



# Material Safety Data Sheet

## Non-Chlorinated Brake Cleaner (Aerosol)

MSDS ID: 403

### \*\*\* Section 1 - Chemical Product and Company Identification \*\*\*

**Part Number:** 403, 4038

**Product Use:** Brake Cleaner

#### Manufacturer Information

BG Products Inc.  
701 S. Wichita Street  
Wichita, KS 67213

Phone: (316) 265-2686  
Fax: (316) 265-0718  
Emergency # 1-800-424-9300 (CHEMTREC)

### \*\*\* Section 2 - Hazards Identification \*\*\*

#### Emergency Overview

##### DANGER

- CONTENTS UNDER PRESSURE.
- EXTREMELY FLAMMABLE. Vapors may cause flash fire or explosion.
- EYE AND SKIN IRRITANT.
- Liquid or vapors may irritate the eyes. Symptoms include itching, burning, redness and tearing.
- Prolonged or repeated contact may result in defatting and drying of the skin, which may result in skin irritation or dermatitis (rash).
- This product may be harmful by inhalation. Avoid prolonged breathing of fumes. Use with adequate ventilation.
- This product may be harmful or fatal if swallowed. Severe and permanent damage to the mouth, throat and stomach may result from swallowing this product.

**HMIS Ratings: Health: 2 Fire: 3 Physical Hazard: 0 Pers. Prot.: B**

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe \* = Chronic hazard

### \*\*\* Section 3 - Composition / Information on Ingredients \*\*\*

CAS #	Component	Percent
142-82-5	Heptane (n-)	40-70
108-88-3	Toluene	15-40
124-38-9	Carbon dioxide	7-13
67-64-1	Acetone	7-13

#### Component Information

This product is considered hazardous under 29 CFR 1910.1200 (Hazard Communication). This product is considered a controlled product under the Canadian Controlled Products Regulations (CPR).

### \*\*\* Section 4 - First Aid Measures \*\*\*

#### First Aid: Eyes

In case of contact, immediately flush eyes with large amounts of water, continuing to flush for 15 minutes. If irritation persists get medical attention.

#### First Aid: Skin

For skin contact flush with large amounts of water while removing contaminated clothing. If irritation persists, get medical attention.

#### First Aid: Ingestion

If ingested, get immediate medical attention. Do not induce vomiting unless instructed to do so by medical personnel.



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## First Aid: Inhalation

Move person to non-contaminated air. Give artificial respiration if not breathing. Call a physician if symptoms develop or persist.

## \*\*\* Section 5 - Fire Fighting Measures \*\*\*

### General Fire Hazards

See Section 9 for Flammability Properties.  
Keep away from heat, sparks, or open flame.

### Hazardous Combustion Products

Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

### Extinguishing Media

Dry chemical, foam, carbon dioxide.

### Fire Fighting Equipment/Instructions

Fire fighters should wear full-face, self contained breathing apparatus and impervious protective clothing.  
Fire fighters should avoid inhaling any combustion products.

**NFPA Ratings: Health: 2 Fire: 3 Reactivity: 0 Other: 0**

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

## \*\*\* Section 6 - Accidental Release Measures \*\*\*

### Containment Procedures

Contain the discharged material. Remove sources of ignition.

### Clean-Up Procedures

Wear appropriate protective equipment and clothing during clean-up. Absorb spill with inert material.  
Shovel material into appropriate container for disposal.

### Evacuation Procedures

Isolate area. Keep unnecessary personnel away. In case of large spills, follow all facility emergency response procedures.

### Special Procedures

Wear appropriate personal protective equipment.

## \*\*\* Section 7 - Handling and Storage \*\*\*

### Handling Procedures

Avoid getting this material into contact with your skin and eyes. Wash thoroughly after handling. Use this product with adequate ventilation. Keep container closed.

### Storage Procedures

Do not store this material in open or unlabeled containers. Store this product in air-tight containers away from sources of heat and light.

