Section 1: Product & Company Identification

Product Name: Brake Caliper Synthetic Grease
Product Number (s): 05351, 05353, 05354, 05359, 75353, 75359
Product Use: Lubricating grease for brakes

Manufacturer / Supplier Contact Information:
In United States: CRC Industries, Inc.
885 Louis Drive
Warminster, PA 18974
www.crcindustries.com
1-215-674-4300 (General)
(800) 521-3168 (Technical)
(800) 272-4620 (Customer Service)
www.crcindustries.com
1-905-670-2291
(800) 521-3168 (Technical)
(800) 272-4620 (Customer Service)

In Canada: CRC Canada Co.
2-1246 Lorimar Drive
Mississauga, Ontario L5S 1R2
www.crc-canada.ca

In Mexico: CRC Industries Mexico
Av. Benito Juárez 4055 G
Colonia Orquidea
San Luis Potosí, SLP CP 78394
www.crc-mexico.com
52-444-824-1666

24-Hr Emergency – CHEMTREC: (800) 424-9300 or (703) 527-3887

Section 2: Hazards Identification

Emergency Overview
Appearance & Odor: Dark gray semi solid grease with a faint odor

Potential Health Effects:

ACUTE EFFECTS:
EYE: May cause irritation.
SKIN: Repeated or prolonged contact can result in drying of the skin.

INHALATION: Heating can generate vapors that may cause respiratory irritation, nausea and headaches. Inhalation hazard at room temperature is unlikely due to the low volatility of this product.

INGESTION: Can cause stomach ache and vomiting.

CHRONIC EFFECTS: Unknown

TARGET ORGANS: None known

Medical Conditions Aggravated by Exposure: skin or respiratory conditions

See Section 11 for toxicology and carcinogenicity information on product ingredients.
Section 3: Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>CAS NUMBER</th>
<th>% by Wt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medium polyalphaolefins</td>
<td>68037-01-4</td>
<td>50 - 70</td>
</tr>
<tr>
<td>Fatty acids, C5-C10, esters w/ pentaerythritol</td>
<td>68424-31-7</td>
<td>10 - 20</td>
</tr>
<tr>
<td>Siliconized silica</td>
<td>67762-90-7</td>
<td>7 - 13</td>
</tr>
<tr>
<td>Molybdenum Disulfide</td>
<td>1317-33-5</td>
<td>1 – 5</td>
</tr>
<tr>
<td>Natural Graphite</td>
<td>7782-42-5</td>
<td>1 – 5</td>
</tr>
<tr>
<td>Zinc, dithiophosphate di-C1-14-alkyl esters</td>
<td>68649-42-3C</td>
<td>1 – 2</td>
</tr>
<tr>
<td>Crystalline silica, quartz</td>
<td>14808-60-7A</td>
<td>&lt; 0.2</td>
</tr>
</tbody>
</table>

Section 4: First Aid Measures

Eye Contact: Immediately flush with plenty of water for 15 minutes. Call a physician if irritation persists.

Skin Contact: Remove contaminated clothing and wash affected area with soap and water. Call a physician if irritation persists. Wash contaminated clothing prior to re-use.

Inhalation: Remove person to fresh air. Keep person calm. If not breathing, give artificial respiration. If breathing is difficult give oxygen. Call a physician.

Ingestion: Do not induce vomiting. Seek medical attention.

Note to Physicians: Treat symptomatically.

Section 5: Fire-Fighting Measures

Flammable Properties: As defined by OSHA, this product is nonflammable.

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash Point</td>
<td>&gt; 350°F / &gt;177°C (COC)</td>
</tr>
<tr>
<td>Autoignition Temperature</td>
<td>ND</td>
</tr>
<tr>
<td>Upper Explosive Limit</td>
<td>ND</td>
</tr>
<tr>
<td>Lower Explosive Limit</td>
<td>ND</td>
</tr>
</tbody>
</table>

Fire and Explosion Data:

Suitable Extinguishing Media: Foam, CO₂, dry chemical, sand, dolomite

Products of Combustion: Acrid smoke/fumes; oxides of carbon, sulfur

Explosion Hazards: Containers, when exposed to heat from fire, may build pressure and rupture.

