

## MATERIAL SAFETY DATA SHEET

### SECTION 1: IDENTIFICATION

**Product identifier** : **DISC BRAKE QUIET**

**Product Use** : Automotive brake coating.

**Chemical Family** : Mixture.

**Manufacturer part no.** : M609, M609C

**Supplier's name and address:** **Radiator Specialty Co., of Canada**  
1711 Aimco Blvd.  
Mississauga, ON, Canada  
L4W 1H7

**Manufacturer's name and address:**  
Refer to Supplier

**Information Telephone #** : (905) 625-9117 (Monday - Friday, 8 AM - 4 PM)

**24 Hr. Emergency Tel #** : 613-996-6666 (CANUTEC)

### SECTION 2 - HAZARDS IDENTIFICATION

**Classification** : WHMIS information: This product is a WHMIS Controlled Product. It meets one or more of the criteria for a controlled product provided in Part IV of the Canadian Controlled Products Regulations (CPR). WHMIS classification:  
Class A (Pressurized containers);  
Class B5 (Flammable Aerosols);  
Class D2A (Materials Causing Other Toxic Effects, Very Toxic Material);  
Class D2B (Materials Causing Other Toxic Effects, Toxic Material).

Labelling: Phrases recommended to appear on a supplier label, can be found in Section 15.

WHMIS symbols required on a supplier label:



**Emergency Overview** : Aerosol spray. Blue, tacky liquid. Solvent odour.  
DANGER! Extremely flammable aerosol. Contents under pressure. Container may explode if heated. Harmful if inhaled. May cause nausea, vomiting, headache and other central nervous system effects. May cause respiratory irritation. Harmful or fatal if swallowed. May be an aspiration hazard. Can enter the lungs and cause damage. Causes eye irritation. May cause skin irritation. Nerves in the extremities may be damaged by prolonged overexposure, possibly irreversibly.

Contains material that may be harmful in the environment.

### POTENTIAL HEALTH EFFECTS:

#### Signs and symptoms of short-term (acute) exposure

- Inhalation** : May cause irritation to the nose, throat and upper respiratory tract. Symptoms may include pain, headache, nausea, vomiting, dizziness, drowsiness and other central nervous system effects. In extremely high concentrations, product may act as an asphyxiant and cause increased breathing and pulse rates, fatigue and unconsciousness.
- Skin** : May cause mild to moderate irritation. Prolonged contact, such as when trapped against the skin under clothing or jewelry, may be more irritating. If product is sprayed directly on skin, symptoms of frostbite may be experienced including numbness, prickling and itching. Can be absorbed through skin.
- Eyes** : Causes severe eye irritation. If product is sprayed directly into the eyes, could cause freezing of the eye.
- Ingestion** : May cause irritation of mouth, throat, and stomach. Symptoms may include pain, headache, nausea, vomiting, dizziness, drowsiness and other central nervous system effects. May be an aspiration hazard. Aspiration into the lungs during swallowing or subsequent vomiting may cause chemical pneumonitis, which can be fatal.

**Effects of long-term (chronic) exposure**

- : Prolonged skin contact may cause dermatitis (rash), characterized by red, dry, itching skin. Prolonged overexposure may cause liver and kidney effects.
- Contains n-hexane. Prolonged overexposure may cause peripheral neuropathy, damage to the nerves of the hands and feet.

**Carcinogenic status** : See TOXICOLOGICAL INFORMATION, Section 11.

**Additional health hazards** : See TOXICOLOGICAL INFORMATION, Section 11.

**Potential environmental effects**

- : Contains material that may be harmful in the environment. See Section 12 for more environmental information.

**SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS**

<u>Ingredients</u>	<b>CAS #</b>	<b>Wt.%</b>
Acetone	67-64-1	10.00 - 30.00
n-Hexane	110-54-3	10.00 - 30.00
Butane	106-97-8	10.00 - 30.00
Propane	74-98-6	10.00 - 30.00
Ethyl acetate	141-78-6	1.00 - 5.00
Light aliphatic solvent naphtha (petroleum)	64742-89-8	1.00 - 5.00

**SECTION 4 - FIRST AID MEASURES**

**Inhalation** : Immediately remove person to fresh air. If breathing has stopped, give artificial respiration. If breathing is difficult, give oxygen by qualified medical personnel only. Get medical attention.

**Skin contact** : Remove contaminated clothing. Wash exposed area thoroughly with soap and water for at least 15 minutes. If irritation persists, seek prompt medical attention.