## \*\*\* Section 8 - Exposure Controls / Personal Protection \*\*\*

### A: Component Exposure Limits

#### Heptane (n-) (142-82-5)

ACGIH: 400 ppm TWA  
500 ppm STEL  
OSHA: 400 ppm TWA; 1600 mg/m<sup>3</sup> TWA  
500 ppm STEL; 2000 mg/m<sup>3</sup> STEL  
NIOSH: 85 ppm TWA; 350 mg/m<sup>3</sup> TWA  
440 ppm Ceiling (15 min); 1800 mg/m<sup>3</sup> Ceiling (15 min)

#### Toluene (108-88-3)

ACGIH: 50 ppm TWA  
Skin - potential significant contribution to overall exposure by the cutaneous route



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OSHA: 100 ppm TWA; 375 mg/m<sup>3</sup> TWA  
150 ppm STEL; 560 mg/m<sup>3</sup> STEL  
NIOSH: 100 ppm TWA; 375 mg/m<sup>3</sup> TWA  
150 ppm STEL; 560 mg/m<sup>3</sup> STEL

#### Carbon dioxide (124-38-9)

ACGIH: 5000 ppm TWA  
30000 ppm STEL  
OSHA: 10000 ppm TWA; 18000 mg/m<sup>3</sup> TWA  
30000 ppm STEL; 54000 mg/m<sup>3</sup> STEL  
NIOSH: 5000 ppm TWA; 9000 mg/m<sup>3</sup> TWA  
30000 ppm STEL; 54000 mg/m<sup>3</sup> STEL

#### Acetone (67-64-1)

ACGIH: 500 ppm TWA  
750 ppm STEL  
OSHA: 750 ppm TWA; 1800 mg/m<sup>3</sup> TWA  
1000 ppm STEL; 2400 mg/m<sup>3</sup> STEL (The acetone STEL does not apply to the cellulose acetate fiber industry. It is in effect for all other sectors)  
NIOSH: 250 ppm TWA; 590 mg/m<sup>3</sup> TWA

### B: Canadian Provincial Exposure Limits

#### Heptane (n-) (142-82-5)

Alberta: 400 ppm TWA; 1640 mg/m<sup>3</sup> TWA  
500 ppm STEL; 2050 mg/m<sup>3</sup> STEL  
British Columbia: 400 ppm TWA  
Manitoba: 500 ppm STEL  
Manitoba: 400 ppm TWA; 1600 mg/m<sup>3</sup> TWA  
500 ppm STEL; 2000 mg/m<sup>3</sup> STEL  
New Brunswick: 400 ppm TWA; 1640 mg/m<sup>3</sup> TWA  
500 ppm STEL; 2050 mg/m<sup>3</sup> STEL  
NW Territories: 400 ppm TWA; 1640 mg/m<sup>3</sup> TWA  
500 ppm STEL; 2049 mg/m<sup>3</sup> STEL  
Nova Scotia: 400 ppm TWA  
500 ppm STEL  
Nunavut: 400 ppm TWA; 1640 mg/m<sup>3</sup> TWA  
500 ppm STEL; 2049 mg/m<sup>3</sup> STEL  
Ontario: 400 ppm TWAEV; 1635 mg/m<sup>3</sup> TWAEV  
500 ppm STEV; 2045 mg/m<sup>3</sup> STEV  
Quebec: 500 ppm STEV; 2050 mg/m<sup>3</sup> STEV  
400 ppm TWAEV; 1640 mg/m<sup>3</sup> TWAEV  
Saskatchewan: 1640 mg/m<sup>3</sup> TWA; 400 ppm TWA  
2050 mg/m<sup>3</sup> STEL; 500 ppm STEL  
Yukon: 400 ppm TWA; 1600 mg/m<sup>3</sup> TWA  
500 ppm STEL; 2000 mg/m<sup>3</sup> STEL