Protection of Fire-Fighters: Firefighters should wear self-contained, NIOSH-approved breathing apparatus for protection against suffocation and possible toxic decomposition products. Proper eye and skin protection should be provided. Use water spray to keep fire-exposed containers cool and to knock down vapors which may result from product decomposition.

Section 6: Accidental Release Measures

Personal Precautions: Use personal protection recommended in Section 8.

Environmental Precautions: Take precautions to prevent contamination of ground and surface waters. Do not flush into sewers or storm drains.
Section 7: Handling and Storage

Handling Procedures: Keep container away from heat, sparks, and open flame. High temperatures may produce irritating vapors. Eye wash station should be available at work place. For product use instructions, please see the product label.

Storage Procedures: Store in a cool dry area out of direct sunlight. Containers should be tightly closed while in storage. Store separated from acids and oxidizing materials.

Aerosol Storage Level: NA

Section 8: Exposure Controls/ Personal Protection

Exposure Guidelines:

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>OSHA</th>
<th>ACGIH</th>
<th>OTHER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medium polyalphaolefins</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
</tr>
<tr>
<td>Fatty acids, C5-C10, esters w/pentaerythritol</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
</tr>
<tr>
<td>Siliconized silica</td>
<td>6</td>
<td>NE</td>
<td>10</td>
</tr>
<tr>
<td>Molybdenum disulfide</td>
<td>NE</td>
<td>NE</td>
<td>10</td>
</tr>
<tr>
<td>Natural graphite</td>
<td>15*</td>
<td>NE</td>
<td>2</td>
</tr>
<tr>
<td>Zinc, dithiophosphate di-C1-14-alkyl esters</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
</tr>
<tr>
<td>Crystalline silica, quartz</td>
<td>0.3</td>
<td>NE</td>
<td>0.025</td>
</tr>
</tbody>
</table>

* – mppcf (millions of particles per cubic foot of air)
N.E. – Not Established  (c) – ceiling  (s) – skin  (v) – vacated

Controls and Protection:

Engineering Controls: Area should have ventilation to provide fresh air. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at the source, preventing dispersion into the general work area. Use mechanical means if necessary to maintain vapor levels below the exposure guidelines. If working in a confined space, follow applicable OSHA regulations.

Respiratory Protection: None required for normal work where adequate ventilation is provided. If engineering controls are not feasible or if exposure exceeds the applicable exposure limits, use a NIOSH-approved cartridge respirator with organic vapor cartridge. Air monitoring is needed to determine actual employee exposure levels. Use a self-contained breathing apparatus in confined spaces and for emergencies.

Eye/face Protection: For normal conditions, wear safety glasses.

Skin Protection: Use protective gloves such as latex or nitrile.
Section 9: Physical and Chemical Properties

Physical State: semi-solid grease
Color: dark grey
Odor: mild
Odor Threshold: ND
Specific Gravity: 0.90 @ 60°F / 16°C
Initial Boiling Point: ND
Freezing Point: ND
Vapor Pressure: < 0.1 mmHg @ 68°F / 20°C
Vapor Density: > 0.5 (air = 1)
Evaporation Rate: slow
Solubility: insoluble in water
Coefficient of water/oil distribution: ND
pH: NA
Volatile Organic Compounds: wt %: 1.5 g/L: 14 lbs/gal: 0.12

Section 10: Stability and Reactivity

Stability: Stable
Conditions to Avoid: Heat
Incompatible Materials: Avoid contact with acids and oxidizing substances.
Hazardous Decomposition Products: Oxides of carbon, sulfur
Possibility of Hazardous Reactions: No

Section 11: Toxicological Information

Long-term toxicological studies have not been conducted for this product. The following information is available for components of this product.

