SAFETY DATA SHEET

1. Identification

Product identifier Carquest® Brake Parts Cleaner

Other means of identification

1006 (CRC# 09740) **Product code** Recommended use Brake parts cleaner Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufactured or sold by:

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

Warminster, PA 18974 US

Telephone

General Information 215-674-4300 **Technical** 800-521-3168

Assistance

800-272-4620 **Customer Service** 24-Hour Emergency 800-424-9300 (US)

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

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Skin corrosion/irritation Category 2 Serious eye damage/eye irritation Category 2B

Carcinogenicity Category 1 Specific target organ toxicity, single exposure

Category 3 narcotic effects Category 2

Specific target organ toxicity, repeated

exposure

Environmental hazards Hazardous to the aquatic environment, acute Category 3

hazard

Hazardous to the aquatic environment,

long-term hazard

OSHA defined hazards Not classified.

Label elements



Signal word Danger

Hazard statement Causes skin irritation. Causes eye irritation. May cause drowsiness or dizziness. May cause

cancer. May cause damage to organs through prolonged or repeated exposure. Harmful to

Category 1

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

Precautionary statement

Prevention Obtain special instructions before use. Do not handle until all safety precautions have been read

and understood. 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 mist or vapor. Wear protective gloves/protective clothing/eye protection/face protection. Wash hands thoroughly after

handling. Avoid release to the environment.

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. Collect spillage.

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

Disposal

Hazard(s) not otherwise classified (HNOC)

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

None known.

Supplemental information

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

RЛ	ivti	ires

Chemical name	Common name and synonyms	CAS number	%
Tetrachloroethylene	Perchloroethylene	127-18-4	90 - 100

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 Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention. Take off

contaminated clothing and wash before reuse.

Eye contactImmediately 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

Exposed individuals may experience eye tearing, redness, and discomfort. Skin irritation. Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea. May cause redness and pain. Prolonged exposure may cause chronic effects.

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

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.

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing media

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

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

Specific hazards arising from the chemical

During fire, gases hazardous to health may be formed. 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

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

Fire-fighting equipment/instructions

General fire hazards

Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up.

No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. 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. Ensure adequate ventilation. 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

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. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: 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. For waste disposal, see section 13 of the SDS.

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 cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Do not breathe mist or vapor. Avoid contact with skin. Avoid contact with eyes. Avoid prolonged exposure. Avoid contact with clothing. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Avoid release to the environment. Do not empty into drains. For product usage instructions, please see the product label.

Conditions for safe storage, including any incompatibilities

Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-2	(29 CFR	1910.1000)
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Components	Туре	Value
Tetrachloroethylene (CAS 127-18-4)	Ceiling	200 ppm
,	TWA	100 ppm
US. ACGIH Threshold Limit Values		
Components	Type	Value
Tetrachloroethylene (CAS 127-18-4)	STEL	100 ppm
,	TWA	25 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 lene	End-exhaled air	*	

^{* -} 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. Eye wash facilities and emergency shower must be available when handling this product.

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: Polyvinyl alcohol (PVA). Viton®. Ethyl vinyl alcohol laminate

(EVAL).

Other Wear appropriate chemical resistant clothing.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment. Air monitoring is needed to

determine actual employee exposure levels.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

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 Colorless.
Odor Irritating.

50 ppm **Odor threshold** Not available.

-8.1 °F (-22.3 °C) estimated Melting point/freezing point Initial boiling point and boiling 250.3 °F (121.3 °C) estimated

range

Flash point None (Tag Closed Cup)

Evaporation rate Very fast. Not available. Flammability (solid, gas) Upper/lower flammability or explosive limits

Flammability limit - lower

Not available.

(%)

Flammability limit - upper

Not available.

13 mm Hg (68 °F (20 °C)) Vapor pressure

Vapor density 5.76 (air = 1)

Relative density 1.62

0.02 % (77 °F (25 °C)) Solubility (water)

Partition coefficient (n-octanol/water)

29

Auto-ignition temperature Not available. Not available. **Decomposition temperature** Not available Viscosity (kinematic) Percent volatile 100 % estimated

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.

Contact with incompatible materials. Welding. When exposed to extreme heat or hot surfaces, Conditions to avoid

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

products

Hydrogen chloride. Trace amounts of chlorine and phosgene.

