have side shields for lateral protection.

Skin Protection

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

Respiratory Protection

In the unlikely event of exposure to mist, wear oil resistant or oil proof particulate respirators or filter masks.

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	Lower Flammability Limit	Not available
Appearance	Black, grease	Upper Flammability Limit	Not available
Odor	Odorless	Vapor Pressure @20 °C	Not available
Odor Threshold	Not applicable	Vapor Density	Not available
pH	Not available	Specific Gravity @25 °C	1.03
Freezing/Melting Point	Not available	Solubility in Water	slightly soluble
Boiling Point	Not available	Partition Coefficient	Not available
Flash Point ^{a)}	>285 °C [>545 °F]	Auto-ignition Temperature	Not available
Evaporation Rate	Not available	Decomposition Temperature	Not available
Flammability (solid, gas)	Not available	Viscosity @40 °C	610 000 cSt

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, open flames, excessive heat, 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

Eye contact, Ingestion, Inhalation, and Skin contact

Eyes	May cause redness and mild irritation.
Skin	May cause mild skin irritation.
Inhalation	None expected under normal conditions. When heated to extreme temperatures, product fumes or combustion gases may result in toxic gas emissions.
Ingestion	No effects known
Chronic	No effects known

Acute Toxicity (Lethal Exposure Concentrations)

Chemical Name	LD50 oral	LD50 dermal	LC50 inhalation
carbon black	>15 g/kg Rat	>3 g/kg Rabbit	Not established
naphthenic acids, zinc salts	4920 mg/kg Rat	>2 g/kg Rabbit	>11 600 mg/m ³ 4 h Rat
amorphous fumed silica	3 160 mg/kg Rat	≥2 000 mg/kg Rabbit ^{b)}	Not established

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

b) Value from supplier (M)SDS

Other Toxicological Effects

Skin corrosion/irritation	Based on available data, the classification criteria are not met.
Serious eye damage/irritation	Based on available data, the classification criteria are not met.
Sensitization (allergic reactions)	Based on available data, the classification criteria are not met.

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PREMIUM CARBON CONDUCTIVE GREASE**8481****Carcinogenicity**

(risk of cancer)

The carbon black [1333-86-4] is possibly carcinogenic by airborne routes of exposures under WHMIS.

Because the carbon black is bound in the liquid mixture, it is not available as an airborne hazard (dust) under normal use.

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 (airborne, as unbound particles of respirable size)

NTP: Not listed

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.

Mutagenicity

(risk of heritable genetic effects)

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

Classification criteria are not met: 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

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 synthetic oil is the predominant component and has very low environmental toxicity. The acute fish toxicity has a LL50 (Lethal Loading Levels) $>100 \text{ mg/L}$. Similarly, its Daphnia magna acute toxicity is given as EL50 (Effective Load) $>100 \text{ mg/L}$. And for the algae, it occurs at a EL50 $>100 \text{ mg/L}$.

The minor zinc naphtenate component has a LC50 96 h of 1.1 mg/L for *Oncorhynchus mykiss* (rainbow trout), an EC50 of 4.6 mg/L *Daphnia magna*, and EC50 0.48 mg/L algae.

Based on available data, carbon black is not classified as environmental hazards according to GHS criteria.

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PREMIUM CARBON CONDUCTIVE GREASE**8481****Acute Ecotoxicity**

Category 3

Harmful to aquatic life.

Chronic Ecotoxicity

Category 3

Harmful to aquatic life with long lasting effects.

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****Refer to TDG regulations** (Canadian Transportation of Dangerous Goods regulations) and **US DOT 49 CFR** (Parts 100 to 185) **Regulations.**

Not Regulated

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

Not Regulated

Sea**Refer to IMDG Dangerous Goods Regulations.**

Not Regulated

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Section 15: Regulatory Information

Canada

WHMIS 1988 Classification

This mixture doesn't contain any ingredient giving rise to a classification under WHMIS.

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.

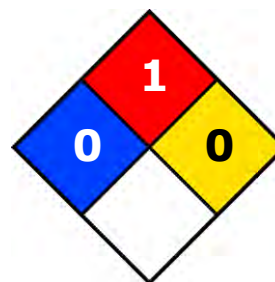
USA

Other Classifications

HMIS® RATING

HEALTH:	0
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 products that are listed as hazardous air pollutants.

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PREMIUM CARBON CONDUCTIVE GREASE**8481****EPCRA** (Emergency Planning and Right to Know Act, USA, 40 CFR 372.45)

This product contains 2% zinc compounds which is 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, which is listed as a carcinogenic substance when airborne, as unbound particles of respirable size.

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

This product does not contain any lead, cadmium, mercury, hexavalent chromium, PBB's, or PBDE's, 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.

Section 16: Other Information

SDS Prepared by	Michel Hachey
Revision Date	23 November 2015
Date of Preparation	30 September 2014
Reason for Changes:	Minor format changes

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®).

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PREMIUM CARBON CONDUCTIVE GREASE**8481****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%
OEL	Occupational Exposure Limit
PEL	Permissible Exposure Limit
STEL	Short-Term Exposure Limit
TCLo	Lowest published toxic concentration
TWA	Time Weighted Average
VOC	Volatile Organic Content

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