Brake Parts Cleaner



SAFETY DATA SHEET

1. Identification

Product identifier

Brakleen® Brake Parts Cleaner

Other means of identification

Product code

05089, 05089T, 85089, 85089AZ

Recommended use

Brake cleaner

Recommended restrictions

None known.

Manufacturer/Importer/Supplier/Distributor information

Manufactured or sold by:

Company name

CRC Industries, Inc.

Address

885 Louis Dr.

Warminster, PA 18974 US

Telephone

General Information

215-674-4300

Technical

800-521-3168

Assistance

Customer Service 24-Hour Emergency 800-272-4620

800-424-9300 (US) 703-527-3887 (International)

(CHEMTREC) Website

www.crcindustries.com

2. Hazard(s) identification

Physical hazards

Gases under pressure

Compressed gas

Health hazards

Skin corrosion/irritation

Category 2

Serious eye damage/eye irritation

Category 2B Category 1

Carcinogenicity Specific target organ toxicity, single exposure

Category 3 narcotic effects

Specific target organ toxicity, repeated

Category 2

exposure

Hazardous to the aquatic environment, acute

Category 3

hazard

Hazardous to the aquatic environment,

Category 1

long-term hazard

OSHA defined hazards

Not classified.

Label elements

Environmental hazards



Signal word

Hazard statement

Contains gas under pressure; may explode if heated. Causes skin irritation. Causes eye irritation. May cause drowsiness or dizziness. May cause cancer. May cause damage to organs through prolonged or repeated exposure.

Precautionary statement

Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not puncture or incinerate container. Do not expose to heat or store at temperatures above 49°C/120°F. Use with adequate ventilation. 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 gas. Do not breathe mist or vapor. Wear protective gloves/protective clothing/eye protection/face protection. Wash hands thoroughly after handling.

Response

If on skin; Wash with plenty of water. If skin irritation occurs: Get medical attention. Take off contaminated clothing and wash before reuse. 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 attention. If exposed or concerned: Get medical attention.

Storage

Store in a well-ventilated place. Store locked up. Protect from sunlight. 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)

Harmful to aquatic life. Very toxic to aquatic life with long lasting effects.

Supplemental information

2.33% of the mixture consists of component(s) of unknown acute hazards to the aquatic environment. 2.33% of the mixture consists of component(s) of unknown long-term hazards to the aquatic environment. When exposed to extreme heat or hot surfaces, vapors may decompose to harmful or fatal corrosive gases such as hydrogen chloride and possibly phosgene.

3. Composition/information on ingredients

Chemical name	Common name and synonyms	CAS number	%
Tetrachloroethylene	Perchloroethylene	127-18-4	90 - 100
Carbon dioxide		124-38-9	1 - 5

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

clothing before reuse.

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	Remove contaminated clothing. Wash off with soap and plenty of water. If skin irritation occurs: Get medical advice/attention.
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	Rinse mouth. Do not induce vomiting. Call a physician or poison control center immediately.
Most important symptoms/effects, acute and delayed	Irritation of eyes and mucous membranes. Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Prolonged exposure may cause chronic effects. May cause drowsiness or dizziness.
Indication of immediate medical attention and special treatment needed	Because rapid absorption may occur through lungs if aspirated and cause systemic effects, the decision of whether to induce vomiting or not should be made by a physician. If lavage is performed, suggest endotracheal and/or esophageal control. If burn is present, treat as any thermal burn, after decontamination. Exposure may increase myocardial irritability. Do not administer sympathomimetic drugs unless absolutely necessary. No specific antidote.
	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. IF exposed or concerned: Get medical advice/attention. Wash contaminated

5. Fire-fighting measures

Suitable extinguishing media	Water.
Unsuitable extinguishing media	None known.
Specific hazards arising from the chemical	Contents under pressure. Exposure to high temperature may cause can to burst. When exposed to extreme heat or hot surfaces, vapors may decompose to harmful or fatal corrosive gases such as hydrogen chloride and possibly phosgene.
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	In case of fire: Stop leak if safe to do so. Do not move cargo or vehicle if cargo has been exposed

In case of fire: Stop leak if safe to do so. Do not move cargo or vehicle if cargo has been exposed to heat. Move containers from fire area if you can do so without risk. Use water spray to cool unopened containers. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out,

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

equipment/instructions

Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate personal protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation, Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up 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. Stop the flow of material, if this is without risk. Collect spillage. Following product recovery, flush area with water.

Environmental precautions

Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Avoid discharge into drains, water courses or onto the ground.

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 breathe mist or vapor. Do not breathe gas. Avoid contact with skin. Avoid contact with eyes. Avoid prolonged exposure. Use with adequate ventilation. 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. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Do not empty into drains. 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. Observe good industrial hygiene practices. For product usage instructions, please see the product label.

Conditions for safe storage, including any incompatibilities

Level 1 Aerosol.

Store in a well-ventilated place. Store in a cool, dry place out of direct sunlight. Do not puncture or incinerate container. Do not expose to heat or store at temperatures above 49 °C/120 °F. Exposure to high temperature may cause can to burst.

