

# SAFETY DATA SHEET

## 1. Identification

**Product identifier** Brakleen® Brake Parts Cleaner - Non-Chlorinated

Other means of identification

No. 05084 (Item# 1003696) **Product Code** 

Recommended use Brake cleaner **Recommended restrictions** None known.

Manufacturer/Importer/Supplier/Distributor information

Manufactured or sold by:

CRC Industries. Inc. Company name 885 Louis Dr. **Address** 

Warminster, PA 18974 US

Telephone

215-674-4300 **General Information Technical Assistance** 800-521-3168 **Customer Service** 800-272-4620 24-Hour Emergency 800-424-9300 (US)

(CHEMTREC) 703-527-3887 (International) Website www.crcindustries.com

# 2. Hazard(s) identification

**Physical hazards** Flammable aerosols Category 1

> Gases under pressure Compressed gas

**Health hazards** Acute toxicity, oral Category 3

> Skin corrosion/irritation Category 2 Serious eye damage/eye irritation Category 2A Reproductive toxicity (fertility, the unborn Category 2

child)

Specific target organ toxicity, single exposure Category 1 (central nervous system, eyes)

Specific target organ toxicity, single exposure Category 3 narcotic effects

Specific target organ toxicity, repeated

exposure

Category 2 (central nervous system, kidney,

peripheral nervous system)

**Environmental hazards** Hazardous to the aquatic environment, acute

Hazardous to the aquatic environment,

long-term hazard

Aspiration hazard

Category 2

Category 1

Category 2

Not classified. **OSHA** defined hazards

Label elements



Signal word Danger

**Hazard statement** Extremely flammable aerosol. Contains gas under pressure; may explode if heated. Toxic if

swallowed. May be fatal if swallowed and enters airways. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness. Suspected of damaging fertility or the unborn child. Causes damage to organs (central nervous system, eyes). May cause damage to organs (central nervous system, kidney, peripheral nervous system) through prolonged or repeated

exposure. Toxic to aquatic life. Toxic to aquatic life with long lasting effects.

Material name: Brakleen® Brake Parts Cleaner - Non-Chlorinated

SDS US No. 05084 (Item# 1003696) Version #: 05 Revision date: 12-28-2017 Issue date: 04-28-2015

#### **Precautionary statement**

#### Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Do not breathe mist or vapor. Do not apply while equipment is energized. Extinguish all flames, pilot lights, and heaters. Vapors will accumulate readily and may ignite. Use only with adequate ventilation; maintain ventilation during use and until all vapors are gone. Open doors and windows or use other means to ensure a fresh air supply during use and while product is drying. If you experience any symptoms listed on this label, increase ventilation or leave the area. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection. Avoid release to the environment.

#### Response

If swallowed: Immediately call a poison center/doctor. Rinse mouth. Do NOT induce vomiting. If on skin: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. If exposed: Call a poison center/doctor. Collect spillage.

Storage

Store in a well-ventilated place. Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F. Exposure to high temperature may cause can to burst.

Disposal

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

Hazard(s) not otherwise classified (HNOC)

Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion.

Supplemental information

None.

# 3. Composition/information on ingredients

#### **Mixtures**

Chemical name	Common name and synonyms	CAS number	%
acetone		67-64-1	40 - 50
methanol		67-56-1	10 - 20
carbon dioxide		124-38-9	5 - 10
n-heptane		142-82-5	5 - 10
toluene		108-88-3	5 - 10
2-methylhexane		591-76-4	1 - 3
3-methylhexane		589-34-4	1 - 3
heptane, branched, cyclic and linear		426260-76-6	1 - 3
methylcyclohexane		108-87-2	1 - 3
naphtha (petroleum), hydrotreated light		64742-49-0	1 - 3
solvent naphtha (petroleum), light aliph.		64742-89-8	1 - 3
3-ethylpentane		617-78-7	< 1
3,3-dimethylpentane		562-49-2	< 0.2

Specific chemical identity and/or percentage of composition has been withheld as a trade secret.