Acute Toxicity:

<table>
<thead>
<tr>
<th>Component</th>
<th>Oral LD50 (rat) &gt; 2000 mg/kg</th>
<th>Dermal LD50 (rabbit) &gt; 2000 mg/kg</th>
<th>Inhalation LC50 (rat)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medium polyalphaolefins</td>
<td>No data</td>
<td>No data</td>
<td>No data</td>
</tr>
<tr>
<td>Fatty acids, C5-C10, esters w/pentaerythritol</td>
<td>No data</td>
<td>No data</td>
<td>No data</td>
</tr>
<tr>
<td>Siliconized silica</td>
<td>No data</td>
<td>No data</td>
<td>No data</td>
</tr>
<tr>
<td>Molybdenum disulfide</td>
<td>No data</td>
<td>No data</td>
<td>&gt; 2820 mg/m³/4H</td>
</tr>
<tr>
<td>Natural graphite</td>
<td>No data</td>
<td>No data</td>
<td>No data</td>
</tr>
<tr>
<td>Zinc, dithiophosphate di-C1-14-alkyl esters</td>
<td>No data</td>
<td>No data</td>
<td>No data</td>
</tr>
<tr>
<td>Crystalline silica, quartz</td>
<td>No data</td>
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</table>
**Product Name:** Brake Caliper Synthetic Grease  
**Product Number (s):** 05351, 05353, 05354, 05359, 75353, 75359

### Chronic Toxicity:

<table>
<thead>
<tr>
<th>Component</th>
<th>OSHA Carcinogen</th>
<th>IARC Carcinogen</th>
<th>NTP Carcinogen</th>
<th>Irritant R (mild)</th>
<th>Sensitizer Unknown</th>
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</thead>
<tbody>
<tr>
<td>Medium polyalphaolefins</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Unknown</td>
<td>Unknown</td>
</tr>
<tr>
<td>Fatty acids, C5-C10, esters w/pentaerythritol</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Unknown</td>
<td>Unknown</td>
</tr>
<tr>
<td>Siliconized silica</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Unknown</td>
<td>Unknown</td>
</tr>
<tr>
<td>Molybdenum disulfide</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>E (mild) / S (mild) / R (mild)</td>
<td>Unknown</td>
</tr>
<tr>
<td>Natural graphite</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>E (mild) / S (mild) / R (mild)</td>
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<td>Zinc, dithiophosphate di-C1-14-alkyl esters</td>
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<tr>
<td>Crystalline silica, quartz</td>
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<td>Known Carcinogen</td>
<td>E (moderate) / R (moderate)</td>
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<table>
<thead>
<tr>
<th>Component</th>
<th>Reproductive Toxicity</th>
<th>Teratogenicity</th>
<th>Mutagenicity</th>
<th>Synergistic Effects</th>
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<tbody>
<tr>
<td>Medium polyalphaolefins</td>
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<td>Fatty acids, C5-C10, esters w/pentaerythritol</td>
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<td>Siliconized silica</td>
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<td>Molybdenum disulfide</td>
<td>No information available</td>
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<tr>
<td>Natural graphite</td>
<td>No information available</td>
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<tr>
<td>Zinc, dithiophosphate di-C1-14-alkyl esters</td>
<td>No information available</td>
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<table>
<thead>
<tr>
<th>Component</th>
<th>Ecotoxicity</th>
<th>Persistence / Degradability</th>
<th>Bioaccumulation / Accumulation</th>
<th>Mobility in Environment</th>
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<tbody>
<tr>
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<td>No information available</td>
<td>No information available</td>
<td>No information available</td>
</tr>
</tbody>
</table>

### Section 12: Ecological Information

Ecological studies have not been conducted for this product. The following information is available for components of this product.

**Ecotoxicity:** No information available  
**Persistence / Degradability:** No information available  
**Bioaccumulation / Accumulation:** No information available  
**Mobility in Environment:** No information available

### Section 13: Disposal Considerations

**Waste Classification:** This product is not a RCRA hazardous waste. (See 40 CFR Part 261.20 – 261.33) Empty containers may be recycled.

All disposal activities must comply with federal, state, provincial and local regulations. Local regulations may be more stringent than state, provincial or national requirements.

