

SAFETY DATA SHEET

1. Identification

Product identifier Brakleen® Brake Parts Cleaner - Non-Chlorinated

Other means of identification

No. 05086 (Item# 1003701) **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 Category 2 Flammable liquids **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

Specific target organ toxicity, single exposure Category 3 narcotic effects

Specific target organ toxicity, repeated

exposure

Aspiration hazard

Category 2 (central nervous system, kidney,

Category 1 (central nervous system, eyes)

peripheral nervous system)

Environmental hazards

Hazardous to the aquatic environment, acute

Category 1 Category 2

Hazardous to the aquatic environment,

Category 2

long-term hazard

OSHA defined hazards

Not classified.

Label elements



Signal word Danger

Highly flammable liquid and vapor. Toxic if swallowed. May be fatal if swallowed and enters **Hazard statement**

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 No. 05086 (Item# 1003701) Version #: 04 Revision date: 12-28-2017 Issue date: 04-23-2015

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. Keep container tightly closed. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Use explosion-proof electrical/ventilating/lighting equipment. Use only with adequate ventilation; maintain ventilation

electrical/ventilating/lighting equipment. 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. Do not breathe mist or vapor. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection. Wash thoroughly after handling. Avoid release to the environment.

Response

If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting. Rinse mouth. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing 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. In case of fire: Do not use water jet as an extinguisher, as this will spread the fire. Collect spillage.

Storage Store in a well-ventilated place. Keep container tightly closed. Keep cool. Store locked up.

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	50 - 60
methanol		67-56-1	10 - 20
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

InhalationRemove 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.

Take off immediately all conteminated elabora. Discouling with protocols over if also imitation

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.

Ingestion 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.

Most important symptoms/effects, acute and delayed

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.

Indication of immediate medical attention and special treatment needed

General information

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

Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. This product is a poor conductor of electricity and can become electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. To reduce potential for static discharge, use proper bonding and grounding procedures. This liquid may accumulate static electricity when filling properly grounded containers. 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

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Fire fighting equipment/instructions
General fire hazards

In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.

Highly flammable liquid and vapor.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Do not breathe mist or vapor. 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.

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. Take precautionary measures against static discharge. Use only non-sparking tools. This product is miscible in water. This material is classified as a water pollutant under the Clean Water Act and should be prevented from contaminating soil or from entering sewage and drainage systems which lead to waterways.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use.

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.

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

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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. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Explosion-proof general and local exhaust ventilation. Minimize fire risks from flammable and combustible materials (including combustible dust and static accumulating liquids) or dangerous reactions with incompatible materials. Handling operations that can promote accumulation of static charges include but are not limited to: mixing, filtering, pumping at high flow rates, splash filling, creating mists or sprays, tank and container filling, tank cleaning, sampling, gauging, switch loading, vacuum truck operations. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. 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. Should be handled in closed systems, if possible. 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

Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Eliminate sources of ignition. Avoid spark promoters. Ground/bond container and equipment. These alone may be insufficient to remove static electricity. Store in a cool, dry place out of direct sunlight. Store in original tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers.

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 Co Components	Type	, Value	
		0400 / 0	
acetone (CAS 67-64-1)	PEL	2400 mg/m3	
		1000 ppm	
methanol (CAS 67-56-1)	PEL	260 mg/m3	
		200 ppm	
methylcyclohexane (CAS 108-87-2)	PEL	2000 mg/m3	
		500 ppm	
naphtha (petroleum), hydrotreated light (CAS 64742-49-0)	PEL	400 mg/m3	
•		100 ppm	
n-heptane (CAS 142-82-5)	PEL	2000 mg/m3	
,		500 ppm	
solvent naphtha (petroleum), light aliph.	PEL	400 mg/m3	
(CAS 64742-89-8)			
		100 ppm	
US. OSHA Table Z-2 (29 CFR 1910.10	000)		
Components	Туре	Value	
toluene (CAS 108-88-3)	Ceiling	300 ppm	
,	TWA	200 ppm	
US. ACGIH Threshold Limit Values		••	
Components	Туре	Value	
2-methylhexane (CAS 591-76-4)	STEL	500 ppm	
,	TWA	400 ppm	
3,3-dimethylpentane (CAS 562-49-2)	STEL	500 ppm	
,	TWA	400 ppm	
3-ethylpentane (CAS 617-78-7)	STEL	500 ppm	
,	TWA	400 ppm	
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Components	Туре	Value	
	TWA	400 ppm	
acetone (CAS 67-64-1)	STEL	500 ppm	
,	TWA	250 ppm	
nethanol (CAS 67-56-1)	STEL	250 ppm	
,	TWA	200 ppm	
nethylcyclohexane (CAS 08-87-2)	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 Chen	nical Hazards		
Components	Туре	Value	
acetone (CAS 67-64-1)	TWA	590 mg/m3	
		250 ppm	
nethanol (CAS 67-56-1)	STEL	325 mg/m3	
		250 ppm	
	TWA	260 mg/m3	
		200 ppm	
nethylcyclohexane (CAS 08-87-2)	TWA	1600 mg/m3	
		400 ppm	
naphtha (petroleum), nydrotreated light (CAS 54742-49-0)	TWA	400 mg/m3	
74742 40 0)		100 ppm	
n-heptane (CAS 142-82-5)	Ceiling	1800 mg/m3	
		440 ppm	
	TWA	350 mg/m3	
		85 ppm	
solvent naphtha petroleum), light aliph. CAS 64742-89-8)	TWA	400 mg/m3	
cc		100 ppm	
oluene (CAS 108-88-3)	STEL	560 mg/m3	
. (-	150 ppm	
	TWA	375 mg/m3	
		100 ppm	

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	*

^{* -} 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) Can be absorbed through the skin. Can be absorbed through the skin.