# 4. First-aid measures

Ingestion

**Inhalation** Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or

artificial respiration if needed. Call a POISON CENTER or doctor/physician if you feel unwell.

**Skin contact**Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation

occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

**Eye contact** Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if

present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Do not use

mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

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Most important symptoms/effects, acute and delayed

Indication of immediate medical attention and special treatment needed

**General information** 

Aspiration may cause pulmonary edema and pneumonitis. May cause drowsiness and dizziness. Narcosis. Headache. Nausea, vomiting. Behavioral changes. Decrease in motor functions. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain. Edema. Prolonged exposure may cause chronic effects.

Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

Take off all contaminated clothing immediately. IF exposed or concerned: Get medical advice/attention. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Wash contaminated clothing before reuse.

# 5. Fire-fighting measures

Suitable extinguishing media

Water fog. Alcohol resistant foam. Carbon dioxide (CO2). Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only.

Unsuitable extinguishing media

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from the chemical

Contents under pressure. Pressurized container may rupture when exposed to heat or flame. This product is a poor conductor of electricity and can become electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. Static electricity accumulation may be significantly increased by the presence of small quantities of water or other contaminants. Material will float and may ignite on surface of water. During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

Fire fighting equipment/instructions
General fire hazards

In case of fire: Stop leak if safe to do so. Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up.

Extremely flammable aerosol. Contents under pressure. Pressurized container may rupture when exposed to heat or flame.

#### 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Remove all possible sources of ignition in the surrounding area. Keep out of low areas. Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks). Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. Emergency personnel need self-contained breathing equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Use appropriate containment to avoid environmental contamination. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. This product is miscible in water. Prevent product from entering drains. Stop the flow of material, if this is without risk. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS.

**Environmental precautions** 

Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Use appropriate containment to avoid environmental contamination.

## 7. Handling and storage

#### Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Minimize fire risks from flammable and combustible materials (including combustible dust and static accumulating liquids) or dangerous reactions with incompatible materials. Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Use caution around energized equipment. The metal container will conduct electricity if it contacts a live source. This may result in injury to the user from electrical shock and/or flash fire. Do not breathe mist or vapor. Do not taste or swallow. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Pregnant or breastfeeding women must not handle this product. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices. For product usage instructions, see the product label.

# Conditions for safe storage, including any incompatibilities

Level 3 Aerosol.

Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122°F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Avoid spark promoters. These alone may be insufficient to remove static electricity. Store in a well-ventilated place. Stored containers should be periodically checked for general condition and leakage. Store away from incompatible materials (see Section 10 of the SDS).

