

PRODUCT NAME: ABRO Brake and Brake Parts Cleaner  
PRODUCT NUMBER/SIZE: BC-780

Revision Date: 10/29/2014

## SECTION 1 Identification of the Substance and of the Company/Undertaking

MANUFACTURER'S NAME: ABRO INDUSTRIES, INC.  
ADDRESS: 3580 Blackthorn Court  
South Bend, IN 46628  
USA  
PRODUCT DESCRIPTION: Brake Cleaner  
COMPANY PHONE: 574-232-8289  
EMERGENCY 24-HR TELEPHONE: Chemtrec: US/Canada 1-800-424-9300  
International +1-703-527-3887

## SECTION 2 Hazards Identification

HMIS: Health 2 Flamm. 0 React. 0 NFPA: Tox. 2 Flamm. 0 React. 0

### Classification:

Aerosol Category 3  
Skin irritation Category 2  
Specific target organ toxicity, single exposure Category 3  
Carcinogenicity Category 2  
Acute aquatic toxicity Category 2  
Chronic aquatic toxicity Category 2

### Label Pictogram(s):



Signal Word: **WARNING**

Hazard Phrases: Pressurized container: may burst if heated. Causes skin irritation. May cause drowsiness or dizziness. Suspected of causing cancer. Toxic to aquatic life with long lasting effects.

Precautionary Phrases: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from open flames. No smoking. Keep container tightly closed. Do not pierce or burn, even after use. Avoid breathing fumes. Wash skin thoroughly after handling. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Wear protective gloves.

**Response:** IF ON SKIN: Take off contaminated clothing and wash it before reuse. Wash with plenty of soap and water. IF exposed or concerned or if skin irritation occurs: Get medical attention.

**Storage / Disposal:** Store in a well-ventilated place. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122 °F. Dispose of container to an approved waste disposal plant. Store locked up.

**Other:** Keep out of reach of children. If medical advice is needed, have product container or label at hand. Read label before use.

### SECTION 3 Composition/Information on Ingredients

COMPONENTS	CAS Number	OSHA PEL	ACGIH TLV	Percent by weight
**Perchloroethylene (Tetrachloroethylene)	127-18-4	100 ppm (200 ppm CLV) (300 ppm MC)	25 ppm (100 ppm STEL)	94%
Carbon dioxide	124-38-9	5000 ppm	5000 ppm	6%

\*\* Indicates ingredients that are subject to the reporting requirements of Section 313 of EPCRA and 40 CFR 372. Components of a blended material regulated under section 313 of SARA.

### SECTION 4 First Aid Measures

#### First Aid Measures

**Immediate Medical Attention:** Inhalation of high concentrations of this material, as could occur in enclosed spaces or during deliberate abuse, may be associated with cardiac arrhythmias. Sympathomimetic drugs may initiate cardiac arrhythmias in persons exposed to this material. This material is an aspiration hazard. Potential danger from aspiration must be weighed against possible oral toxicity when deciding whether to induce vomiting.

**Eyes** Move victim away from exposure and into fresh air. Flush eyes gently with water for at least 15 minutes while holding eyelids apart; seek immediate medical attention.

**Skin** Remove contaminated clothing. Flush exposed area with large amounts of water. Seek medical attention. Launder clothing before reuse.

**Ingestion** Seek medical attention. Do not give anything by mouth; Contact a physician, medical facility, or poison control center for advice about whether to induce vomiting.

**Inhalation** Move victim away from exposure and into fresh air. Seek immediate medical attention; If person is not breathing, begin artificial respiration.

**Signs & Symptoms Of Over Exposure:** 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.

**Special Treatment:** Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

## SECTION 5 Fire Fighting Measures

<b>Extinguishing media</b>	Foam, Dry Chemical, CO <sub>2</sub>
<b>Hazardous Combustion:</b>	Unknown
<b>Protective Equipment and Precautions for firefighters:</b>	<p>Keep containers cool using water spray. Use proper equipment to protect personnel from bursting containers. Wear full firefighting turn-out gear and respiratory protection. Never use welding or cutting torch on or near area of use (even empty) because product (even just residue) can ignite explosively. This product contains halogenated solvents which inhibit flashing until the halogenated solvent has been evaporated away. The product may become combustible or flammable after this occurs. Vapors are heavier than air and may travel along the ground or may be moved by ventilation and ignited by pilot lights, other flames, sparks, heaters, smoking, electric motors, static discharge, or other ignition sources at locations distant from material handling point. Use water spray to cool fire exposed containers and structures until fire is out if it can be done with minimal risk. Avoid spreading burning liquid with water used for cooling purposes.</p> <p>Contents under pressure. Do not expose to temperatures exceeding 120° F as containers may vent, rupture or burst.</p>
<b>Flammability per Flame Projection Test</b>	NON-FLAMMABLE

