# SAFETY DATA SHEET

## 1. Identification

**Product identifier** **Mag 1 Brake Parts Cleaner**

**Other means of identification**

**Product code** MG 750408 (CRC# 09999)

**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 Assistance** 800-521-3168

**Customer Service** 800-272-4620

**24-Hour Emergency (CHEMTREC)** 800-424-9300 (US)
703-527-3887 (International)

**Website** www.crcindustries.com

## 2. Hazard(s) identification

| | | |
|---|---|---|
| **Physical hazards** | Gases under pressure | Compressed gas |
| **Health hazards** | Skin corrosion/irritation | Category 2 |
| | Carcinogenicity | Category 1B |
| | Specific target organ toxicity, single exposure | Category 3 narcotic effects |
| **Environmental hazards** | Hazardous to the aquatic environment, long-term hazard | Category 2 |
| **OSHA defined hazards** | Not classified. | |

**Label elements**



**Signal word** Danger

**Hazard statement** Contains gas under pressure; may explode if heated. Causes skin irritation. May cause drowsiness or dizziness. May cause cancer. 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. 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. Avoid breathing mist or vapor. Avoid breathing gas. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. 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 exposed or concerned: Get medical attention. Collect spillage.

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

**Mixtures**

| 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.

## 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. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

**Eye contact** Rinse with water. Get medical attention if irritation develops and persists.

**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. Headache. Nausea, vomiting. Irritation of eyes and mucous membranes. Irritation of nose and throat. Skin irritation. May cause redness and pain.

**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.

## 5. Fire-fighting measures

**Suitable extinguishing media** Dry chemical, CO2, or water spray.

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

## 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. Avoid breathing mist or vapor. Avoid breathing gas. 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** Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. 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. 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. 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. 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. 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 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. Avoid breathing mist or vapor. Avoid breathing gas. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Use only in well-ventilated areas. Should be handled in closed systems, if possible. 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**

Level 1 Aerosol.

Contents under pressure. Do not puncture or incinerate container. Do not expose to heat or store at temperatures above 49 °C/120 °F. Do not handle or store near an open flame, heat or other sources of ignition. Exposure to high temperature may cause can to burst. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

**Occupational exposure limits**

**US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)**

| Components | Type | Value |
|---|---|---|
| Carbon dioxide (CAS 124-38-9) | PEL | 9000 mg/m3 |
| | | 5000 ppm |

**US. OSHA Table Z-2 (29 CFR 1910.1000)**

| Components | Type | Value |
|---|---|---|
| Tetrachloroethylene (CAS 127-18-4) | Ceiling | 200 ppm |
| | TWA | 100 ppm |

**US. ACGIH Threshold Limit Values**

| Components | Type | 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 Chemical Hazards**

| Components | Type | Value |
|---|---|---|
| Carbon dioxide (CAS 124-38-9) | STEL | 54000 mg/m3 |
| | | 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 | Tetrachloroethylene | Blood | * |
| | 3 ppm | Tetrachloroethylene | 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: Viton®. Polyvinyl alcohol (PVA). Nitrile. Silver Shield®

**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** 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** Liquid.

**Form** Aerosol.

**Color** Colorless.

**Odor** Irritating.

**Odor threshold** 50 ppm

**pH** Not available.

**Melting point/freezing point** -8.1 °F (-22.3 °C) estimated

**Initial boiling point and boiling range** 250.3 °F (121.3 °C) estimated

**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.

**Vapor pressure** 1352.4 hPa estimated

**Vapor density** 5.76 (air = 1)

**Relative density** 1.62

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

**Partition coefficient (n-octanol/water)** Not available.

**Auto-ignition temperature** Not available.

**Decomposition temperature** Not available.

**Viscosity (kinematic)** Not available.

**Percent volatile** 97.7 % estimated

**Other information**

**Partition coefficient (oil/water)** 2.88

## 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** | Heat, flames and sparks. 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. |
| **Incompatible materials** | Strong oxidizing agents. Strong acids. Strong bases. |
| **Hazardous decomposition products** | Hydrogen chloride. Trace amounts of chlorine and phosgene. Carbon oxides. Halogenated materials. Carbonyl halides. |

## 11. Toxicological information

**Information on likely routes of exposure**

| | |
|---|---|
| **Inhalation** | Prolonged inhalation may be harmful. May cause drowsiness and dizziness. Headache. Nausea, vomiting. |
| **Skin contact** | Causes skin irritation. |
| **Eye contact** | Direct contact with eyes may cause temporary irritation. |
| **Ingestion** | Ingestion of large amounts may produce gastrointestinal disturbances including irritation, nausea, and diarrhea. |
| **Symptoms related to the physical, chemical and toxicological characteristics** | May cause drowsiness and dizziness. Headache. Nausea, vomiting. Irritation of nose and throat. Irritation of eyes and mucous membranes. Skin irritation. May cause redness and pain. |

