



SAFETY DATA SHEET

1. Identification

Product identifier Synthetic Brake & Caliper Grease - 340 g

Other means of identification

Product Code No. 75353 (Item# 1006383)

Recommended use Lubricating grease for brakes

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufactured or sold by:

Company name CRC Canada Co.

Address
83 Galaxy Blvd
Unit 35 - 37
Toronto, ON M9W 5X6
Canada

Telephone

General Information 416-847-7750

**24-Hour Emergency
(CHEMTREC)** 800-424-9300 (Canada)

Website www.crc-canada.ca

E-mail Support.CA@crcindustries.com

2. Hazard identification

Physical hazards Not classified.

Health hazards Not classified.

Environmental hazards Not classified.

Label elements

Hazard symbol None.

Signal word None.

Hazard statement The mixture does not meet the criteria for classification.

Precautionary statement

Prevention Observe good industrial hygiene practices.

Response Wash hands after handling.

Storage Store away from incompatible materials.

Disposal Dispose of contents/container in accordance with local/regional/national/international regulations.

Other hazards None known.

Supplemental information When exposed to extreme heat or hot surfaces, vapors may decompose to harmful or fatal corrosive gases such as hydrogen fluoride.

3. Composition/information on ingredients

Mixtures

| Chemical name | Common name and synonyms | CAS number | % |
|--------------------------------------|--------------------------|-------------|----------|
| polypropylene glycol monobutyl ether | | 9003-13-8 | 80 - 100 |
| graphite | | 7782-42-5 | 5 - 10 |
| amorphous fumed silica | | 112945-52-5 | 3 - 7 |
| molybdenum disulphide | | 1317-33-5 | 1 - 5 |
| polytetrafluoroethylene | | 9002-84-0 | 1 - 5 |
| ethylene glycol | | 107-21-1 | 0.1 - 1 |

4. First-aid measures

| | |
|---|--|
| Inhalation | Move to fresh air. Call a physician if symptoms develop or persist. |
| Skin contact | Wash off with soap and water. Get medical attention if irritation develops and persists. |
| Eye contact | Rinse with water. Get medical attention if irritation develops and persists. |
| Ingestion | If swallowed, do NOT induce vomiting. Get medical attention if symptoms occur. |
| Most important symptoms/effects, acute and delayed | Direct contact with eyes may cause temporary irritation. |
| Indication of immediate medical attention and special treatment needed | Treat symptomatically. |
| General information | Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. |

5. Fire-fighting measures

| | |
|--|--|
| Suitable extinguishing media | Water spray. Foam. Dry chemical powder. Carbon dioxide (CO ₂). |
| Unsuitable extinguishing media | None known. |
| Specific hazards arising from the chemical | During fire, gases hazardous to health may be formed. When exposed to extreme heat or hot surfaces, vapors may decompose to harmful or fatal corrosive gases such as hydrogen fluoride. |
| Special protective equipment and precautions for firefighters | Self-contained breathing apparatus and full protective clothing must be worn in case of fire. |
| Fire fighting equipment/instructions | In case of fire: Stop leak if safe to do so. Move containers from fire area if you can do so without risk. Use water spray to cool unopened containers. Containers should be cooled with water to prevent vapor pressure build up. |
| General fire hazards | No unusual fire or explosion hazards noted. |

6. Accidental release measures

| | |
|--|--|
| Personal precautions, protective equipment and emergency procedures | Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. Ventilate closed spaces before entering them. For personal protection, see section 8 of the SDS. |
| Methods and materials for containment and cleaning up | Following product recovery, flush area with water. Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal. Clean surface thoroughly to remove residual contamination. Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. |
| Environmental precautions | Avoid discharge into drains, water courses or onto the ground. |

7. Handling and storage

| | |
|---|---|
| Precautions for safe handling | Avoid breathing vapors. Avoid contact with eyes. Avoid prolonged or repeated contact with skin. Provide adequate ventilation. Observe good industrial hygiene practices. For product usage instructions, see the product label. |
| Conditions for safe storage, including any incompatibilities | Store in a cool, dry place out of direct sunlight. Store at ambient temperature and atmospheric pressure. Keep container tightly closed. Store away from incompatible materials (see Section 10 of the SDS). |