#### Toluene (108-88-3)

Alberta: 50 ppm TWA; 188 mg/m<sup>3</sup> TWA  
Substance may be readily absorbed through intact skin  
British Columbia: 50 ppm TWA  
Columbia: Skin notation  
Manitoba: 100 ppm TWA; 375 mg/m<sup>3</sup> TWA  
150 ppm STEL; 560 mg/m<sup>3</sup> STEL  
New Brunswick: 50 ppm TWA; 188 mg/m<sup>3</sup> TWA  
Skin - potential for cutaneous absorption  
NW Territories: 100 ppm TWA; 375 mg/m<sup>3</sup> TWA  
150 ppm STEL; 560 mg/m<sup>3</sup> STEL  
Skin notation  
Nova Scotia: 50 ppm TWA  
Skin - potential significant contribution to overall exposure by the cutaneous route



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Nunavut: 100 ppm TWA; 375 mg/m<sup>3</sup> TWA  
150 ppm STEL; 560 mg/m<sup>3</sup> STEL  
Skin notation

Ontario: 50 ppm TWAEV

Quebec: 150 ppm STEV; 565 mg/m<sup>3</sup> STEV  
100 ppm TWAEV; 377 mg/m<sup>3</sup> TWAEV

Saskatchewan: 188 mg/m<sup>3</sup> TWA; 50 ppm TWA  
235 mg/m<sup>3</sup> STEL; 60 ppm STEL

Yukon: 100 ppm TWA; 375 mg/m<sup>3</sup> TWA  
150 ppm STEL; 560 mg/m<sup>3</sup> STEL  
Skin notation

#### Carbon dioxide (124-38-9)

Alberta: 5000 ppm TWA; 9000 mg/m<sup>3</sup> TWA  
30000 ppm STEL; 54000 mg/m<sup>3</sup> STEL

British Columbia: 5000 ppm TWA

Manitoba: 5000 ppm TWA; 9000 mg/m<sup>3</sup> TWA  
30000 ppm STEL; 54000 mg/m<sup>3</sup> STEL

New Brunswick: 5000 ppm TWA; 9000 mg/m<sup>3</sup> TWA  
30000 ppm STEL; 54000 mg/m<sup>3</sup> STEL

NW Territories: 5000 ppm TWA; 9000 mg/m<sup>3</sup> TWA  
15000 ppm STEL; 27000 mg/m<sup>3</sup> STEL

Nova Scotia: 5000 ppm TWA  
30000 ppm STEL

Nunavut: 5000 ppm TWA; 9000 mg/m<sup>3</sup> TWA  
15000 ppm STEL; 27000 mg/m<sup>3</sup> STEL

Ontario: 5000 ppm TWAEV; 9000 mg/m<sup>3</sup> TWAEV  
30000 ppm STEV; 54000 mg/m<sup>3</sup> STEV

Quebec: 30000 ppm STEV; 54000 mg/m<sup>3</sup> STEV  
5000 ppm TWAEV; 9000 mg/m<sup>3</sup> TWAEV

Saskatchewan: 9000 mg/m<sup>3</sup> TWA; 5000 ppm TWA  
54000 mg/m<sup>3</sup> STEL; 30000 ppm STEL

Yukon: 5000 ppm TWA; 9000 mg/m<sup>3</sup> TWA  
15000 ppm STEL; 27000 mg/m<sup>3</sup> STEL

#### Acetone (67-64-1)

Alberta: 750 ppm TWA; 1800 mg/m<sup>3</sup> TWA  
1000 ppm STEL; 2400 mg/m<sup>3</sup> STEL

British Columbia: 250 ppm TWA

Manitoba: 750 ppm TWA; 1780 mg/m<sup>3</sup> TWA  
1000 ppm STEL; 2375 mg/m<sup>3</sup> STEL

New Brunswick: 500 ppm TWA; 1188 mg/m<sup>3</sup> TWA  
1782 mg/m<sup>3</sup> STEL

NW Territories: 1000 ppm TWA; 2370 mg/m<sup>3</sup> TWA  
1250 ppm STEL; 2970 mg/m<sup>3</sup> STEL

Nova Scotia: 500 ppm TWA  
750 ppm STEL

Nunavut: 1000 ppm TWA; 2370 mg/m<sup>3</sup> TWA  
1250 ppm STEL; 2970 mg/m<sup>3</sup> STEL

