

SAFETY DATA SHEET

1. Identification

Product identifier	Brakleen® Brake Parts Cleaner				
Other means of identification					
Product Code	No. 05151 (Item# 1003740)				
Recommended use	Brake parts cleaner				
Recommended restrictions	None known.				
Manufacturer/Importer/Supplier	/Distributor information				
Manufactured or sold by:					
Company name	CRC Industries, Inc.	CRC Industries, Inc.			
Address	885 Louis Dr.				
	Warminster, PA 18974 US				
Telephone					
General Information	215-674-4300				
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	ı				
Physical hazards	Flammable aerosols	Category 1			
	Cases under pressure	Compressed ass			

	Gases under pressure	Compressed gas
Health hazards	Serious eye damage/eye irritation	Category 2A
	Reproductive toxicity (the unborn child)	Category 2
	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 hazard	Category 3
OSHA defined hazards	Not classified.	
Label elements		
	$\wedge \wedge \wedge \wedge$	

Signal word Hazard statement

Extremely flammable aerosol. Contains gas under pressure; may explode if heated. Causes serious eye irritation. May cause drowsiness or dizziness. Suspected of damaging the unborn child. May cause damage to organs (central nervous system, kidney, peripheral nervous system) through prolonged or repeated exposure. Harmful to aquatic life.

Danger

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. Wear protective gloves/protective clothing/eye protection/face protection. Avoid release to the environment.
Response	If inhaled: Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor if you feel unwell. 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 or concerned: Get medical advice/attention.
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	80 - 90
carbon dioxide		124-38-9	10 - 20
toluene		108-88-3	1 - 3

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

4. First-aid measures		
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.	
Skin contact	Wash off with soap and water. Get medical attention if irritation develops and persists.	
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. If eye irritation persists: Get medical advice/attention.	
Ingestion	In the unlikely event of swallowing contact a physician or poison control center. Rinse mouth.	
Most important symptoms/effects, acute and delayed	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. Edema. Prolonged exposure may cause chronic effects.	
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.	
General information	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.	
5. Fire-fighting measures		
Suitable extinguishing media		
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 firefightersFirefighters must use standard protective equipment including flame retardant coat, helmet with
face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

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. Avoid contact with eyes. Avoid prolonged exposure. Pregnant or breastfeeding women must not handle this product. Should be handled in closed systems, if possible. Use only in well-ventilated areas. Wear appropriate personal protective equipment. 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

Components	Туре	Value	
acetone (CAS 67-64-1)	PEL	2400 mg/m3	
		1000 ppm	
carbon dioxide (CAS 124-38-9)	PEL	9000 mg/m3	
,		5000 ppm	
US. OSHA Table Z-2 (29 CFR 1910	0.1000)		
Components	Туре	Value	
toluene (CAS 108-88-3)	Ceiling	300 ppm	
	TWA	200 ppm	

US. ACGIH Threshold Limit Values

Components	Туре	Value	
acetone (CAS 67-64-1)	STEL	500 ppm	
	TWA	250 ppm	
carbon dioxide (CAS 124-38-9)	STEL	30000 ppm	
	TWA	5000 ppm	
toluene (CAS 108-88-3)	TWA	20 ppm	
US. NIOSH: Pocket Guide to Che	mical Hazards		
Components	Туре	Value	
acetone (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	
toluene (CAS 108-88-3)	STEL	560 mg/m3	
		150 ppm	
	TWA	375 mg/m3	
		100 ppm	

Biological limit values

Components	Value	Determinant	Specimen	Sampling Time
acetone (CAS 67-64-1)	25 mg/l	Acetone	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 o	designation	
toluene (CAS 108-88-3)	Can be absorbed through the skin.	
US - Minnesota Haz Subs: S	Skin designation applies	
toluene (CAS 108-88-3)	Skin designation applies.	
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).	
Other	Wear suitable protective clothing.	
Respiratory protection	If engineering controls are not feasible or if exposure exceeds the applicable exposure limits, use a NIOSH-approved cartridge respirator with an organic vapor cartridge. Use a self-contained breathing apparatus in confined spaces and for emergencies. Air monitoring is needed to determine actual employee exposure levels.	
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.	
General hygiene considerations	When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.	
9. Physical and chemical	properties	

Appearance

Physical state

Form	Aerosol.
Color	Colorless.
Odor	Sweet.
Odor threshold	Not available.
рН	Not available.
Melting point/freezing point	-138.8 °F (-94.9 °C) estimated
Initial boiling point and boiling range	132.9 °F (56.1 °C) estimated
Flash point	< 0 °F (< -17.8 °C)
Evaporation rate	Fast.
Flammability (solid, gas)	Not available.
Upper/lower flammability or exp	losive limits
Flammability limit - lower (%)	1.2 % estimated
Flammability limit - upper (%)	12.8 % estimated
Vapor pressure	6962 hPa estimated
Vapor density	2 (air = 1)
Relative density	0.88 estimated
Solubility(ies)	
Solubility (water)	Slightly soluble.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	869 °F (465 °C) estimated
Decomposition temperature	Not available.
Percent volatile	88.2 % estimated
10. Stability and reactivity	/