8. Exposure controls/personal protection

Occupational exposure limits

US. ACGIH Threshold Limit Values Components

| | Type | Value | Form |
|--------------------------------|------|----------------------|----------------------|
| ethylene glycol (CAS 107-21-1) | STEL | 10 mg/m ³ | Aerosol, inhalable. |
| | | 50 ppm | Vapor fraction |
| | TWA | 25 ppm | Vapor fraction |
| graphite (CAS 7782-42-5) | TWA | 2 mg/m ³ | Respirable fraction. |

US. ACGIH Threshold Limit Values

| Components | Type | Value | Form |
|--|------|----------|----------------------|
| molybdenum disulphide (CAS 1317-33-5) | TWA | 3 mg/m3 | Respirable fraction. |
| | | 10 mg/m3 | Inhalable fraction. |

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

| Components | Type | Value | Form |
|--|---------|-----------|-------------|
| ethylene glycol (CAS 107-21-1) | Ceiling | 100 mg/m3 | |
| graphite (CAS 7782-42-5) | TWA | 2 mg/m3 | Respirable. |
| molybdenum disulphide (CAS 1317-33-5) | TWA | 3 mg/m3 | Respirable. |
| | | 10 mg/m3 | Total |

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

| Components | Type | Value | Form |
|--|---------|-----------|--------------|
| ethylene glycol (CAS 107-21-1) | Ceiling | 100 mg/m3 | Aerosol. |
| | | 50 ppm | Vapor. |
| | STEL | 20 mg/m3 | Particulate. |
| | TWA | 10 mg/m3 | Particulate. |
| graphite (CAS 7782-42-5) | TWA | 2 mg/m3 | Respirable. |
| molybdenum disulphide (CAS 1317-33-5) | TWA | 3 mg/m3 | Respirable. |
| | | 10 mg/m3 | Inhalable |

Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)

| Components | Type | Value | Form |
|--|------|----------|----------------------|
| ethylene glycol (CAS 107-21-1) | STEL | 10 mg/m3 | Aerosol, inhalable. |
| | | 50 ppm | Vapor fraction |
| | TWA | 25 ppm | Vapor fraction |
| graphite (CAS 7782-42-5) | TWA | 2 mg/m3 | Respirable fraction. |
| molybdenum disulphide (CAS 1317-33-5) | TWA | 3 mg/m3 | Respirable fraction. |
| | | 10 mg/m3 | Inhalable fraction. |

Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

| Components | Type | Value | Form |
|--|---------|-----------|----------------------|
| ethylene glycol (CAS 107-21-1) | Ceiling | 100 mg/m3 | Aerosol. |
| graphite (CAS 7782-42-5) | TWA | 2 mg/m3 | Respirable fraction. |
| molybdenum disulphide (CAS 1317-33-5) | TWA | 3 mg/m3 | Respirable fraction. |
| | | 10 mg/m3 | Inhalable fraction. |

Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety)

| Components | Type | Value | Form |
|--------------------------------|---------|-----------|------------------|
| ethylene glycol (CAS 107-21-1) | Ceiling | 127 mg/m3 | Vapor and mist. |
| | | 50 ppm | Vapor and mist. |
| graphite (CAS 7782-42-5) | TWA | 2 mg/m3 | Respirable dust. |

Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety)

| Components | Type | Value | Form |
|--|------|----------|------|
| molybdenum disulphide (CAS 1317-33-5) | TWA | 10 mg/m3 | |

Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21)

| Components | Type | Value | Form |
|--|-----------|-----------|----------------------|
| ethylene glycol (CAS 107-21-1) | Ceiling | 100 mg/m3 | Aerosol. |
| graphite (CAS 7782-42-5) | 15 minute | 4 mg/m3 | Respirable fraction. |
| | 8 hour | 2 mg/m3 | Respirable fraction. |
| molybdenum disulphide (CAS 1317-33-5) | 15 minute | 20 mg/m3 | Inhalable fraction. |
| | 8 hour | 10 mg/m3 | Inhalable fraction. |

Biological limit values

No biological exposure limits noted for the ingredient(s).

