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

# Safety Data Sheet

## Section 1: Identification

### Product Identifier and Other Means of Identification

**Product Name:** 8481

**Other Means of Identification:** Premium Carbon Conductive Grease

**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
1210 Corporate Drive
Burlington, Ontario L7L 5R6
CANADA

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

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

☎ +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 Verisk 3E at ***+1-866-519-4752*** or ***+1-760-476-3962***
(Service access code: 335388)

**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

## Section 2: Hazard(s) Identification

### Classification of Hazardous Chemical

### GHS Categories

| Criteria | Category | Signal Word | Pictograms |
|---|---|---|---|
| Hazardous to the Aquatic Environment Chronic | 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** | *No signal word* |
|---|---|
| **Pictograms** | **Hazard Statements** |
| *No Symbol Mandated* | 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 in accordance to local, regional, national, and international regulations. |

### 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) |
|---|---|---|
| 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)

## Section 4: First Aid Measures

| *Exposure Condition* | *GHS Code/Symptoms/Precautionary Statements* |
|---|---|
| **IF INHALED** | P304 + P340 |
| **Immediate Symptoms** | *low toxicity: no symptoms known or expected* |
| **Response** | Remove person to fresh air and keep comfortable for breathing. |
| **IF IN EYES** | P305 + P351 + P338 |
| **Immediate Symptoms** | *low toxicity: redness, mild irritation* |
| **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** | *low toxicity: mild skin irritation* |
| **Response** | Wash with plenty of water. If skin irritation occurs: Get medical advice or attention. |
| **IF SWALLOWED** | P301 + P330 + P331 |
| **Immediate Symptoms** | *low toxicity: no symptoms known or expected* |
| **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. |

## Section 6: Accidental Release Measures

| | |
|---|---|
| **Personal Protection** | Use personal protection recommended in Section 8. |
| **Precautions for Response** | Avoid breathing 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 and 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 |

*Note:* Ingredients are listed in descending weight contribution order (from greatest to least). The ACGIH[1], OSHA (Table Z-1), and Canadian provinces exposure limits were consulted. Limits from the RTECS database[2] 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 grease matrix, 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:** Ensure that glasses have side shields for lateral protection.

**Skin Protection**

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

*Section continued on the next page*

**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 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** | Odorless | **Vapor Pressure @20 °C** | Not available |
| **Odor Threshold** | Not applicable | **Vapor Density** | Not available |
| **pH** | Not available | **Relative Density @25 °C** | 1.03 |
| **Freezing/Melting Point** | Not available | **Solubility in Water** | slightly soluble |
| **Initial Boiling Point** | Not available | **Partition Coefficient n-octanol/water** | 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 applicable | **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. |

## Section 11: Toxicological Information

### Summary of Effects and Symptoms by Routes of Exposure

| | |
|---|---|
| **Eyes** | Low toxicity: may cause redness and mild irritation. |
| **Skin** | Low toxicity: 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** | 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 |
|---|---|---|---|
| carbon black | >15 g/kg Rat | >3 g/kg Rabbit | Not available |
| naphthenic acids, zinc salts | 4 920 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 available |

*Note:* Toxicity data from the RTECS[2] and ECHA database were consulted. The data from supplier SDSs were also consulted.
b) Value from supplier SDS

*Section continued on the next page*

## 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. |
| **Carcinogenicity** (risk of cancer) | The carbon black [1333-86-4] is possibly carcinogenic by airborne routes of exposures under WHMIS.<br>Because the carbon black is bound in the liquid mixture, it is not available as an airborne hazard (dust) under normal use.<br>**Carbon Black [1333-86-4]**<br>IARC Group 2B: Possibly carcinogenic to humans<br>ACGIH A4: Not classified as a human carcinogen<br>CA Prop 65: Listed as a carcinogen (airborne, as unbound particles of respirable size)<br>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 toxicants and its viscosity is >20.5 $mm^2/s$ at 40 °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 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.

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.

### 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 |

*Section continued on the next page*

### Air

| **Refer to ICAO-IATA Dangerous Goods Regulations.** |
|---|
| Not Regulated |

### Sea

| **Refer to IMDG Dangerous Goods Regulations.** |
|---|
| Not Regulated |

## 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.

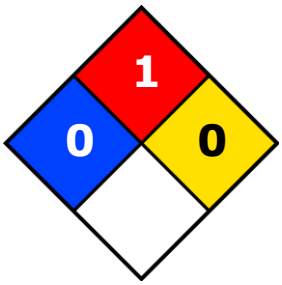
### USA

### 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)

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**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.

**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)

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.

## Section 16: Other Information

| | |
|---|---|
| **SDS Prepared by** | Regulatory Department |
| **Revision Date** | 04 March 2020 |
| **Date of Preparation** | 12 December 2018 |
| **Reason for Changes:** | Change to emergency phone numbers. |

**Reference**

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®)

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***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 |

**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.

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