**Eye contact** : Immediately flush eyes with plenty of water for at least 15 minutes. Seek immediate medical attention/advice.

**Ingestion** : Do not induce vomiting. Seek immediate medical attention/advice. Never give anything by mouth to an unconscious person.

**Notes For Physician** : Treat symptomatically. This product is a CNS depressant.

**SECTION 5 - FIRE FIGHTING MEASURES**

**Fire hazards/conditions of flammability**

- : Flammable aerosol. Will ignite when exposed to heat, flame and other sources of ignition. Closed containers are contained under pressure and may explode if exposed to excess heat for a prolonged period of time. Vapours may be heavier than air and may collect in confined and low-lying areas. Material will float on water and can be re-ignited at the water's surface.

**Oxidizing properties** : None known.

**Explosion data: Sensitivity to mechanical impact / static discharge**

- : May be sensitive to static discharge. Aerosols are sensitive to mechanical impact. Contents under pressure.

**Suitable extinguishing media** : Dry chemical, foam, carbon dioxide and water fog.

**Special fire-fighting procedures/equipment**

- : Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode. Move containers from fire area if safe to do so. Shield personnel to protect from venting or rupturing containers. Water spray may be useful in cooling equipment exposed to heat and flame.

**Hazardous combustion products**

- : Carbon oxides; Aldehydes; Other unidentified organic compounds.

**SECTION 6 - ACCIDENTAL RELEASE MEASURES**

**Personal precautions** : All persons dealing with the clean-up should wear the appropriate personal protective equipment. Keep all other personnel upwind and away from the spill/release. Restrict access to area until completion of clean-up. Refer to protective measures listed in sections 7 and 8.

- Environmental precautions** : Ensure spilled product does not enter drains, sewers, waterways, or confined spaces.
- Spill response/cleanup** : Ventilate area of release. Remove all sources of ignition. Use only non-sparking tools and equipment in the clean-up process. Contain and absorb spilled liquid with non-combustible, inert absorbent material (e.g. sand), then place absorbent material into a container for later disposal (see Section 13). Notify the appropriate authorities as required.
- Prohibited materials** : Do not use combustible absorbents, such as sawdust.

## SECTION 7 - HANDLING AND STORAGE

- Safe Handling procedures** : Use in a well-ventilated area. Wear suitable protective equipment during handling. Do not breathe vapours or spray mist. Avoid contact with skin, eyes and clothing. Keep away from heat, sparks and open flames. No sparking tools should be used. Avoid contact with incompatible materials. Do not puncture or incinerate. Wash thoroughly after handling. Always replace cap after use.
- Storage requirements** : Store in a cool, dry, well-ventilated area. Keep away from direct sunlight. Storage area should be clearly identified, clear of obstruction and accessible only to trained and authorized personnel. Inspect periodically for damage or leaks. No smoking in the area.
- Incompatible materials** : Strong oxidizing agents; Acids; Bases; Reducing agents
- Special packaging materials** : Always keep in containers made of the same materials as the supply container.

## SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION

<u>Exposure Limits</u>				
<u>Ingredients</u>	<u>ACGIH TLV</u>		<u>OSHA PEL</u>	
	<u>TWA</u>	<u>STEL</u>	<u>PEL</u>	<u>STEL</u>
Acetone	250 ppm	500 ppm	1000 ppm (2400 mg/m <sup>3</sup> )	N/Av
n-Hexane	50 ppm (skin)	N/Av	500 ppm (1800 mg/m <sup>3</sup> )	N/Av
Butane	1000 ppm (Butane, all isomers)	N/Av	800 ppm (final rule limit)	N/Av
Propane	N/Av	N/Av	1000 ppm (1800 mg/m <sup>3</sup> )	N/Av
Ethyl acetate	400 ppm	N/Av	400 ppm (1400 mg/m <sup>3</sup> )	N/Av
Light aliphatic solvent naphtha (petroleum)	N/Av	N/Av	500 ppm (2000 mg/m <sup>3</sup> ) (as petroleum distillates, naphtha)	N/Av

### Ventilation and engineering measures

- : Use in a well-ventilated area. Use general or local exhaust ventilation to maintain air concentrations below recommended exposure limits.

### Respiratory protection

- : If the TLV is exceeded, a NIOSH/MSHA-approved respirator is advised. Advice should be sought from respiratory protection specialists.

### Skin protection

- : Impervious gloves must be worn when using this product. Advice should be sought from glove suppliers. Depending on conditions of use, an impervious apron should be worn.