Ontario: 500 ppm TWAEV  
750 ppm STEV

Quebec: 1000 ppm STEV; 2380 mg/m<sup>3</sup> STEV  
750 ppm TWAEV; 1780 mg/m<sup>3</sup> TWAEV

Saskatchewan: 1780 mg/m<sup>3</sup> TWA; 750 ppm TWA  
2380 mg/m<sup>3</sup> STEL; 1000 ppm STEL

Yukon: 1000 ppm TWA; 2400 mg/m<sup>3</sup> TWA  
1250 ppm STEL; 3000 mg/m<sup>3</sup> STEL



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## Engineering Controls

Provide adequate local exhaust ventilation to maintain worker exposure below exposure limits.

## PERSONAL PROTECTIVE EQUIPMENT

### Personal Protective Equipment: Eyes/Face

Wear safety glasses; chemical goggles (if splashing is possible).

### Personal Protective Equipment: Skin

Use appropriate hand protection.

### Personal Protective Equipment: Respiratory

Use NIOSH approved respirator with cartridge, air line, or SCBA as appropriate based on workplace exposure evaluations.

### Personal Protective Equipment: General

Use good industrial hygiene practices in handling this material.

## \*\*\* Section 9 - Physical & Chemical Properties \*\*\*

<b>Appearance:</b>	Clear	<b>Odor:</b>	Solvent
<b>Physical State:</b>	Liquid	<b>Flash Point:</b>	-20°C (-4°F)
<b>Flash Point Method:</b>	TCC	<b>Boiling Point:</b>	55-111°C (132-232°F)
<b>Melting Point:</b>	Not Determined	<b>Pour Point:</b>	Not Determined
<b>Specific Gravity:</b>	0.7533	<b>Solubility (H2O):</b>	Insoluble
<b>Vapor Pressure:</b>	95-105 PSIG	<b>Vapor Density:</b>	Heavier Than Air
<b>Auto Ignition:</b>	Not Available	<b>Lower Flammability Limit:</b>	Not Available
<b>Upper Flammability Limit:</b>	Not Available	<b>pH:</b>	Not Available

## \*\*\* Section 10 - Chemical Stability & Reactivity Information \*\*\*

### Chemical Stability

Stable under normal conditions.

### Chemical Stability: Conditions to Avoid

Keep away from heat, ignition sources and incompatible materials. Avoid strong oxidizing agents.

### Incompatibility

This product may react with oxidizing agents. Strong oxidizing agents (peroxides, chlorine, strong acids).

### Hazardous Decomposition

Upon decomposition, this product emits carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.

### Possibility of Hazardous Reactions

Will not occur.

## \*\*\* Section 11 - Toxicological Information \*\*\*

### Acute Dose Effects

#### A: General Product Information

An LD50 value for this product has not been determined.

#### B: Component Analysis - LD50/LC50

##### Heptane (n-) (142-82-5)

Inhalation LC50 Rat: 103 g/m<sup>3</sup>/4H

##### Toluene (108-88-3)

Inhalation LC50 Rat: 12.5 mg/L/4H; Inhalation LC50 Rat: >26700 ppm/1H; Oral LD50 Rat: 636 mg/kg; Dermal LD50 Rabbit: 8390 mg/kg

##### Acetone (67-64-1)

Inhalation LC50 Rat: 76 mg/L/4H; Oral LD50 Rat: 1800 mg/kg; Dermal LD50 Rabbit: 20000 mg/kg



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## Carcinogenicity

### A: General Product Information

No carcinogenicity data available for this product.

### B: Component Carcinogenicity

#### Toluene (108-88-3)

ACGIH: A4 - Not Classifiable as a Human Carcinogen

IARC: Monograph 71 [1999], Monograph 47 [1989] (Group 3 (not classifiable))

#### Acetone (67-64-1)

ACGIH: A4 - Not Classifiable as a Human Carcinogen

## \*\*\* Section 12 - Ecological Information \*\*\*

### Ecotoxicity

No information available for the product.