# 8. Exposure controls/personal protection

#### Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

US. OSHA Table Z-1 Limits for Air Contar	ninants (29 CFR 1910.1000)	
Components	Type	Value
acetone (CAS 67-64-1)	PEL	2400 mg/m3
		1000 ppm
carbon dioxide (CAS	PEL	9000 mg/m3
124-38-9)		•
		5000 ppm
methanol (CAS 67-56-1)	PEL	260 mg/m3
		200 ppm
methylcyclohexane (CAS	PEL	2000 mg/m3
108-87-2)		
		500 ppm
naphtha (petroleum),	PEL	400 mg/m3
hydrotreated light (CAS		
64742-49-0)		100 ppm
n-heptane (CAS 142-82-5)	PEL	2000 mg/m3
Trioptano (O/10 172 02-0)		500 ppm
solvent naphtha	PEL	400 mg/m3
(petroleum), light aliph.	1 22	400 mg/m3
(CAS 64742-89-8)		
,		100 ppm
US. OSHA Table Z-2 (29 CFR 1910.1000)		
Components	Туре	Value
toluene (CAS 108-88-3)	Ceiling	300 ppm
	TWA	200 ppm
	IVVA	200 ppiii
US. ACGIH Threshold Limit Values	IVVA	200 ββιτι
US. ACGIH Threshold Limit Values Components	Туре	Value
Components	Туре	Value
Components 2-methylhexane (CAS	Туре	Value
Components 2-methylhexane (CAS	<b>Type</b> STEL	Value 500 ppm
Components  2-methylhexane (CAS 591-76-4)	Type STEL TWA STEL	Value 500 ppm 400 ppm 500 ppm
Components  2-methylhexane (CAS 591-76-4)  3,3-dimethylpentane (CAS 562-49-2)	Type STEL TWA STEL TWA	Value 500 ppm 400 ppm 500 ppm 400 ppm
Components  2-methylhexane (CAS 591-76-4)  3,3-dimethylpentane (CAS 562-49-2)  3-ethylpentane (CAS	Type STEL TWA STEL	Value 500 ppm 400 ppm 500 ppm
Components  2-methylhexane (CAS 591-76-4)  3,3-dimethylpentane (CAS 562-49-2)	Type STEL TWA STEL TWA	Value 500 ppm 400 ppm 500 ppm 400 ppm
Components  2-methylhexane (CAS 591-76-4)  3,3-dimethylpentane (CAS 562-49-2)  3-ethylpentane (CAS	Type STEL TWA STEL TWA STEL	Value 500 ppm 400 ppm 500 ppm 400 ppm 500 ppm
Components  2-methylhexane (CAS 591-76-4)  3,3-dimethylpentane (CAS 562-49-2)  3-ethylpentane (CAS 617-78-7)	Type STEL TWA STEL TWA STEL TWA STEL TWA STEL	Value 500 ppm 400 ppm 500 ppm 400 ppm 500 ppm 400 ppm 500 ppm
Components  2-methylhexane (CAS 591-76-4)  3,3-dimethylpentane (CAS 562-49-2)  3-ethylpentane (CAS 617-78-7)  3-methylhexane (CAS 589-34-4)	Type STEL TWA STEL TWA STEL TWA STEL TWA STEL TWA	Value 500 ppm 400 ppm 500 ppm 400 ppm 500 ppm 400 ppm 500 ppm 400 ppm 500 ppm
Components  2-methylhexane (CAS 591-76-4)  3,3-dimethylpentane (CAS 562-49-2)  3-ethylpentane (CAS 617-78-7)  3-methylhexane (CAS	Type STEL TWA STEL TWA STEL TWA STEL TWA STEL TWA STEL	Value  500 ppm  400 ppm 500 ppm  400 ppm 500 ppm  400 ppm 500 ppm  400 ppm 500 ppm
Components  2-methylhexane (CAS 591-76-4)  3,3-dimethylpentane (CAS 562-49-2)  3-ethylpentane (CAS 617-78-7)  3-methylhexane (CAS 589-34-4)  acetone (CAS 67-64-1)	Type STEL TWA STEL TWA STEL TWA STEL TWA STEL TWA STEL TWA	Value  500 ppm  400 ppm 500 ppm  400 ppm 500 ppm  400 ppm 500 ppm  400 ppm 500 ppm  500 ppm  250 ppm
Components  2-methylhexane (CAS 591-76-4)  3,3-dimethylpentane (CAS 562-49-2)  3-ethylpentane (CAS 617-78-7)  3-methylhexane (CAS 589-34-4)  acetone (CAS 67-64-1)  carbon dioxide (CAS	Type STEL TWA STEL TWA STEL TWA STEL TWA STEL TWA STEL	Value  500 ppm  400 ppm 500 ppm  400 ppm 500 ppm  400 ppm 500 ppm  400 ppm 500 ppm
Components  2-methylhexane (CAS 591-76-4)  3,3-dimethylpentane (CAS 562-49-2)  3-ethylpentane (CAS 617-78-7)  3-methylhexane (CAS 589-34-4)  acetone (CAS 67-64-1)	Type STEL TWA STEL TWA STEL TWA STEL TWA STEL TWA STEL TWA	Value  500 ppm  400 ppm 500 ppm  400 ppm 500 ppm  400 ppm 500 ppm  400 ppm 500 ppm  500 ppm  250 ppm
Components  2-methylhexane (CAS 591-76-4)  3,3-dimethylpentane (CAS 562-49-2)  3-ethylpentane (CAS 617-78-7)  3-methylhexane (CAS 589-34-4)  acetone (CAS 67-64-1)  carbon dioxide (CAS	Type STEL TWA STEL	Value  500 ppm  400 ppm 500 ppm  400 ppm 500 ppm  400 ppm 500 ppm  400 ppm 500 ppm  500 ppm  500 ppm  500 ppm  500 ppm
Components  2-methylhexane (CAS 591-76-4)  3,3-dimethylpentane (CAS 562-49-2)  3-ethylpentane (CAS 617-78-7)  3-methylhexane (CAS 589-34-4)  acetone (CAS 67-64-1)  carbon dioxide (CAS 124-38-9)	Type STEL TWA	Value  500 ppm  400 ppm 500 ppm  400 ppm 500 ppm  400 ppm 500 ppm  400 ppm 500 ppm  250 ppm 30000 ppm