The product is stable and non-reactive under normal conditions of use, storage and transport. Reactivity Material is stable under normal conditions. **Chemical stability** Possibility of hazardous No dangerous reaction known under conditions of normal use. reactions Heat, flames and sparks. Contact with incompatible materials. Conditions to avoid Acids. Aluminum. Incompatible materials Hazardous decomposition Carbon oxides. products

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.	
Skin contact	No adverse effects due to skin contact are expected.	
Eye contact	Causes serious eye irritation.	
Ingestion	Expected to be a low ingestion hazard.	
Symptoms related to the physical, chemical and toxicological characteristics	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. Edema.	

Information on toxicological effects

Acute toxicity

Components	Species	Test Results
acetone (CAS 67-64-1)		
<u>Acute</u>		
Dermal		
LD50	Rabbit	20000 mg/kg
Oral		
LD50	Rat	5800 mg/kg
toluene (CAS 108-88-3)		
<u>Acute</u>		
Inhalation		
LC50	Rat	12.5 mg/l, 4 hours
Skin corrosion/irritation	Prolonged skin contact may cause to	emporary irritation.
Serious eye damage/eye irritation	Causes serious eye irritation.	
Respiratory or skin sensitizatio	n	
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	Not classifiable as to carcinogenicity to humans.	
IARC Monographs. Overall	Evaluation of Carcinogenicity	
toluene (CAS 108-88-3) OSHA Specifically Regulate	3 No ed Substances (29 CFR 1910.1001-10	nt classifiable as to carcinogenicity to humans. 2 52)
Not regulated.		
•••	ogram (NTP) Report on Carcinogens	
Not listed.	Supported of demoging the unborn	ahild
Reproductive toxicity	Suspected of damaging the unborn	
Specific target organ toxicity - single exposure	May cause drowsiness and dizzines	S.
Specific target organ toxicity - repeated exposure	May cause damage to organs (centr through prolonged or repeated expo	al nervous system, kidney, peripheral nervous system) sure.
Aspiration hazard	Not an aspiration hazard.	
Chronic effects	May cause damage to organs throug be harmful.	gh prolonged or repeated exposure. Prolonged inhalation may

12. Ecological information

cotoxicity	Harmful to	Harmful to aquatic life.		
Components		Species	Test Results	
acetone (CAS 67-64-1)				
Aquatic				
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss)	4740 - 6330 mg/l, 96 hours	
Acute				
Crustacea	EC50	Daphnia magna	10294 - 17704 mg/l, 48 hours	
toluene (CAS 108-88-3)				
Acute				
Other	EC50	Pseudokirchnerella subcapitata	433 mg/l, 96 hours	
			12.5 mg/l, 72 hours	
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	

Persistence and degradability	No data is available on the degradability of any ingredients in the mixture.	
Bioaccumulative potential		
Partition coefficient n-octan	ol / water (log Kow)	
acetone	-0.24	
toluene	2.73	
Bioconcentration factor (BC	F)	
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

Hazardous waste code	D001: Waste Flammable material with a flash point <140 F F003: 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.
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.