**Information on toxicological effects**

**Acute toxicity** Narcotic effects.

| Product | Species | Test Results |
|---|---|---|
| Mag 1 Brake Parts Cleaner | | |
| **Acute** | | |
| *Dermal* | | |
| LD50 | Rabbit | 3305.1284 mg/kg estimated |
| *Inhalation* | | |
| LC50 | Rat | 20.4779 mg/l, 4 Hours estimated |
| *Oral* | | |
| LD50 | Rat | 2691.8162 mg/kg estimated |

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

| | |
|---|---|
| **Skin corrosion/irritation** | Causes skin irritation. |
| **Serious eye damage/eye irritation** | Direct contact with eyes may cause temporary 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.

| | |
|---|---|
| **Reproductive toxicity** | This product is not expected to cause reproductive or developmental effects. |
| **Specific target organ toxicity - single exposure** | May cause drowsiness and dizziness. |
| **Specific target organ toxicity - repeated exposure** | Not classified. |
| **Aspiration hazard** | May be an aspiration hazard. |

**Chronic effects** Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

## 12. Ecological information

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

| Product | | Species | Test Results |
|---|---|---|---|
| Mag 1 Brake Parts Cleaner | | | |
| **Aquatic** | | | |
| Fish | LC50 | Fish | 19.1805 mg/l, 96 hours estimated |
| **Components** | | **Species** | **Test Results** |
| Tetrachloroethylene (CAS 127-18-4) | | | |
| **Aquatic** | | | |
| Fish | LC50 | Rainbow trout,donaldson trout (Oncorhynchus mykiss) | 4.73 - 5.27 mg/l, 96 hours |

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

**Persistence and degradability** Not available.

**Bioaccumulative potential** Not available.

**Partition coefficient n-octanol / water (log Kow)**

| | |
|---|---|
| Tetrachloroethylene | 2.88 |

**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 of waste from residues / unused products** This material and its container must be disposed of as hazardous waste. Consult authorities before disposal. 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** 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** 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** UN1950
**UN proper shipping name** Aerosols, poison, Packing Group III, Limited Quantity, MARINE POLLUTANT
**Transport hazard class(es)**
**Class** 2.2
**Subsidiary risk** 6.1(PGIII)
**Label(s)** 2.2, 6.1
**Packing group** Not applicable.
**Environmental hazards**
**Marine pollutant** Yes
**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.
**Special provisions** Not available.
**Packaging exceptions** 306
**Packaging non bulk** 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** | Read safety instructions, SDS and emergency procedures before handling. |
| **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** | Read safety instructions, SDS and emergency procedures before handling. |
| **General information** | DOT Regulated Marine Pollutant. IMDG Regulated Marine Pollutant. |

## 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 (SDWA)** Not regulated.

**Food and Drug Administration (FDA)** Not regulated.

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

| | |
|---|---|
| **Section 311/312 Hazard categories** | Immediate Hazard - Yes<br>Delayed Hazard - Yes<br>Fire Hazard - No<br>Pressure Hazard - Yes<br>Reactivity Hazard - No |
| **SARA 302 Extremely hazardous substance** | No |

**US state regulations**

**US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)**

Not listed.

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

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 Worker and Community Right-to-Know Law**

Tetrachloroethylene (CAS 127-18-4)
Carbon dioxide (CAS 124-38-9)

**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))** | 0 % |
| **Consumer products (40 CFR 59, Subpt. C)** | Not regulated |

**State**

| | |
|---|---|
| **Consumer products** | This product is regulated as a Brake Cleaner. This product is not compliant to be sold for use in California 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 |
| 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** | 12-23-2013 |
| **Revision date** | 08-07-2014 |
| **Prepared by** | Allison Cho |
| **Version #** | 02 |
| **Further information** | CRC # 491G |

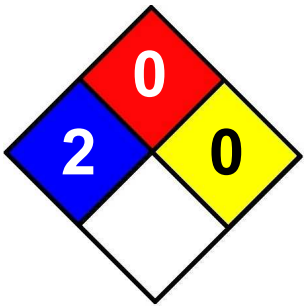
**HMIS® ratings**

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

**NFPA ratings**

Health: 2
Flammability: 0
Instability: 0

**NFPA ratings**




**Disclaimer**

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