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Components	Туре	Value	
nethylcyclohexane (CAS 108-87-2)	STEL	500 ppm	
	TWA	400 ppm	
n-heptane (CAS 142-82-5)	STEL	500 ppm	
	TWA	400 ppm	
oluene (CAS 108-88-3)	TWA	20 ppm	
JS. NIOSH: Pocket Guide to Chem	ical Hazards		
Components	Туре	Value	
icetone (CAS 67-64-1)	TWA	590 mg/m3	
		250 ppm	
carbon dioxide (CAS 124-38-9)	STEL	54000 mg/m3	
•		30000 ppm	
	TWA	9000 mg/m3	
		5000 ppm	
nethanol (CAS 67-56-1)	STEL	325 mg/m3	
		250 ppm	
	TWA	260 mg/m3	
		200 ppm	
nethylcyclohexane (CAS 108-87-2)	TWA	1600 mg/m3	
,		400 ppm	
naphtha (petroleum), nydrotreated light (CAS 34742-49-0)	TWA	400 mg/m3	
77.72 70 0)		100 ppm	
n-heptane (CAS 142-82-5)	Ceiling	1800 mg/m3	
	·····g	440 ppm	
	TWA	350 mg/m3	
		85 ppm	
solvent naphtha petroleum), light aliph. CAS 64742-89-8)	TWA	400 mg/m3	
5/10 5 1/ <del>12</del> 00 0/		100 ppm	
oluene (CAS 108-88-3)	STEL	560 mg/m3	
		150 ppm	
	TWA	375 mg/m3	

# **Biological limit values**

**ACGIH Biological Exposure Indices** 

Components	Value	Determinant	Specimen	Sampling Time	
acetone (CAS 67-64-1)	25 mg/l	Acetone	Urine	*	
methanol (CAS 67-56-1)	15 mg/l	Methanol	Urine	*	
toluene (CAS 108-88-3)	0.3 mg/g	o-Cresol, with hydrolysis	Creatinine in urine	*	
	0.03 mg/l	Toluene	Urine	*	
	0.02 mg/l	Toluene	Blood	*	

<sup>\* -</sup> For sampling details, please see the source document.

# **Exposure guidelines**

US - California OELs: Skin designation

methanol (CAS 67-56-1) toluene (CAS 108-88-3)

US - Minnesota Haz Subs: Skin designation applies

methanol (CAS 67-56-1) toluene (CAS 108-88-3)

Skin designation applies. Skin designation applies.

US - Tennessee OELs: Skin designation

methanol (CAS 67-56-1)

Can be absorbed through the skin.

Can be absorbed through the skin.

Can be absorbed through the skin.

US ACGIH Threshold Limit Values: Skin designation

methanol (CAS 67-56-1) Can be absorbed through the skin.

US NIOSH Pocket Guide to Chemical Hazards: Skin designation

methanol (CAS 67-56-1) Can be absorbed through the skin.

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. Provide eyewash station. Eye wash fountain and emergency showers are recommended.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin protection

Wear protective gloves such as: Nitrile. Neoprene. Polyvinyl alcohol (PVA). **Hand protection** 

Wear appropriate chemical resistant clothing. Other

If engineering controls are not feasible or if exposure exceeds the applicable exposure limits, use a Respiratory protection

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

Observe any medical surveillance requirements. When using do not smoke. Keep away from food and drink. 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** 

Liquid. Physical state Aerosol. **Form** Clear. Color Odor Solvent. **Odor threshold** Not available. Not available.