8. Exposure controls/personal protection

US. OSHA Table Z-1 Limits for Air Components	Туре	Value	
Carbon dioxide (CAS 124-38-9)	PEL	9000 mg/m3	
,		5000 ppm	
US. OSHA Table Z-2 (29 CFR 1910).1000)		
Components	Туре	Value	
Tetrachloroethylene (CAS 127-18-4)	Ceiling	200 ppm	
,	TWA	100 ppm	
US. ACGIH Threshold Limit Value	s		
Components	Туре	Value	
Carbon dioxide (CAS 124-38-9)	STEL	30000 ppm	
	TWA	5000 ppm	
Tetrachloroethylene (CAS 127-18-4)	STEL	100 ppm	
,	TWA	25 ppm	
US. NIOSH: Pocket Guide to Che	mical Hazards		
Components	Туре	Value	
Carbon dioxide (CAS 124-38-9)	STEL	54000 mg/m3	
<i>,</i> .		30000 ppm	
	TWA	9000 mg/m3	
		5000 ppm	

Biological limit values

ACGIH Biological Exposure Indices				
Components	Value	Determinant	Specimen	Sampling Time
Tetrachloroethylene (CAS 127-18-4)	0.5 mg/l	Tetrachloroethy lene	Blood	*
,	3 ppm	Tetrachloroethy	End-exhaled	*

^{* -} For sampling details, please see the source document.

Exposure guidelines

US - Minnesota Haz Subs: Skin designation applies

Tetrachloroethylene (CAS 127-18-4)

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

Skin protection

Hand protection Wear protective gloves such as: Polyvinyl alcohol (PVA). Teflon. Viton®. Ethyl vinyl alcohol

laminate (EVAL).

Other Wear appropriate chemical resistant clothing.

Respiratory protection When workers are facing concentrations above the exposure limit they must use appropriate

certified respirators. Air monitoring is needed to determine actual employee exposure levels.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

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

Aerosol.

Color

Colorless.

Odor

Irritating.

Odor threshold

50 ppm

nН

Not available.

Melting point/freezing point

-8.1 °F (-22.3 °C) estimated

Initial boiling point and boiling

250.3 °F (121.3 °C) estimated

range

Flash point

None (Tag Closed Cup)

Evaporation rate

Very fast.

Flammability (solid, gas)

Not available.

Upper/lower flammability or explosive limits

Flammability limit - lower

Not available.

(%)

Flammability limit - upper

Not available.

(%)

1352.4 hPa estimated

Vapor pressure Vapor density

5.76 (air = 1)

Relative density

1.62

Solubility (water)

0.02 % (77 °F (25 °C))

Partition coefficient

Not available.

(n-octanol/water)

Not available.

Auto-ignition temperature Decomposition temperature

Not available.

Viscosity (kinematic)

Not available.

Percent volatile

97.7 % estimated

Other information

Partition coefficient

2.88

(oil/water)

10. Stability and reactivity

Reactivity

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

Chemical stability

Material is stable under normal conditions.

Possibility of hazardous

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid

Contact with incompatible materials. When exposed to extreme heat or hot surfaces, vapors may decompose to harmful or fatal corrosive gases such as hydrogen chloride and possibly phosgene.

Strong oxidizing agents, Metals, Powdered metal, Amines, Strong bases,

Incompatible materials
Hazardous decomposition

Hydrogen chloride. Trace amounts of chlorine and phosgene.

products

11. Toxicological information

Information on likely routes of exposure

Single dose oral toxicity is considered to be extremely low. Swallowing large amounts may cause Ingestion

injury if aspirated into the lungs. This may be rapidly absorbed through the lungs and result in

injury to other body systems.

Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Inhalation

Prolonged inhalation may be harmful. May cause damage to organs by inhalation.

Skin contact

Causes skin irritation.

Eve contact

Causes eve irritation.

Symptoms related to the physical, chemical and

Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Irritant

toxicological characteristics

Information on toxicological effects

Acute toxicity

Narcotic effects.

Test Results Product Species

Brakleen® Brake Parts Cleaner

Acute

Dermal-LD50

Rabbit

3305.1284 mg/kg estimated

Inhalation

LC50

Rat

4197.9639 mg/l, 6 Hours estimated

Oral

LD50

Rat

2691.8162 mg/kg estimated

Skin corrosion/irritation

Serious eye damage/eye

Causes skin irritation. Causes eye irritation.

irritation Respiratory sensitization

Not available.

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

May cause cancer.

IARC Monographs. Overall Evaluation of Carcinogenicity

Tetrachloroethylene (CAS 127-18-4)

2A Probably carcinogenic to humans.

US. National Toxicology Program (NTP) Report on Carcinogens

Tetrachloroethylene (CAS 127-18-4)

Reasonably Anticipated to be a Human Carcinogen. This product is not expected to cause reproductive or developmental effects.

Reproductive toxicity

Specific target organ toxicity -Narcotic effects.

single exposure

Specific target organ toxicity -

repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard

May be an aspiration hazard.