## SECTION 6 Accidental Release Measures

<b>Personal precautions, protective equipment and emergency procedures:</b>	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.
<b>Methods/materials for containment and cleanup:</b>	Soak up spilled liquid with absorbent material. Place in closed metal drum for proper disposal.
<b>Environmental precautions:</b>	Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## SECTION 7 Handling and Storage

<b>Precautions for Safe Handling</b>	DANGER! VAPOR AND SPRAY HARMFUL. HARMFUL IF INHALED. HARMFUL OR FATAL IF SWALLOWED. EYE, SKIN AND RESPIRATORY IRRITANT. Contents under pressure. Avoid prolonged or repeated contact
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with skin. Prolonged or repeated contact may dry skin, cause irritation and burns. Use only in well ventilated areas. Avoid breathing vapor or mist. Avoid contact with eyes. Do not smoke while using. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

**Conditions for Safe Storage**

Do not store at temperatures above 120°F. Do not incinerate containers. Keep out of reach of children. Store in a cool, dry, well-ventilated area away from incompatible materials. Store in accordance with NFPA 30B for Level 1 Aerosols.

**SECTION 8**  
**Exposure Controls/Personal Protection**

<b>COMPONENTS</b>	<b>CAS Number</b>	<b>OSHA PEL</b>	<b>ACGIH TLV</b>
Perchloroethylene (Tetrachloroethylene)	127-18-4	100 ppm (200 ppm CLV) (300 ppm MC)	25 ppm (100 ppm STEL)
Carbon dioxide	124-38-9	5000 ppm	5000 ppm

**Engineering Controls:** Ensure adequate ventilation.

**Personal Protective Equipment:**

**Skin** Impervious clothing and boots. Wash hands after each use. Wear **RESISTANT GLOVES** if repeated skin contact occurs or causes irritation.

**Eyes** Wear **CHEMICAL SPLASH GOGGLES OR SAFETY GLASSES** to prevent eye contact.

**Respiratory** Air – supplied respirator should be used in confined areas

**SECTION 9**  
**Physical and Chemical Properties**

<b>Appearance and Physical State:</b>	Colorless liquid mixture packaged in pressurized aerosol spray can.
<b>Odor:</b>	Ether-like
<b>Odor Threshold:</b>	50 ppm (from reference SDS)
<b>pH:</b>	Not Applicable.
<b>Melting Point/Freezing Point:</b>	-8.1° F estimated (from reference SDS)
<b>Initial boiling point &amp; boiling range:</b>	Greater than 100 °F
<b>Flash Point:</b>	None.
<b>Evaporation rate:</b>	Greater than 1.0 (BuAc=1)
<b>Flammability (solid, gas)</b>	Not Available.
<b>Upper/lower flammability or explosive limits</b>	Not Available
<b>Vapor pressure</b>	Not Available.
<b>Vapor density</b>	5.76 (from reference SDS)
<b>Relative density / Specific gravity</b>	1.62 g/ml
<b>Solubility</b>	Slightly soluble in water.
<b>Partition Coefficient n-Octanol/Water</b>	Not Available.
<b>Auto-ignition Temperature:</b>	Not Available.
<b>Decomposition Temperature:</b>	Not Available.
<b>Viscosity:</b>	Not Available.

<b>%-VOC Content:</b>	0%
<b>CARB VOC Category/Standard(%)</b>	Brake Cleaner / 45 %
<b>OTC Model Rule Category/Standard(%)</b>	Brake Cleaner / 45 %
<b>US EPA Cons Prod Category/Standard(%)</b>	Not Regulated

## SECTION 10 Stability and Reactivity

<b>Reactivity</b>	Product is non-reactive under normal conditions of use.
<b>Chemical Stability:</b>	Product is stable
<b>Possibility of hazardous reactions:</b>	None known.
<b>Conditions to avoid (e.g. static discharge, shock or vibration):</b>	Fire, sparks, open flames, temperatures above 120°F
<b>Incompatibilities:</b>	Alkali metals, aluminum, Barium, Strong acids, strong oxidizing agents
<b>Hazardous decomposition products:</b>	Carbon dioxide, carbon monoxide, chlorine, hydrogen chloride, phosgene, open flames, welding arcs, resistance heaters.
<b>Hazardous polymerization:</b>	Will not occur

## SECTION 11 Toxicological Information

<b>Likely Routes of Exposure:</b>	Skin or eye contact and inhalation.
<b>Symptoms:</b>	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.
<b>Delayed and Immediate Effects:</b>	Causes skin irritation. Direct contact with eyes may cause temporary irritation. Ingestion of large amounts may produce gastrointestinal disturbances including irritation, nausea, and diarrhea.
<b>Chronic Effects:</b>	Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.
<b>Toxicity Measures: Tetrachloroethylene</b>	Acute toxicity LD50 Oral - rat - 2,629 mg/kg LC50 Inhalation - rat - 8 h - 34,200 mg/m <sup>3</sup> LD50 Dermal - rabbit - 5,000 mg/kg  Skin corrosion/irritation Skin corrosion – rabbit Result: Severe skin irritation - 24 h Serious eye damage/eye irritation
<b>Chronic Effects:</b>	No data available

<b>NTP Carcinogen:</b>	Reasonably anticipated to be a human carcinogen (Tetrachloroethylene)
<b>IARC Carcinogen:</b>	2A - Group 2A: Probably carcinogenic to humans (Tetrachloroethylene)
<b>OSHA Carcinogen:</b>	No.