### Eye / face protection

- : Chemical splash goggles are recommended.

### Other protective equipment

- : An eyewash station and safety shower should be made available in the immediate working area.

### General hygiene considerations

- : Handle in accordance with good industrial hygiene and safety practice. Avoid breathing vapour or mist. Avoid contact with skin, eyes and clothing. Wash contaminated clothing before reuse. Wash hands thoroughly after using this product, and before eating, drinking or smoking.

## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

- Physical state** : Liquid aerosol.      **Appearance** : Blue, tacky liquid.
- Odour** : Solvent odour.      **Odour threshold** : N/Av

<b>pH</b>	: N/Av	<b>Specific gravity</b>	: 0.75 @ 20°C
<b>Boiling point</b>	: > 37.8°C	<b>Coefficient of water/oil distribution</b>	: N/Av
<b>Melting/Freezing point</b>	: N/Av	<b>Solubility in water</b>	: insoluble
<b>Vapour pressure (mmHg @ 20° C / 68° F)</b>	: N/Av	<b>Evaporation rate (n-Butyl acetate = 1)</b>	: > 1
<b>Vapour density (Air = 1)</b>	: N/Av	<b>Volatiles (% by weight)</b>	: N/Av
<b>Volatile organic Compounds (VOC's)</b>	: N/Av	<b>Auto-ignition temperature</b>	: Not available.
<b>Flash point</b>	: - 104.4°C (propellant)	<b>Upper flammable limit (% by vol.)</b>	: N/Av
<b>Flash point Method</b>	: N/Av	<b>Flashback observed</b>	: YES
<b>Lower flammable limit (% by vol.)</b>	: N/Av	<b>Viscosity</b>	: N/Av
<b>Flame Projection Length</b>	: > 15 cm, < 100 cm		
<b>Absolute pressure of container</b>	: 469 - 496 kPa		
<b>General Information</b>	: No additional information.		

**Section 10: STABILITY AND REACTIVITY**

<b>Stability and reactivity</b>	: Stable under the recommended storage and handling conditions prescribed.
<b>Hazardous polymerization</b>	: Hazardous polymerization does not occur.
<b>Conditions to avoid</b>	: Avoid heat and open flame. Keep away from direct sunlight. Do not use in areas without adequate ventilation. Avoid contact with incompatible materials.
<b>Materials To Avoid And Incompatibility</b>	: Strong oxidizing agents; Acids; Bases; Reducing agents.
<b>Hazardous decomposition products</b>	: None known, refer to hazardous combustion products in Section 5.

**SECTION 11 - TOXICOLOGICAL INFORMATION**

<b>Target organs</b>	: Eyes, skin, respiratory system, digestive system, central nervous system.
<b>Routes of exposure</b>	: <i>Inhalation</i> : YES <i>Skin Absorption</i> : YES <i>Skin &amp; Eyes</i> : YES <i>Ingestion</i> : YES
<b>Irritancy</b>	: Mild to moderate skin irritant. Severe eye irritant.
<b>Toxicological data</b>	: There is no available data for the product itself, only for the ingredients. See below for individual ingredient acute toxicity data.

<b>Ingredients</b>	<b>LC<sub>50</sub> (4hr)</b>	<b>LD<sub>50</sub></b>	
	<b>inh, rat</b>	<b>(Oral, rat)</b>	<b>(Rabbit, dermal)</b>
Acetone	30 000 ppm (71 mg/L) (vapour)	5800 mg/kg	> 15 800 mg/kg
n-Hexane	38 500 ppm (135.7 mg/L) (vapour)	28 670 mg/kg	> 3350 mg/kg (No mortality)
Butane	276 000 ppm	N/Ap (gas)	N/Ap (gas)
Propane	N/Av	N/Ap (gas)	N/Ap (gas)
Ethyl acetate	8000 - 16 000 ppm (28.8 - 57.7 mg/L) (vapour)	10 200 mg/kg	> 18 000 mg/kg
Light aliphatic solvent naphtha (petroleum)	> 23 mg/L (vapour)	> 8000 mg/kg	> 4000 mg/kg

<b>Carcinogenic status</b>	: No components are listed as carcinogens by ACGIH, IARC, OSHA or NTP.
<b>Reproductive effects</b>	: Not expected to have other reproductive effects.
<b>Teratogenicity</b>	: Not expected to be a teratogen.
<b>Mutagenicity</b>	: Not expected to be mutagenic in humans.
<b>Epidemiology</b>	: None known or reported by the manufacturer.
<b>Sensitization to material</b>	: Not expected to be a skin or respiratory sensitizer.
<b>Synergistic materials</b>	: None known or reported by the manufacturer.
<b>other important hazards</b>	: CNS depression may result from extreme exposures.