Exposure guidelines

Occupational Exposure Limits are not relevant to the current physical form of the product.

Appropriate engineering controls

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment**Eye/face protection**

Wear safety glasses with side shields (or goggles).

Skin protection**Hand protection**

Wear protective gloves such as: Nitrile. Neoprene.

Other

Wear suitable protective clothing.

Respiratory protection

If engineering controls are not feasible or if exposure exceeds the applicable exposure limits, use a NIOSH-approved cartridge respirator with an organic vapor cartridge. Use a self-contained breathing apparatus in confined spaces and for emergencies. Air monitoring is needed to determine actual employee exposure levels.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties**Appearance****Physical state**

Solid.

Form

Grease.

Color

Black.

Odor

Mild.

Odor threshold

Not available.

pH

Not available.

Melting point/freezing point

> 550 °F (> 287.8 °C) estimated

Initial boiling point and boiling range

842 °F (450 °C) estimated

Flash point

450 °F (232.2 °C) Cleveland Open Cup

Evaporation rate

Not available.

Flammability (solid, gas)

Not available.

Upper/lower flammability or explosive limits**Flammability limit - lower (%)**

Not available.

Flammability limit - upper (%)

Not available.

Vapor pressure

48261 hPa estimated

Vapor density

Not available.

| | |
|--|-----------------------------|
| Relative density | 0.89 |
| Solubility(ies) | |
| Solubility (water) | Not available. |
| Partition coefficient (n-octanol/water) | Not available. |
| Auto-ignition temperature | 845.6 °F (452 °C) estimated |
| Decomposition temperature | Not available. |
| Viscosity | Not available. |

10. Stability and reactivity

| | |
|---|---|
| Reactivity | The product is stable and non-reactive under normal conditions of use, storage and transport. |
| Chemical stability | Material is stable under normal conditions. |
| Possibility of hazardous reactions | No dangerous reaction known under conditions of normal use. |
| Conditions to avoid | Heat, flames and sparks. Avoid temperatures exceeding the decomposition temperature. When exposed to extreme heat or hot surfaces, vapors may decompose to harmful or fatal corrosive gases such as hydrogen fluoride. Contact with incompatible materials. |
| Incompatible materials | Fluorine. Chlorine. Strong oxidizing agents. |
| Hazardous decomposition products | Hydrogen fluoride. Carbonyl fluoride. Perfluoroisobutylene. Carbon oxides. Halogenated compounds. Metal oxides. |

11. Toxicological information

Information on likely routes of exposure

| | |
|---------------------|---|
| Inhalation | Prolonged inhalation may be harmful. |
| Skin contact | Prolonged skin contact may cause temporary irritation. |
| Eye contact | Direct contact with eyes may cause temporary irritation. |
| Ingestion | Health injuries are not known or expected under normal use. |

| | |
|---|--|
| Symptoms related to the physical, chemical and toxicological characteristics | Direct contact with eyes may cause temporary irritation. |
|---|--|

Information on toxicological effects

Acute toxicity

| Components | Species | Test Results |
|--|---------|---------------|
| amorphous fumed silica (CAS 112945-52-5) | | |
| <u>Acute</u> | | |
| Oral | | |
| LD50 | Rat | > 5000 mg/kg |
| ethylene glycol (CAS 107-21-1) | | |
| <u>Acute</u> | | |
| Dermal | | |
| LD50 | Rat | > 5000 mg/kg |
| Oral | | |
| LD50 | Rat | > 5000 mg/kg |
| polytetrafluoroethylene (CAS 9002-84-0) | | |
| <u>Acute</u> | | |
| Oral | | |
| LD50 | Rat | > 10000 mg/kg |

| | |
|----------------------------------|--|
| Skin corrosion/irritation | Prolonged skin contact may cause temporary irritation. |
|----------------------------------|--|

| | |
|--|--|
| Serious eye damage/eye irritation | Direct contact with eyes may cause temporary irritation. |
|--|--|