Melting point/freezing point -195.9 °F (-126.6 °C) estimated Initial boiling point and boiling 132.9 °F (56.1 °C) estimated

range

< 0 °F (< -17.8 °C) Tag Closed Cup Flash point

Fast. **Evaporation rate** 

Flammability (solid, gas) Not available. Upper/lower flammability or explosive limits Flammability limit - lower

1.1 % estimated

Flammability limit - upper

36 % estimated

(%)

5157.4 hPa estimated Vapor pressure

> 1 (air = 1)Vapor density Relative density 0.84 estimated

Solubility(ies)

Slightly soluble. Solubility (water) Not available. Partition coefficient

(n-octanol/water)

539.6 °F (282 °C) estimated **Auto-ignition temperature** 

**Decomposition temperature** Not available. 91.1 % estimated Percent volatile

Material name: Brakleen® Brake Parts Cleaner - Non-Chlorinated

# 10. Stability and reactivity

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Material is stable under normal conditions. **Chemical stability** 

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid Heat, flames and sparks. Contact with incompatible materials.

Incompatible materials Acids. Alkalies. Amines. Ammonia. Halogens. Aluminum. Magnesium. Zinc. Peroxides. Strong

oxidizing agents. Reducing agents.

**Hazardous decomposition** 

products

Carbon oxides. Formaldehyde.

# 11. Toxicological information

#### Information on likely routes of exposure

Inhalation May cause damage to organs through prolonged or repeated exposure by inhalation. May cause

drowsiness and dizziness. Headache. Nausea, vomiting.

Causes skin irritation. Skin contact

Causes serious eye irritation. Eve contact

Toxic if swallowed. Even small amounts (30-250 ml methanol) may be fatal. Symptoms are Ingestion

stomach ache, nausea, vomiting, dullness, visual disorder and blindness. Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.

Symptoms related to the physical, chemical and toxicological characteristics Aspiration may cause pulmonary edema and pneumonitis. May cause drowsiness and dizziness. Narcosis. Headache. Nausea, vomiting. Behavioral changes. Decrease in motor functions. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May

> 2000 mg/kg

cause respiratory irritation. Skin irritation. May cause redness and pain. Edema.

## Information on toxicological effects

**Acute toxicity** May be fatal if swallowed and enters airways. Narcotic effects.

Acute toxicity	iviay be latal il swallowed alla ci	Alters all ways. Narcotte chects.
Components	Species	Test Results
3-methylhexane (CAS 589	-34-4)	
<u>Acute</u>		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Oral		
LD50	Rat	> 2000 mg/kg
acetone (CAS 67-64-1)		
<u>Acute</u>		
Dermal		
LD50	Rabbit	20000 mg/kg
Oral		
LD50	Rat	5800 mg/kg
heptane, branched, cyclic	and linear (CAS 426260-76-6)	
<u>Acute</u>		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Inhalation		
LC50	Rat	> 60 mg/l, 4 hours
Oral		
LD50	Rat	> 5000 mg/kg
methylcyclohexane (CAS 1	108-87-2)	
<u>Acute</u>		
Dermal		

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LD50

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Rabbit

Components Species Test Results

naphtha (petroleum), hydrotreated light (CAS 64742-49-0)

Acute Dermal

LD50 Rabbit > 2000 mg/kg

n-heptane (CAS 142-82-5)

<u>Acute</u> Dermal

LD50 Rabbit 3000 mg/kg

solvent naphtha (petroleum), light aliph. (CAS 64742-89-8)

Acute Dermal

LD50 Rabbit > 2000 mg/kg

**Skin corrosion/irritation** Causes skin irritation.

Serious eye damage/eye

Causes serious eve irritation.

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** This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity

toluene (CAS 108-88-3)

3 Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity Suspected of damaging fertility. Suspected of damaging the unborn child.