## SECTION 12 Ecological Information

<b>Ecotoxicity: Tetrachloroethylene</b>	Toxic to aquatic life with long lasting effects. Accumulation in aquatic organisms is expected. LC50 - Cyprinodon variegatus (sheepshead minnow) - 9.8 mg/l - 96.0 h LC50 - Lepomis macrochirus (Bluegill) - 13 mg/l - 96.0 h LC50 - Oncorhynchus mykiss (rainbow trout) - 4.9 mg/l - 96.0 h NOEC - Oryzias latipes - 17 mg/l - 10.0 d NOEC - Cyprinodon variegatus (sheepshead minnow) - 29 mg/l - 96.0 h Toxicity to daphnia and other aquatic invertebrates EC50 - Daphnia magna (Water flea) - 7.50 mg/l - 48 h
<b>Persistence and Degradability:</b>	No data available.
<b>Bioaccumulation Potential: (Tetrachloroethylene)</b>	Lepomis macrochirus (Bluegill) - 21 d - 0.00343 mg/l Bioconcentration factor (BCF): 49
<b>Mobility in Soil:</b>	No data available.
<b>Other Adverse Effects:</b>	No data available.

## SECTION 13 Disposal Considerations

<b>Storage and Disposal</b>	Keep out of reach of children. Do not store near heat, sparks or open flame. Do not puncture or incinerate container. Do not store in direct sunlight. Store in a cool, dry, well-ventilated area away from incompatible materials.
<b>Waste Disposal Method:</b>	Do not dispose of this product in drains or storm sewers. Do not dispose of this product in a landfill without prior solidification. The generator of a waste is always responsible for making proper hazardous waste determinations and needs to consider state and local requirements in addition to federal regulations. 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.

## SECTION 14 Transport Information

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (ocean, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport.

<b>U.S. DOT</b>	UN/ID Number: UN1950 Proper shipping name: Aerosols Hazard class: 2.2 Packing Group: None Exceptions: May be shipped as a limited quantity Environmental Hazards: Marine Pollutant (Tetrachloroethylene) Transport in Bulk: Not Applicable. Special Precautions: ERG#126
<b>IMO/IMDG</b>	UN/ID Number: UN1950 Proper shipping name: Aerosols Hazard class: 2.2 Packing Group: None Exceptions: May be shipped as a limited quantity Environmental Hazards: Marine Pollutant (Tetrachloroethylene) Transport in Bulk: Not Applicable Special Precautions: EmS F-D, S-U
<b>ICAO/IATA</b>	UN/ID Number: UN1950 Proper shipping name: Aerosols Hazard Class: 2.2 Packing Group: None Exceptions: None Environmental Hazards: Marine Pollutant (Tetrachloroethylene) Transport in Bulk: Not Applicable Special Precautions: None
<b>Canada (TDG)</b>	UN/ID Number: UN1950 Proper shipping name: Aerosols Hazard class: 2.2 Packing Group: None Exceptions: May be reclassified as a limited quantity. Environmental Hazards: Marine Pollutant (Tetrachloroethylene) Transport in Bulk: Not Applicable Special Precautions: ERG#126

## SECTION 15 Regulatory Information

Proposition 65 – California Safe Drinking Water and Toxic Enforcement Act of 1986  
WARNING: This product contains a chemical known to the State of California to cause cancer.  
(Tetrachloroethylene)

## SECTION 16 Other Information

We believe all information given is accurate. It is offered in good faith but without guarantee. Since conditions of use are beyond our control, user assumes all responsibility and risk.

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product is suitable for their particular purposes and they assume all risks of their use, handling, and disposal of the product. Users also assume all risks in regards to the publication or use of, or reliance upon, information contained herein. This information relates only to the product designated herein, and does not relate to its use in combination with any other material or process.

**ABBREVIATIONS:**

NG="NOT GIVEN"

BT="BETWEEN"

<="LESS THAN"

>="GREATER THAN"

ND = Not Determined

NA = Not Applicable

This information is intended to provide interpretative and authoritative information in regard to the subject matter covered as a service to our clients and has been answered to the best of our ability based on the information provided to us. We do not guarantee the accuracy or completeness of any such interpretation or information, however, nor do we warrant that compliance with any advice we provide will guarantee compliance with any legal or regulatory requirements. Our statements or opinions do not convey legal interpretation and government authorities or legal counsel should be contacted for such a response.