Respiratory or skin sensitization

| | |
|----------------------------------|---|
| Respiratory sensitization | Not a respiratory sensitizer. |
| Skin sensitization | This product is not expected to cause skin sensitization. |

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity

ACGIH Carcinogens

ethylene glycol (CAS 107-21-1)

A4 Not classifiable as a human carcinogen.

Canada - Manitoba OELs: carcinogenicity

ethylene glycol (CAS 107-21-1)

Not classifiable as a human carcinogen.

IARC Monographs. Overall Evaluation of Carcinogenicity

amorphous fumed silica (CAS 112945-52-5)

3 Not classifiable as to carcinogenicity to humans.

polytetrafluoroethylene (CAS 9002-84-0)

3 Not classifiable as to carcinogenicity to humans.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure Not classified.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard Not an aspiration hazard.

Chronic effects Prolonged inhalation may be harmful.

Further information This product has no known adverse effect on human health.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

| Components | | Species | Test Results |
|--|------|---|------------------------|
| amorphous fumed silica (CAS 112945-52-5) | | | |
| Aquatic | | | |
| Acute | | | |
| Crustacea | EC50 | Water flea (Daphnia magna) | > 10000 mg/l, 48 hours |
| Fish | LC50 | Zebra danio (Danio rerio) | > 10000 mg/l, 96 hours |
| ethylene glycol (CAS 107-21-1) | | | |
| Aquatic | | | |
| Acute | | | |
| Crustacea | EC50 | Water flea (Daphnia magna) | 41000 mg/l, 48 hours |
| Fish | LC50 | Rainbow trout,donaldson trout (Oncorhynchus mykiss) | 22810 mg/l, 96 hours |
| graphite (CAS 7782-42-5) | | | |
| Aquatic | | | |
| Acute | | | |
| Fish | LC50 | Fish | > 1800 mg/l, 96 hours |

Persistence and degradability No data is available on the degradability of any ingredients in the mixture.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

ethylene glycol -1.36

Mobility in soil No data available.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site.

Local disposal regulations Dispose in accordance with all applicable regulations.

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

TDG

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

15. Regulatory information

Canadian regulations

This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

Controlled Drugs and Substances Act

Not regulated.

Export Control List (CEPA 1999, Schedule 3)

Not listed.

Greenhouse Gases

Not listed.

Precursor Control Regulations

Not regulated.

International regulations

Stockholm Convention

Not applicable.

Rotterdam Convention

Not applicable.

Kyoto protocol

Not applicable.

Montreal Protocol

Not applicable.

Basel Convention

Not applicable.

International Inventories

| Country(s) or region | Inventory name | On inventory (yes/no)* |
|-----------------------------|--|------------------------|
| Australia | Australian Inventory of Chemical Substances (AICS) | Yes |
| Canada | Domestic Substances List (DSL) | Yes |
| Canada | Non-Domestic Substances List (NDSL) | No |
| China | Inventory of Existing Chemical Substances in China (IECSC) | Yes |
| Europe | European Inventory of Existing Commercial Chemical Substances (EINECS) | No |
| Europe | European List of Notified Chemical Substances (ELINCS) | No |
| Japan | Inventory of Existing and New Chemical Substances (ENCS) | No |
| Korea | Existing Chemicals List (ECL) | Yes |
| New Zealand | New Zealand Inventory | Yes |
| Philippines | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | Yes |
| Taiwan | Taiwan Chemical Substance Inventory (TCSI) | Yes |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory | Yes |

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information

| | |
|---------------|------------|
| Issue date | 09-05-2019 |
| Revision date | 12-12-2019 |
| Version # | 02 |

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Revision information

This document has undergone significant changes and should be reviewed in its entirety.