Specific target organ toxicity -

single exposure

Causes damage to organs (central nervous system, eyes). May cause drowsiness and dizziness.

Specific target organ toxicity -

repeated exposure

May cause damage to organs (central nervous system, kidney, peripheral nervous system)

through prolonged or repeated exposure.

Aspiration hazard May be fatal if swallowed and enters airways. If aspirated into lungs during swallowing or vomiting,

may cause chemical pneumonia, pulmonary injury or death.

Chronic effects May cause damage to organs through prolonged or repeated exposure. Prolonged inhalation may

be harmful.

## 12. Ecological information

**Ecotoxicity** Toxic to aquatic life with long lasting effects.

Components		Species	Test Results
acetone (CAS 67-64-1)	ı		
Aquatic			
Crustacea	EC50	Water flea (Daphnia magna)	10294 - 17704 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	4740 - 6330 mg/l, 96 hours
neptane, branched, cyc	clic and linear (CA	S 426260-76-6)	
Aquatic			
Acute			
Crustacea	EC50	Water flea (Daphnia magna)	1.5 mg/l, 48 hours

<sup>\*</sup> Estimates for product may be based on additional component data not shown.

Components		Species	Test Results
methanol (CAS 67-56-1)			
Aquatic			
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	18000 - 20000 mg/l, 96 hours
Acute			
Crustacea	EC50	Water flea (Daphnia magna)	> 10000 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	18000 - 20000 mg/l, 96 hours
methylcyclohexane (CAS 10	08-87-2)		
Aquatic			
Fish	LC50	Striped bass (Morone saxatilis)	5.8 mg/l, 96 hours
naphtha (petroleum), hydroi	treated light (C	CAS 64742-49-0)	
Aquatic	<b>.</b> .	·	
Acute			
Crustacea	EC50	Daphnia	1 - 10 mg/l, 48 hours
Fish	LC50	Fish	1 - 10 mg/l, 96 hours
n-heptane (CAS 142-82-5)			
Aquatic			
Acute			
Crustacea	EC50	Water flea (Daphnia magna)	1.5 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas)	2.1 - 2.98 mg/l, 96 hours
solvent naphtha (petroleum	). light aliph. ((	CAS 64742-89-8)	
Aquatic	,, 0 1 (	,	
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	8.8 mg/l, 96 hours
			8.8 mg/l, 96 hours
Acute			-
Crustacea	EC50	Water flea (Daphnia magna)	1.5 mg/l, 48 hours
toluene (CAS 108-88-3)		-	
Aquatic			
Acute			
Crustacea	EC50	Water flea (Daphnia magna)	6 mg/l, 48 hours
Fish	LC50	Coho salmon,silver salmon (Oncorhynchus kisutch)	5.5 mg/l, 96 hours
sistence and degradability	No data is	available on the degradability of this product.	

Рe

#### Bio

Partition coefficient n-octanol / water (log Kow)

-0.24 acetone methanol -0.77methylcyclohexane 3.61 n-heptane 4.66 toluene 2.73

**Bioconcentration factor (BCF)** naphtha (petroleum), hydrotreated light 10 - 25000 90

toluene

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** This material and its container must be disposed of as hazardous waste. Collect and reclaim or

dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose in accordance

with all applicable regulations.

D001: Waste Flammable material with a flash point <140 F Hazardous waste code

> F003: Waste Non-halogenated Solvent - Spent Non-halogenated Solvent F005: Waste Non-halogenated Solvent - Spent Non-halogenated Solvent

Since emptied containers may retain product residue, follow label warnings even after container is Contaminated packaging

emptied. Empty containers should be taken to an approved waste handling site for recycling or

disposal.

## 14. Transport information

DOT

UN1950 **UN number** 

**UN proper shipping name** Aerosols, flammable, Limited Quantity

Transport hazard class(es)

2.1 Class 6.1(PGIII) Subsidiary risk Label(s) 2.1

**Packing group** Not applicable.

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Special provisions N82 306 Packaging exceptions Packaging non bulk None Packaging bulk None

**IATA** 

UN1950 **UN** number

**UN** proper shipping name Aerosols, flammable, containing substances in Division 6.1, Packing Group III

Transport hazard class(es)

Class 2.1 Subsidiary risk 6.1(PGIII) Packing group Not applicable.