14. Transport information

DOT	
UN number	UN1950
UN proper shipping name	Aerosols, flammable, Limited Quantity
Transport hazard class(es)	
Class	2.1
Subsidiary risk	-
Label(s)	2.1
Packing group	Not applicable.
	Read safety instructions, SDS and emergency procedures before handling.
Special provisions	N82
Packaging exceptions	306
Packaging non bulk	304
Packaging bulk	None
ΙΑΤΑ	
UN number	UN1950
UN proper shipping name	Aerosols, flammable, Limited Quantity
Transport hazard class(es)	
Class	2.1
Subsidiary risk	-
Packing group	Not applicable.
ERG Code	10L
· · ·	Read safety instructions, SDS and emergency procedures before handling.
Other information	
Passenger and cargo	Allowed with restrictions.
aircraft	
Cargo aircraft only IMDG	Allowed with restrictions.
UN number	UN1950
UN proper shipping name	AEROSOLS, Limited Quantity
Transport hazard class(es)	
Class	2
Subsidiary risk	- Natawilashia
Packing group Environmental hazards	Not applicable.
	No
Marine pollutant	No.
EmS Special pressutions for use	F-D, S-U
Special precautions for use	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.		
TSCA Section 12(b) Export	Notification (40 CFR	707, Subpt. D)	
Not regulated. SARA 304 Emergency relea	ase notification		
Not regulated. OSHA Specifically Regulat	ed Substances (29 CF	R 1910.1001-1052)	
Not regulated. US EPCRA (SARA Title III)	Section 313 - Toxic Ch	nemical: Listed substan	ce
toluene (CAS 108-88-3) CERCLA Hazardous Subst	ance List (40 CFR 302	.4)	
acetone (CAS 67-64-1)		Listed.	
toluene (CAS 108-88-3)		Listed.	
CERCLA Hazardous Subst	ances: Reportable qua	antity	
acetone (CAS 67-64-1) toluene (CAS 108-88-3)		5000 LBS 1000 LBS	
Spills or releases resulti			a require immediate notification to the National committee.
Other federal regulations			
Clean Air Act (CAA) Sectio	n 112 Hazardous Air P	Pollutants (HAPs) List	
toluene (CAS 108-88-3) Clean Air Act (CAA) Sectio	n 112(r) Accidental Re	lease Prevention (40 CF	FR 68.130)
Not regulated.			
Safe Drinking Water Act (SDWA)	Not regulated.		
		t 2, Essential Chemicals	s (21 CFR 1310.02(b) and 1310.04(f)(2) and
acetone (CAS 67-64	4-1)	6532	
toluene (CAS 108-8 Drug Enforcement Adr	-	6594 t 1 & 2 Exempt Chemica	al Mixtures (21 CFR 1310.12(c))
acetone (CAS 67-64		35 %WV	
toluene (CAS 108-8 DEA Exempt Chemical	8-3)	35 %WV	
acetone (CAS 67-6		6532	
toluene (CAS 07-04-1)		594	
FEMA Priority Substar	ces Respiratory Healt	h and Safety in the Flav	or Manufacturing Workplace
acetone (CAS 67-6	4-1)	Low priority	
Food and Drug Administration (FDA)	Not regulated.		
Superfund Amendments and R	eauthorization Act of	1986 (SARA)	
Classified hazard		aerosols, liquids, or solids)
categories	Gas under pressure		
	Serious eye damage Reproductive toxicity		
		toxicity (single or repeate	ed exposure)
SARA 302 Extremely haza			
Not listed.			
SARA 313 (TRI reporting)			
Chemical name		CAS number	% by wt.
toluene		108-88-3	1 - 3
US state regulations			
US. New Jersey Worker an	d Community Right-to	-Know Act	
acetone (CAS 67-64-1) carbon dioxide (CAS 12 toluene (CAS 108-88-3)			

US. Massachusetts RTK - S	ubstance List	
acetone (CAS 67-64-1)		
carbon dioxide (CAS 124	l-38-9)	
toluene (CAS 108-88-3)		
-	nd Community Right-to-Know Law	
acetone (CAS 67-64-1)		
carbon dioxide (CAS 124 toluene (CAS 108-88-3)	-38-9)	
US. Rhode Island RTK		
acetone (CAS 67-64-1)		
carbon dioxide (CAS 124	l-38-9)	
toluene (CAS 108-88-3)		
California Proposition	65	
	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 71-4		7
cumene (CAS 98-82		
ethylbenzene (CAS naphthalene (CAS 9		
• •	65 - CRT: Listed date/Developmental toxin	
benzene (CAS 71-4	-	97
toluene (CAS 108-8	B-3) Listed: January 1, 1991	
California Proposition	65 - CRT: Listed date/Male reproductive toxin	
benzene (CAS 71-4 US. California. Candida subd. (a)) acetone (CAS 67-64	te Chemicals List. Safer Consumer Products Regulation	
toluene (CAS 108-8	8-3)	
Volatile organic compounds (V EPA	DC) regulations	
VOC content (40 CFR 51.100(s))	2.7 %	
Consumer products (40 CFR 59, Subpt. C)	Not regulated	
State		
Consumer products	This product is regulated as a Brake Cleaner. This produ This product also complies with South Coast Air Quality I	
VOC content (CA)	2.7 %	
VOC content (OTC)	2.7 %	
International Inventories		
Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IEC	CSC) Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS	i) No
Japan	Inventory of Existing and New Chemical Substances (EN	ICS) Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substan (PICCS)	rces Yes
Taiwan	Taiwan Toxic Chemical Substances (TCS)	Yes
Material name: Brakleen® Brake Par	ts Cleaner	SDS US

On inventory (yes/no)* Yes

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory

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

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

Issue date	05-26-2015
Revision date	04-05-2018
Prepared by	Allison Yoon
Version #	02
Further information	CRC # 668A/1002701
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Revision information	This document has undergone significant changes and should be reviewed in its entirety.