**Conditions aggravated by overexposure**

: Pre-existing skin, eye and respiratory disorders.

**SECTION 12 - ECOLOGICAL INFORMATION**

**Ecotoxicity** : No data is available on the product itself. The product should not be allowed to enter drains or water courses, or be deposited where it can affect ground or surface waters. This product contains the following substance which may also be hazardous for the environment:  
n-Hexane.

See the following tables for individual ingredient ecotoxicity data.

**Ecotoxicity data:**

<u>Ingredients</u>	CAS No	Toxicity to Fish		
		LC50 / 96h	NOEC / 21 day	M Factor
Acetone	67-64-1	6210 mg/L (Fathead minnow)	N/Av	None.
n-Hexane	110-54-3	2.5 mg/L (Fathead minnow)	2.8 mg/L/28-day (Rainbow trout)	None.
Butane	106-97-8	N/Ap	N/Ap	N/Ap
Propane	74-98-6	N/Ap	N/Ap	N/Ap
Ethyl acetate	141-78-6	> 100 mg/L	N/Av	None.
Light aliphatic solvent naphtha (petroleum)	64742-89-8	8.2 mg/L (Fathead minnow)	N/Av	None.

<u>Ingredients</u>	CAS No	Toxicity to Daphnia		
		EC50 / 48h	NOEC / 21 day	M Factor
Acetone	67-64-1	15 800 mg/L (Daphnia magna)	1660 mg/L	None.
n-Hexane	110-54-3	3.9 mg/L (Daphnia magna)	4.9 mg/L (QSAR)	None.
Butane	106-97-8	N/Ap	N/Ap	N/Ap
Propane	74-98-6	N/Ap	N/Ap	N/Ap
Ethyl acetate	141-78-6	> 100 mg/L	2.4 mg/L	None.
Light aliphatic solvent naphtha (petroleum)	64742-89-8	32 mg/L (Daphnia magna)	2.6 mg/L	None.

<u>Ingredients</u>	CAS No	Toxicity to Algae		
		EC50 / 96h or 72h	NOEC / 96h or 72h	M Factor
Acetone	67-64-1	7000 mg/L/96hr (Green algae)	N/Av	None.
n-Hexane	110-54-3	0.89 mg/L/96hr (Green algae)	N/Av	1
Butane	106-97-8	N/Ap	N/Ap	N/Ap
Propane	74-98-6	N/Ap	N/Ap	N/Ap
Ethyl acetate	141-78-6	> 100 mg/L/72hr	N/Av	None.
Light aliphatic solvent naphtha (petroleum)	64742-89-8	45 mg/L/96hr (Green algae)	18 mg/L/96hr (NOEL)	None.

**Mobility** : No data is available on the product itself.

- Persistence** : No data is available on the product itself.  
 Contains the following chemicals which are considered to be inherently biodegradable: Light aliphatic solvent naphtha (petroleum).  
 The following ingredients are considered to be readily biodegradable: Acetone; n-Hexane; Ethyl acetate.
- Bioaccumulation potential** : No data is available on the product itself. See the following data for ingredient information.

<u>Components</u>	<u>Partition coefficient n-octanol/water (log Kow)</u>	<u>Bioconcentration factor (BCF)</u>
Acetone (CAS 67-64-1)	0.24	0.65 (Fish)
n-Hexane (CAS 110-54-3)	3.9	200
Butane (CAS 106-97-8)	2.89 (estimated)	33 (estimated)
Ethyl acetate (CAS 141-78-6)	0.73	30 (Fish)
Light aliphatic solvent naphtha (petroleum) (CAS 64742-89-8)	2.1 - 6	129 - 576


**Other Adverse Environmental effects**

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

**SECTION 13 - DISPOSAL CONSIDERATIONS**

- Handling for Disposal** : Handle waste according to recommendations in Section 7. Do not puncture or incinerate containers.
- Methods of Disposal** : Dispose of in accordance with federal, provincial and local hazardous waste laws.