10P **ERG Code** 

Other information

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Passenger and cargo

aircraft

Allowed with restrictions.

Cargo aircraft only

Allowed with restrictions.

**IMDG** 

UN1950 **UN number UN** proper shipping name **AEROSOLS** 

Transport hazard class(es)

Class 2

6.1(PGIII) Subsidiary risk Packing group Not applicable.

**Environmental hazards** 

No. Marine pollutant

Not available.

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

### 15. Regulatory information

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication **US federal regulations** 

Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

SARA 304 Emergency release notification

Not regulated.

Material name: Brakleen® Brake Parts Cleaner - Non-Chlorinated

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### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

#### US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance

methanol (CAS 67-56-1) toluene (CAS 108-88-3)

#### **CERCLA Hazardous Substance List (40 CFR 302.4)**

3,3-dimethylpentane (CAS 562-49-2) Listed. acetone (CAS 67-64-1) Listed. methanol (CAS 67-56-1) Listed. toluene (CAS 108-88-3) Listed.

#### **CERCLA Hazardous Substances: Reportable quantity**

3,3-dimethylpentane (CAS 562-49-2) 100 LBS acetone (CAS 67-64-1) 5000 LBS methanol (CAS 67-56-1) 5000 LBS toluene (CAS 108-88-3) 1000 LBS

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.

## Other federal regulations

#### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

methanol (CAS 67-56-1) toluene (CAS 108-88-3)

#### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act Not regulated. (SDWA)

Drug Enforcement Administration (DEA). List 2, Essential Chemicals (21 CFR 1310.02(b) and 1310.04(f)(2) and **Chemical Code Number** 

acetone (CAS 67-64-1) 6532 toluene (CAS 108-88-3) 6594

Drug Enforcement Administration (DEA). List 1 & 2 Exempt Chemical Mixtures (21 CFR 1310.12(c))

acetone (CAS 67-64-1) 35 %WV toluene (CAS 108-88-3) 35 %WV

**DEA Exempt Chemical Mixtures Code Number** 

acetone (CAS 67-64-1) 6532 toluene (CAS 108-88-3) 594

FEMA Priority Substances Respiratory Health and Safety in the Flavor Manufacturing Workplace

acetone (CAS 67-64-1) Low priority

**Food and Drug** Not regulated.

Administration (FDA)

#### Superfund Amendments and Reauthorization Act of 1986 (SARA)

Flammable (gases, aerosols, liquids, or solids) Classified hazard

Gas under pressure categories

Acute toxicity (any route of exposure)

Skin corrosion or irritation

Serious eye damage or eye irritation

Reproductive toxicity

Specific target organ toxicity (single or repeated exposure)

Aspiration hazard

Hazard not otherwise classified (HNOC)

#### SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous Yes

chemical

## SARA 313 (TRI reporting)

Chemical name	CAS number	% by wt.	
methanol	67-56-1	10 - 20	
toluene	108-88-3	5 - 10	

#### **US** state regulations

## US. New Jersey Worker and Community Right-to-Know Act

3-methylhexane (CAS 589-34-4) acetone (CAS 67-64-1) carbon dioxide (CAS 124-38-9) methanol (CAS 67-56-1) methylcyclohexane (CAS 108-87-2) naphtha (petroleum), hydrotreated light (CAS 64742-49-0) n-heptane (CAS 142-82-5) solvent naphtha (petroleum), light aliph. (CAS 64742-89-8) toluene (CAS 108-88-3)

#### **US. Massachusetts RTK - Substance List**

2-methylhexane (CAS 591-76-4)
3-methylhexane (CAS 589-34-4)
acetone (CAS 67-64-1)
carbon dioxide (CAS 124-38-9)
methanol (CAS 67-56-1)
methylcyclohexane (CAS 108-87-2)
naphtha (petroleum), hydrotreated light (CAS 64742-49-0)
n-heptane (CAS 142-82-5)
solvent naphtha (petroleum), light aliph. (CAS 64742-89-8)
toluene (CAS 108-88-3)