11. Toxicological information

Information on likely routes of exposure

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

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. Eye contact Causes eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics

Exposed individuals may experience eye tearing, redness, and discomfort. Skin irritation. May cause redness and pain. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Information on toxicological effects

Narcotic effects. **Acute toxicity**

Product Species Test Results

Carquest® Brake Parts Cleaner

Acute Dermal

LD50 Rabbit 3228 mg/kg estimated

Inhalation

LC50 Rat 4100 mg/l, 6 Hours estimated Product Species Test Results
4000 ppm, 4 hours estimated

Oral

LD50 Rat 2629 mg/kg estimated

Skin corrosion/irritation Causes skin irritation.
Serious eye damage/eye Causes eye irritation.

irritation

Respiratory sensitization Not available.

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 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.

Reproductive toxicityThis product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

Narcotic effects.

Specific target organ toxicity -

repeated exposure

May cause damage to organs through prolonged or repeated exposure.

Aspiration hazard May be an aspiration hazard. Swallowing large amounts may cause injury if aspirated into the

lungs. This may be rapidly absorbed through the lungs and result in injury to other body systems.

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

12. Ecological information

Ecotoxicity	Very toxic to aquatic life with long lasting effects. Accumulation in aquatic organisms is expected.			
Product	Species	Test Results		
Carquest® Brake Parts Clean	er			

Acute

Fish LC50 Fish 20.2333 mg/l, 96 hours estimated

Bluegill (Lepomis macrochirus)

Components Species Test Results

Tetrachloroethylene (CAS 127-18-4)

Aquatic Acute

Fish

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

Bioaccumulative potential Not available.

Partition coefficient n-octanol / water (log Kow)

Carquest® Brake Parts Cleaner 2.88
Tetrachloroethylene 2.88

LC50

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.

12.9 mg/l, 96 hours

13. Disposal considerations

Disposal of waste from This material and its container must be disposed of as hazardous waste. Consult authorities before disposal. Collect and reclaim or dispose in sealed containers at licensed waste disposal site. 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 D039: Waste Tetrachloroethylene

F001: Waste Tetrachloroethylene - Spent halogenated solvent used in degreasing

F002: Waste Tetrachloroethylene - Spent halogenated solvent

US RCRA Hazardous Waste U List: Reference

Tetrachloroethylene (CAS 127-18-4) U210

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

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Contaminated packaging

Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT

UN number UN1897

UN proper shipping name Tetrachloroethylene, Limited Quantity (RQ = 100 lbs)

Transport hazard class(es)

Class 6.1(PGIII)

Subsidiary risk Label(s) 6.1

Packing group III

Environmental hazards

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Marine pollutant Yes

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

Special provisions IB3, N36, T4, TP1

Packaging exceptions153Packaging non bulk203Packaging bulk241

IATA

UN number UN1897

UN proper shipping name Tetrachloroethylene

Transport hazard class(es)

Class 6.1(PGIII)

Subsidiary risk Packing group III
Environmental hazards No.
ERG Code 6L

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

Other information

Passenger and cargo

aircraft

Allowed.

Cargo aircraft only Allowed.

IMDG

UN number UN1897

UN proper shipping name Transport hazard class(es)

Class 6.1(PGIII)

Subsidiary risk - Packing group |||

Environmental hazards

Marine pollutant Yes S F-A, S-A

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

TETRACHLOROETHYLENE, LIMITED QUANTITY

Standard, 29 CFR 1910,1200.

All components are on the U.S. EPA TSCA Inventory List.

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)

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.

100 lbs

Material name: Carquest® Brake Parts Cleaner 1488 Version #: 01 Issue date: 02-17-2014

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)

Section 311/312 Immediate Hazard - Yes
Hazard categories Delayed Hazard - Yes
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

No

SARA 302 Extremely hazardous substance

US state regulations

US. New Jersey RTK - Substances: Listed substance

Tetrachloroethylene (CAS 127-18-4)

US. Massachusetts RTK - Substance List

Tetrachloroethylene (CAS 127-18-4)

US. Pennsylvania RTK - Hazardous Substances

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

51.100(s))

Consumer products (40 CFR 59, Subpt. C)

Not regulated

Inventory name

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

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 (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).

On inventory (vec/ne)*

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

Issue date 02-17-2014
Prepared by Allison Cho

Version # 01

Further information CRC # 491G
HMIS® ratings Health: 2*
Flammability: 0
Physical bazarr

Physical hazard: 0 Personal protection: B

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.