**SECTION 14: TRANSPORT INFORMATION**

<b>Regulatory Information</b>	<b>UN Number</b>	<b>Shipping Name</b>	<b>Class</b>	<b>Packing Group</b>	<b>Label</b>
TDG	UN1950	AEROSOLS	2.1	None	
<b>TDG Additional information</b>	May be shipped as LIMITED QUANTITY when transported in containers no larger than 1.0 Litre, in packages not exceeding 30 kg gross mass. Under the TDGR, refer to Section 1.17 for additional exemption information, if shipping under this exemption.				

**SECTION 15 - REGULATORY INFORMATION**

**Labelling:**

Danger. Extremely flammable aerosol Contents under pressure. Container may explode if heated. Harmful if inhaled. May cause respiratory irritation. May cause headache, nausea, dizziness and other symptoms of central nervous system depression. May be harmful or fatal if swallowed in large amounts. May be an aspiration hazard. Can enter the lungs and cause damage. Causes eye irritation. May cause skin irritation. Nerves in the extremities may be damaged by prolonged overexposure, possibly irreversibly.

Precautions: Use in a well-ventilated area. Wear suitable protective equipment during handling. Avoid breathing vapors or mists. Avoid contact with skin, eyes and clothing. Keep away from heat, sparks and open flames. No sparking tools should be used. Do not puncture or incinerate containers. Avoid contact with incompatible materials. Wash thoroughly after handling. Store in a cool, dry, well-ventilated area away from sources of heat, ignition and sunlight.

FIRST AID: If inhaled, move to fresh air. If breathing is difficult, give oxygen by qualified medical personnel only. If breathing stops, provide artificial respiration. Get medical attention if symptoms persist. For skin contact, immediately remove contaminated clothing then wash thoroughly with soap and water for at least 15 minutes. If irritation persists, seek prompt medical attention. For eye contact, flush with running water for at least 15 minutes. Get medical attention if symptoms persist. If ingested, do not induce vomiting. Never give anything by mouth to an unconscious person. Seek immediate medical attention/advice.

Refer To Material Safety Data Sheet for further information.

**Canadian Information:**

Canadian Environmental Protection Act (CEPA) information: All ingredients listed appear on the Domestic Substances List (DSL).

WHMIS information: Refer to Section 2 for a WHMIS Classification for this product.

**This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.**

**US Federal Information:**

TSCA: All listed ingredients appear on the Toxic Substances Control Act (TSCA) inventory.


**SECTION 16 - OTHER INFORMATION**

**Legend** :

- ACGIH: American Conference of Governmental Industrial Hygienists
- CAS: Chemical Abstract Services
- HSDB: Hazardous Substances Data Bank
- IARC: International Agency for Research on Cancer
- Inh: Inhalation
- LC: Lethal Concentration
- LD: Lethal Dose
- MSHA: Mine Safety and Health Administration
- N/Ap: Not Applicable
- N/Av: Not Available
- NIOSH: National Institute of Occupational Safety and Health
- NOEC: No observable effect concentration
- NTP: National Toxicology Program
- OECD: Organisation for Economic Co-operation and Development
- OSHA: Occupational Safety and Health Administration
- PEL: Permissible exposure limit
- RTECS: Registry of Toxic Effects of Chemical Substances
- STEL: Short Term Exposure Limit
- TDG: Canadian Transportation of Dangerous Goods Act & Regulations
- TLV: Threshold Limit Values
- TWA: Time Weighted Average
- WHMIS: Workplace Hazardous Materials Identification System

**References** :

1. ACGIH, Threshold Limit Values for Chemical Substances and Physical Agents & Biological Exposure Indices for 2016.
2. International Agency for Research on Cancer Monographs, searched 2016.
3. Canadian Centre for Occupational Health and Safety, CCIInfoWeb databases, 2016 (Chempendium, HSDB and RTECs).
4. Material Safety Data Sheets from manufacturer.
5. OECD - The Global Portal to Information on Chemical Substances - eChemPortal, 2016.

<p><b><u>Prepared for:</u></b>                  Radiator Specialty Co. of Canada                  1711 Aimco Blvd.                  Mississauga, ON, Canada, L4W 1H7                  Telephone: 905-625-9117 (Mon. - Fri., 8 AM - 4 PM)                  Please direct all enquiries to Radiator Specialty.</p>	
<p><b><u>Prepared by:</u></b>                  ICC The Compliance Center Inc.  <a href="http://www.thecompliancecenter.com">http://www.thecompliancecenter.com</a></p>	

**DISCLAIMER OF LIABILITY**

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**DISC BRAKE QUIET**

M609, M609C

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**Revision Information**

: (M)SDS sections updated:  
12. ECOLOGICAL INFORMATION.

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