Chronic effects

Prolonged inhalation may be harmful. May cause damage to organs through prolonged or

repeated exposure.

12. Ecological information

Very toxic to aquatic life with long lasting effects. Accumulation in aquatic organisms is expected. **Ecotoxicity**

Product Species **Test Results**

Brakleen® Brake Parts Cleaner

Acute

Fish

LC50

Fish

20.7168 mg/l, 96 hours estimated

Test Results Components **Species**

Tetrachloroethylene (CAS 127-18-4)

Aquatic

Acute

Fish LC50 Bluegill (Lepomis macrochirus)

12.9 mg/l, 96 hours

Persistence and degradability

No data is available on the degradability of this product.

Bioaccumulative potential

No data available.

No data available.

Partition coefficient n-octanol / water (log Kow)

Tetrachloroethylene

2.88

Mobility in soil

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 of waste from residues / unused products This material and its container must be disposed of as hazardous waste. Consult authorities before disposal. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds,

waterways or ditches with chemical or used container. Dispose of contents/container in

accordance with local/regional/national regulations.

Hazardous waste code

D039: Waste Tetrachloroethylene

F001: Waste Halogenated Solvent - Spent Halogenated Solvent Used in Degreasing

F002: Waste Halogenated Solvent - Spent Halogenated Solvent

US RCRA Hazardous Waste U List: Reference

Tetrachloroethylene (CAS 127-18-4)

U210

Contaminated packaging

Not available.

14. Transport information

DOT

UN number

UN1950

UN proper shipping name Transport hazard class(es) Aerosols, non-flammable, limited quantity, MARINE POLLUTANT

Class

2.2 6.1

Subsidiary risk Label(s)

2.2, 6.1

Packing group

Not applicable.

Environmental hazards

Marine pollutant

Yes

Special precautions for user Not available.

Packaging exceptions Packaging non bulk

306 None

Packaging bulk

None

IATA

UN number

UN1950

UN proper shipping name

Aerosols, non-flammable, containing substances in Division 6.1, Packing Group III, Limited

Quantity

Transport hazard class(es)

Class

2.2

Subsidiary risk

6.1

Packing group

Not applicable.

Environmental hazards

No.

ERG Code

2P

Special precautions for user Not available.

Other information

Passenger and cargo

aircraft

Allowed.

Cargo aircraft only

Allowed.

IMDG

UN number

UN1950

UN proper shipping name

AEROSOLS, MARINE POLLUTANT

Transport hazard class(es)

Class

2

Subsidiary risk

6.1

Packing group

Not applicable.

Environmental hazards

Marine pollutant

Yes

EmS

Not available.

Special precautions for user Not available.

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 release notification

Not regulated.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed

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

Tetrachloroethylene (CAS 127-18-4)

CERCLA Hazardous Substance List (40 CFR 302.4)

Tetrachloroethylene (CAS 127-18-4)

CERCLA Hazardous Substances: Reportable quantity

Tetrachloroethylene (CAS 127-18-4)

100 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.

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

Tetrachloroethylene (CAS 127-18-4)

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

Not regulated.

Safe Drinking Water Act

Not regulated.

(SDWA)

Food and Drug

Not regulated.

Administration (FDA)

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Nο

Section 311/312

Immediate Hazard - Yes Delayed Hazard - Yes

Hazard categories

Fire Hazard - No Pressure Hazard - Yes

Reactivity Hazard - No

SARA 302 Extremely hazardous substance

US state regulations

US. New Jersey RTK - Substances: Listed substance

Carbon dioxide (CAS 124-38-9)

Tetrachloroethylene (CAS 127-18-4)

US. Massachusetts RTK - Substance List

Carbon dioxide (CAS 124-38-9)

Tetrachloroethylene (CAS 127-18-4)

US. Pennsylvania RTK - Hazardous Substances

Carbon dioxide (CAS 124-38-9)

Tetrachloroethylene (CAS 127-18-4)

US. Rhode Island RTK

Tetrachloroethylene (CAS 127-18-4)

US. California Proposition 65

WARNING: This product contains a chemical known to the State of California to cause cancer.

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

Tetrachloroethylene (CAS 127-18-4)

Listed: April 1, 1988

Volatile organic compounds (VOC) regulations

EPA

VOC content (40 CFR

0 %

51,100(s))

Consumer products

Not regulated

(40 CFR 59, Subpt. C)

State

Consumer products

This product is regulated as a Brake Cleaner. This product is not compliant to be sold for use in California and New Jersey. This product is compliant in all other states.

VOC content (CA)

0 %

VOC content (OTC)

0 %

International Inventories

Country(s) or region

Inventory name

On inventory (yes/no)*

Australia

Australian Inventory of Chemical Substances (AICS)

Yes

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

^{*}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 12-20-2013
Prepared by Allison Cho
Version # 01
Further information CRC # 491G

HMIS® ratings Health: 2* Flammability: 0

Flammability: 0
Physical hazard: 0
Personal protection: B
Health: 2

NFPA ratings Health: 2

Flammability: 0 Instability: 0

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 Industries' 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.