

# MATERIAL SAFETY DATA SHEET

Bio Chem, Inc.  
P.O. Box 521925  
SLC, UT84152 - USA



GENERAL INFORMATION NUMBER: 1-800-653-9795

REVISION DATE: August 1, 2002  
DATE OF ISSUE: October 18, 2002

## I - Product Identification

### Brake Cleaner

**PRODUCT CODE:** 8200

**CHEMICAL FORMULATION:** Pressurized non-flammable cleaner

**NFPA HAZARD IDENTIFICATION SYSTEM:** **HEALTH:** 2 **FLAMMABILITY:** 1 **REACTIVITY:** 0

**HAZARD RATING:** 4 - Extreme; 3 - High; 2 - Moderate; 1 - Slight; 0 - Insignificant

## II - Hazardous Ingredients

Values reported as TWA unless noted.

<u>SUBSTANCE</u>	<u>APPROX</u> <u>%</u>	<u>OSHA</u> <u>PEL</u>	<u>ACGIH</u> <u>TLV</u>	<u>EPA 40 CFR:</u>			<u>CAS #</u>
				<u>302</u>	<u>355</u>	<u>372</u>	
Trichloroethylene	> 90.0	50 ppm	50 ppm	Y	N	Y	79-01-6
Carbon Dioxide	1.00-5.00	10,000 ppm	5,000 ppm	N	N	N	124-38-9

Key: **PEL:** Permissible Exposure Limit **TLV:** Threshold Limit Value **C:** Ceiling level **STEL:** Short Term Exposure Limit

**N/A:** Not Applicable **N/D:** Not Determined **N/E:** Not Established **Y:** Yes **N:** No

**302:** CERCLA List of Hazardous Substances and Reportable Quantities (40 CFR 302.4).

**355:** SARA TITLE III / List of Extremely Hazardous Substances for Emergency Planning and Notification (40 CFR 355).

**372:** SARA TITLE III / List of Toxic Chemicals subject to Release Reporting (Community Right to Know) (40 CFR 372).

## III - Physical Data

**BOILING POINT (°F):** 188.4

**SPECIFIC GRAVITY (WATER = 1):** 1.46

**VAPOR PRESSURE (mm Hg):** 59

**VOC CONTENT (% by weight):** 0

**VAPOR DENSITY (AIR = 1):** 4.5

**EVAPORATION RATE (WATER = 1):** > 1.0

**SOLUBILITY IN WATER:** Insoluble

**pH:** N/A

**APPEARANCE AND ODOR:** Clear, water-white liquid; chlorinated solvent odor.

## IV - Fire and Explosion Hazard Data

**FLASH POINT (°F):** > 200 **(TEST METHOD):** Closed cup

**NFPA 30B Rating:** 1

**FLAMMABLE LIMITS IN AIR (VOLUME %)** **UPPER:** 10.5 **LOWER:** 8

**FLAME EXTENSION:** N/D

**EXTINGUISHING MEDIA:** Water, foam, carbon dioxide, dry chemical.

**SPECIAL FIRE FIGHTING PROCEDURES:** Cool fire exposed containers with water fog. Firefighters should be equipped with full protective gear including self-contained breathing apparatus.

**UNUSUAL FIRE AND EXPLOSION HAZARD:** None

---

**V - Reactivity Data**

---

**STABILITY:** Stable

**INCOMPATIBILITY:** Oxidizers, strong acids, alkalis and aluminum.

**CONDITIONS TO AVOID:** None.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Thermal decomposition may produce hydrogen chloride and traces of phosgene.

**HAZARDOUS POLYMERIZATION:** Will not occur.

**CONDITIONS TO AVOID:** None

---

**VI - Health Hazard Data**

---

**ROUTES OF ENTRY**    **INHALATION:** X    **EYE CONTACT:** X    **SKIN CONTACT:** X    **INGESTION:** X

**INGREDIENTS THAT ARE CONSIDERED BY OSHA, NTP, IARC TO BE SUSPECTED HUMAN CARCINOGENS:**  
Trichloroethylene (IARC 2A)

**EFFECTS OF OVEREXPOSURE**

**IF IN EYES:** Moderate to severe irritation.

**IF ON SKIN:** Redness, dryness, irritation, dermatitis with prolonged or repeated exposure.

**IF SWALLOWED:** Gastrointestinal irritation, nausea, cramps, vomiting.

**IF INHALED:** Irritation to upper respiratory tract, CNS depression, cardiac sensitization.

**EMERGENCY AND FIRST AID PROCEDURES**

**IF IN EYES:** Flush eyes and under eyelids with plenty of cool water for at least 15 minutes. If irritation persists, obtain medical attention.

**IF ON SKIN:** Wash with soap and water. If irritation persists, obtain medical attention.

**IF SWALLOWED:** Contact physician or poison control center immediately. Give affected person 1 to 2 glasses of water. Do not induce vomiting. Never give anything to an unconscious person.

**IF INHALED:** Remove person to fresh air. If irritation persists, obtain medical attention.

---

**VII - Spill or Leak Protection**

---

**STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:** Ventilate area. Soak up spilled material with inert absorbent material and place in a labeled closed container.

**WASTE DISPOSAL METHOD:** Consult local environmental authorities. Dispose of cans in non-incinerated trash.

---

**VIII - Special Protection Information**

---

**RESPIRATORY PROTECTION:** Use with adequate ventilation. Do not breathe vapors or mists. If recommended Exposure Limits are exceeded, wear a NIOSH approved respirator, following the manufacturer's recommendations.

**VENTILATION**

**LOCAL:** Recommended

**MECHANICAL:** Not required

**PROTECTIVE GLOVES:** Chemical resistant.

**EYE PROTECTION:** Safety glasses and/or face shield.

**OTHER PROTECTIVE EQUIPMENT:** Eye wash station.

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:** Store in a cool, dry place. Keep container tightly closed when not in use.

**OTHER PRECAUTIONS:** Keep out of reach of children. Do not puncture or incinerate can.

---

**IX - Transportation Information (ground transportation only)**

---

**DOT PROPER SHIPPING NAME:** Consumer Commodity

**DOT CLASS:** ORM-D

**DOT ID NUMBER:** None

**DOT PACKING GROUP:** None

The shipping information listed above applies only to non-bulk (< 119 gallons) containers of this product. This product may have more than one proper shipping name depending on packaging, product properties, & mode of shipment. If any alteration of packaging, product, or mode of transportation is further intended, different shipping names and labeling may apply.

---

**REVISION DATE:** August 1, 2002

**Prepared by:** PMR

**DATE OF ISSUE:** October 18, 2002

This information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. Total Solutions assumes no responsibility for personal injury or property damage to the vendee, users or third parties caused by the material such vendees or users assume all risks associated with the use of this material.