### Section 14: Transport Information

**US DOT (ground):** Not Regulated  
**ICAO/IATA (air):** Not Regulated  
**IMO/IMDG (water):** Not Regulated  
**Special Provisions:** None
Section 15: Regulatory Information

U.S. Federal Regulations:

Toxic Substances Control Act (TSCA):
All ingredients are either listed on the TSCA inventory or are exempt.

Comprehensive Environmental Response, Compensation and Liability Act (CERCLA):
Reportable Quantities (RQ's) exist for the following ingredients: None

Spills or releases resulting in the loss of any ingredient at or above its RQ require immediate notification to the National Response Center (800-424-8802) and to your Local Emergency Planning Committee.

Superfund Amendments Reauthorization Act (SARA) Title III:
Section 302 Extremely Hazardous Substances (EHS): None

Section 311/312 Hazard Categories:
- Fire Hazard: No
- Reactive Hazard: No
- Release of Pressure: No
- Acute Health Hazard: No
- Chronic Health Hazard: No

Section 313 Toxic Chemicals: This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:
- Zinc compounds (< 2%)

Clean Air Act:
Section 112 Hazardous Air Pollutants (HAPs): None

Occupational Safety and Health Administration (OSHA):
This product is regulated under the Hazard Communication Standard.

U.S. State Regulations:

California Safe Drinking Water and Toxic Enforcement Act (Prop 65):
This product may contain the following chemicals known to the state of California to cause cancer, birth defects or other reproductive harm: Crystalline silica

Consumer Products VOC Regulations: This product is not regulated.

State Right to Know:
New Jersey: 14808-60-7, 1317-33-5,
Pennsylvania: 14808-60-7, 7782-42-5
Massachusetts: 14808-60-7, 1317-33-5, 7782-42-5
Rhode Island: 14808-60-7, 7782-42-5

Canadian Regulations:

Controlled Products Regulations:
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

WHMIS Hazard Class: D2A

Canadian DSL Inventory: All ingredients are either listed on the DSL Inventory or are exempt.

European Union Regulations:
Product Name: Brake Caliper Synthetic Grease
Product Number (s): 05351, 05353, 05354, 05359, 75353, 75359


Additional Regulatory Information: None

Section 16: Other Information

<table>
<thead>
<tr>
<th>HMIS® (II)</th>
<th>NFPA</th>
<th>1</th>
<th>1</th>
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<th>B</th>
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<tbody>
<tr>
<td>Health:</td>
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<td>1</td>
<td></td>
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<tr>
<td>Flammability:</td>
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<tr>
<td>Reactivity:</td>
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<tr>
<td>PPE:</td>
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</tr>
</tbody>
</table>

Ratings range from 0 (no hazard) to 4 (severe hazard)

Prepared By: Michelle Rudnick
CRC #: 2965
Revision Date: 11/16/2012

Changes since last revision: Removed Product Number

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. This information is accurate to the best of CRC Industries' knowledge or obtained from sources believed by CRC to be accurate. Before using any product, read all warnings and directions on the label. For further clarification of any information contained on this MSDS consult your supervisor, a health & safety professional, or CRC Industries.

ACGIH: American Conference of Governmental Industrial Hygienists
CAS: Chemical Abstract Service
CFR: Code of Federal Regulations
DOT: Department of Transportation
DSL: Domestic Substance List
g/L: grams per Liter
HMIS: Hazardous Materials Identification System
IARC: International Agency for Research on Cancer
IATA: International Air Transport Association
ICAO: International Civil Aviation Organization
IMDG: International Maritime Dangerous Goods
IMO: International Maritime Organization
lbs./gal: pounds per gallon
LC: Lethal Concentration
LD: Lethal Dose

NA: Not Applicable
ND: Not Determined
NIOSH: National Institute of Occupational Safety & Health
NFPA: National Fire Protection Association
NTP: National Toxicology Program
OSHA: Occupational Safety and Health Administration
PMCC: Pensky-Martens Closed Cup
PPE: Personal Protection Equipment
ppm: Parts per Million
RoHS: Restriction of Hazardous Substances
STEL: Short Term Exposure Limit
TCC: Tag Closed Cup
TWA: Time Weighted Average
WHMIS: Workplace Hazardous Materials Information System