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.

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.

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. Polyvinyl alcohol (PVA). Suitable gloves can be

recommended by the glove supplier.

Other Wear appropriate chemical resistant 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

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

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

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

Evaporation rate Fast.

Flammability (solid, gas) Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower

1.1 % estimated

(%)

Flammability limit - upper

pper

36 % estimated

Vapor pressure 169.5 hPa estimated

Vapor density > 1 (air = 1)

Relative density 0.78

Solubility(ies)

Solubility (water) Slightly soluble.

Partition coefficient Not available.

(n-octanol/water)

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

Decomposition temperature Not available. **Percent volatile** 99.8 % estimated

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

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	may be latal if swallowed and efficies all ways. Narcolic effects.	
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 a	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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Rabbit

LD50

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> 2000 mg/kg

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)

Acute 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 mutagenicityNo 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)		
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, cy	clic and linear (CA	S 426260-76-6)	
Aquatic			
Acute			
Crustacea	EC50	Water flea (Daphnia magna)	1.5 mg/l, 48 hours

^{*} 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 (CA	S 108-87-2)		
Aquatic			
Fish	LC50	Striped bass (Morone saxatilis)	5.8 mg/l, 96 hours
naphtha (petroleum), hy	drotreated light (0	CAS 64742-49-0)	
Aquatic			
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 (petrole	eum), light aliph. (CAS 64742-89-8)	
Aquatic			
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

^{*} Estimates for product may be based on additional component data not shown.

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

 acetone
 -0.24

 methanol
 -0.77

 methylcyclohexane
 3.61

 n-heptane
 4.66

 toluene
 2.73

Bioconcentration factor (BCF)

naphtha (petroleum), hydrotreated light 10 - 25000 toluene 90

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 instructionsThis 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.

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

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

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

DOT

UN number UN1992

UN proper shipping name Flammable liquids, toxic, n.o.s. (acetone RQ = 9091 LBS, heptane RQ = 1613 LBS), MARINE

POLLUTANT (heptanes, hexanes)

Transport hazard class(es)

Class 3
Subsidiary risk 6.1
Label(s) 3, 6.1
Packing group II
Environmental hazards

Marine pollutant Yes

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

Special provisions IB2, T7, TP2, TP13

Packaging exceptions 150
Packaging non bulk 202
Packaging bulk 243

IATA

UN number UN1992

UN proper shipping name Flammable liquid, toxic, n.o.s. (acetone, heptane)

Transport hazard class(es)

Class 3
Subsidiary risk 6.1
Packing group II
ERG Code 3HP

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

Other information

Passenger and cargo

aircraft

Allowed with restrictions.

Cargo aircraft only

Allowed with restrictions.

IMDG

UN number UN1992

UN proper shipping name FLAMMABLE LIQUID, TOXIC, N.O.S. (acetone, heptane), MARINE POLLUTANT (heptanes,

hexanes)

Transport hazard class(es)

Class 3
Subsidiary risk 6.1
Packing group II
Environmental hazards

Marine pollutant Yes
S F-E, S-D

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

15. Regulatory information

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

Standard, 29 CFR 1910.1200.

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

SDS US

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

Not regulated.

SARA 304 Emergency release notification

Not regulated.

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)

acetone (CAS 67-64-1)

methanol (CAS 67-56-1)

toluene (CAS 108-88-3)

Listed.

Listed.

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)

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

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 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) 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) 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) 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) 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 Listed: April 6, 2010 cumene (CAS 98-82-8) ethylbenzene (CAS 100-41-4) Listed: June 11, 2004 naphthalene (CAS 91-20-3) Listed: April 19, 2002

California Proposition 65 - CRT: Listed date/Developmental toxin

Listed: December 26, 1997 benzene (CAS 71-43-2) methanol (CAS 67-56-1) Listed: March 16, 2012 toluene (CAS 108-88-3) Listed: January 1, 1991

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

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

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 45 %

51.100(s))

Consumer products (40 CFR 59, Subpt. C)

Not regulated

State

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

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) 45 % VOC content (OTC) 45 %

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
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No

Existing Chemicals List (ECL) Yes Korea New Zealand New Zealand Inventory No Yes

Philippines Philippine Inventory of Chemicals and Chemical Substances

(PICCS)

Taiwan Taiwan Toxic Chemical Substances (TCS) Yes Toxic Substances Control Act (TSCA) Inventory United States & Puerto Rico Yes

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

04-23-2015 Issue date **Revision date** 12-28-2017 Allison Yoon Prepared by

Version # 04

Further information CRC # 991A/1002987

Health: 2* **HMIS®** ratings Flammability: 3

Physical hazard: 0 Personal protection: B

Health: 2 NFPA ratings

> Flammability: 3 Instability: 0

NFPA ratings



Disclaimer

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

^{*}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).

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

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

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