#### US. Pennsylvania Worker and Community Right-to-Know Law

2-methylhexane (CAS 591-76-4)
3,3-dimethylpentane (CAS 562-49-2)
3-methylhexane (CAS 589-34-4)
acetone (CAS 67-64-1)
carbon dioxide (CAS 124-38-9)
methanol (CAS 67-56-1)
methylcyclohexane (CAS 108-87-2)
naphtha (petroleum), hydrotreated light (CAS 64742-49-0)
n-heptane (CAS 142-82-5)
solvent naphtha (petroleum), light aliph. (CAS 64742-89-8)
toluene (CAS 108-88-3)

#### **US. Rhode Island RTK**

acetone (CAS 67-64-1)
carbon dioxide (CAS 124-38-9)
methanol (CAS 67-56-1)
methylcyclohexane (CAS 108-87-2)
naphtha (petroleum), hydrotreated light (CAS 64742-49-0)
n-heptane (CAS 142-82-5)
solvent naphtha (petroleum), light aliph. (CAS 64742-89-8)
toluene (CAS 108-88-3)

#### **California Proposition 65**



WARNING: Cancer and Reproductive Harm - www.P65Warnings.ca.gov

## California Proposition 65 - CRT: Listed date/Carcinogenic substance

acetaldehyde (CAS 75-07-0)
Listed: April 1, 1988
benzene (CAS 71-43-2)
Listed: February 27, 1987
cumene (CAS 98-82-8)
Listed: April 6, 2010
ethylbenzene (CAS 100-41-4)
naphthalene (CAS 91-20-3)
Listed: April 19, 2002

# California Proposition 65 - CRT: Listed date/Developmental toxin

benzene (CAS 71-43-2)
methanol (CAS 67-56-1)
toluene (CAS 108-88-3)

Listed: December 26, 1997
Listed: March 16, 2012
Listed: January 1, 1991

# California Proposition 65 - CRT: Listed date/Male reproductive toxin

benzene (CAS 71-43-2) Listed: December 26, 1997

Material name: Brakleen® Brake Parts Cleaner - Non-Chlorinated

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# US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

acetone (CAS 67-64-1) methanol (CAS 67-56-1)

naphtha (petroleum), hydrotreated light (CAS 64742-49-0) solvent naphtha (petroleum), light aliph. (CAS 64742-89-8)

toluene (CAS 108-88-3)

## Volatile organic compounds (VOC) regulations

**EPA** 

**VOC content (40 CFR** 43.8 %

51.100(s))

Consumer products (40 CFR 59, Subpt. C)

Not regulated

State

Consumer products This product is regulated as a Brake Cleaner. This product is not compliant to be sold for use in

California, Delaware, Maryland, New Hampshire, and the following counties in Utah: Box Elder, Cache, Davis, Salt Lake, Tooele, Utah, and Weber. This product is compliant in all other states.

**VOC content (CA)** 43.8 % **VOC content (OTC)** 43.8 %

#### **International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	Yes
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No

EuropeEuropean List of Notified Chemical Substances (ELINCS)NoJapanInventory of Existing and New Chemical Substances (ENCS)NoKoreaExisting Chemicals List (ECL)YesNew ZealandNew Zealand InventoryNoPhilippinesPhilippine Inventory of Chemicals and Chemical SubstancesYes

(PICCS)

Taiwan Toxic Chemical Substances (TCS)

United States & Puerto Rico

Toxic Substances Control Act (TSCA) Inventory

Yes

## 16. Other information, including date of preparation or last revision

Issue date04-28-2015Revision date12-28-2017Prepared byAllison Yoon

Version # 05

Further information CRC # 991/1002986

HMIS® ratings Health: 2\*

Flammability: 4 Physical hazard: 0 Personal protection: B

NFPA ratings Health: 2

Flammability: 4 Instability: 0

NFPA ratings



<sup>\*</sup>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).

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**Revision information** 

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

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