## \*\*\* Section 13 - Disposal Considerations \*\*\*

### Waste Disposal Instructions

Dispose of in accordance with all applicable Federal, State, Provincial, and local regulations.

## \*\*\* Section 14 - Transportation Information \*\*\*

### US DOT Information

Shipping Name: Consumer Commodity, ORM-D

### IMDG Information

Shipping Name: Aerosol, flammable UN #: 1950 Hazard Class: 2.1

Required Label(s): Limited Quantity

### IATA Information

Shipping Name: Aerosol, flammable UN #: 1950 Hazard Class: 2.1

Required Label(s): Limited Quantity

## \*\*\* Section 15 - Regulatory Information \*\*\*

### US Federal Regulations

Components of this product have been checked against the non-confidential TSCA inventory by CAS Registry Number. Components not identified on this non-confidential inventory are exempt from listing (i.e. as polymers) or are listed on the confidential inventory as declared by the supplier.

### A: Component Analysis

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) and/or CERCLA (40 CFR 302.4).

#### Toluene (108-88-3)

SARA 313: 1.0 % de minimis concentration

CERCLA: 1000 lb final RQ; 454 kg final RQ

#### Acetone (67-64-1)

CERCLA: 5000 lb final RQ; 2270 kg final RQ

### B: Component Analysis - Inventory

Component	CAS #	TSCA	CAN	EEC
Heptane (n-)	142-82-5	Yes	DSL	EINECS
Toluene	108-88-3	Yes	DSL	EINECS
Carbon dioxide	124-38-9	Yes	DSL	EINECS
Acetone	67-64-1	Yes	DSL	EINECS



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## State Regulations

Other state regulations may apply. Check individual state requirements.

## Component Analysis - State

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA	RI
Heptane (n-)	142-82-5	Yes	Yes	Yes	Yes	Yes	Yes
Toluene	108-88-3	Yes	Yes	Yes	Yes	Yes	Yes
Carbon dioxide	124-38-9	Yes	Yes	Yes	Yes	Yes	Yes
Acetone	67-64-1	Yes	Yes	Yes	Yes	Yes	Yes

The following statement(s) are provided under the California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):

WARNING! This product contains a chemical known to the state of California to cause reproductive/developmental effects.

## Component Analysis - WHMIS IDL

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

Component	CAS #	Minimum Concentration
Heptane (n-)	142-82-5	1 %
Toluene	108-88-3	1 %
Carbon dioxide	124-38-9	1 %
Acetone	67-64-1	1 %

## \*\*\* Section 16 - Other Information \*\*\*

## Other Information

We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind, express or implied, and we assume no responsibility for any loss, damage, or expense, direct or consequential, arising out of their use. You must notify each person to whom this mixture or trade name product is sold. This statement must not be detached. Any copy or redistribution of the Material Safety Data Sheet shall include this statement.

## Key/Legend

ACGIH = American Conference of Governmental Industrial Hygienists; CAS = Chemical Abstract Services; CERCLA = Comprehensive Environmental Response, Compensation, and Liability Act; CFR = Code of Federal Regulations; CPR = Controlled Product Regulations; DOT = Department of Transportation; DSL = Domestic Substances List; EEC = European Economic Community; EINECS = European Inventory of Existing Commercial Chemical Substances; ELINCS = European List of Notified Chemical Substances; EPA = Environmental Protection Agency; HMIS = Hazardous Materials Information System; IARC = International Agency for Research on Cancer; IATA = International Air Transport Association; IDL = Ingredient Disclosure List; IMDG = International Maritime Dangerous Goods; LC50 = Lethal Concentration 50%; LD50 = Lethal Dose 50%; NDSL = Non-Domestic Substances List; NFPA = National Fire Protection Agency; NIOSH = National Institute for Occupational Safety and Health; NTP = National Toxicology Program; OSHA = Occupational Safety and Health Administration; SARA = Superfund Amendments and Reauthorization Act; SCBA = Self Contained Breathing Apparatus; TSCA = Toxic Substance Control Act; WHMIS = Workplace Hazardous Materials Information System.

End of MSDS 403