# Material Safety Data Sheet

MSDS No. 021 **Brake Cleaner (Aerosol)** 

Date of Preparation: 10-29-99 Revision: 12-01-05

# **Section 1 - Chemical Product and Company Identification**

Product/Chemical Name: Brake Cleaner (Aerosol)

**Part Number(s):** 1420, 1425 (Blend 5C-3) **CAS Number:** Not applicable to mixtures General Use: Automotive product

Manufacturer: Berryman Products, Inc., 3800 E. Randol Mill Rd., Arlington, TX 76011-5434

Phone: 1-800-433-1704, Emergency phone number: 1-800-535-5053.

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**Section 2 - Composition / Information on Ingredients** 

Ingredient Name	CAS Number	% wt <i>or</i> % vol
Perchloroethylene (Tetrachloroethylene)	127-18-4	15-25
Methylene Chloride (Dichloromethane)	75-09-2	35-45
Hydrotreated Light Distillate	68410-97-9	35-40
Carbon Dioxide	124-38-9	<4

### Trace Impurities:

	OSHA PEL		ACC	ACGIH TLV		NIOSH REL	
Ingredient	TWA	STEL	TWA	STEL	TWA	STEL	IDLH
Perchloroethylene	100	none estab.	25	100	none estab.	none estab.	none estab.
(Tetrachloroethylene)							
Methylene Chloride	125	none estab.	50	none estab.	none estab.	none estab.	none estab.
(Dichloromethane)							
Hydrotreated Light	none estab.						
Distillate							
Carbon Dioxide	5000	none estab.	5000	30000	none estab.	none estab.	none estab.

# **Section 3 - Physical and Chemical Properties**

**Boiling Point:** 104-250 °F Physical State: Liquid Appearance and Odor: Clear, Colorless, Ether-like

**Vapor Pressure:** 14 mm Hg at 68 °F (Major Component)

Vapor Density (Air=1): Heavier than air

Density: 9.53 lbs/gal

Specific Gravity (H<sub>2</sub>O=1, at 4 °C): 1.142

**Refractive Index:** 1.4341

% Volatile: 100

Evaporation Rate: Slower than ether

# **Section 4 - Fire-Fighting Measures**

Flash Point: <40 °F Flash Point Method: CC

LEL: N/A

Flammability Classification: Class IB

**Extinguishing Media:** Carbon dioxide, foam, dry chemicals.

Unusual Fire or Explosion Hazards: Extremely flammable liquid. Vapors can cause flash fire. **Fire-Fighting Instructions:** Do not release runoff from fire control methods to sewers or waterways.

Fire-Fighting Equipment: Wear self-contained breathing apparatus pressure demand, MSNA/OSHA (approved or equivalent)

and full protective gear. Use water spray to keep fire-exposed containers cool.

# Section 5 - Stability and Reactivity

**Stability:** Brake Cleaner is stable at room temperature in closed containers under normal storage and handling conditions.

**Polymerization:** Hazardous polymerization cannot occur.



Chemical Incompatibilities & Conditions to Avoid: Isolate from oxidizers, heat, sparks, electric equipment and open flame. May react violently with alkali and alkaline earth metals such as sodium, potassium and barium. May be corrosive to aluminum, magnesium, titanium and their alloys.

**Hazardous Decomposition Products:** Thermal oxidative decomposition of Brake Cleaner can produce carbon monoxide, hydrogen chloride, chlorine and phosgene.

### **Section 6 - Health Hazard Information**

#### **Potential Health Effects**

Primary Entry Routes: Skin, dermal, inhalation and ingestion.

Target Organs: Eyes, skin, respiratory system, CNS.

Acute Effects: May cause irritation to the eyes, skin, nose, throat and respiratory system. Nausea, vomiting, abdominal pain,

headache, light-headedness, dizziness, and dermatitis. Harmful or fatal if swallowed. **Carcinogenicity:** IARC, NTP, and OSHA do not list Brake Cleaner as a carcinogen.

Chronic Effects: May affect lungs or central nervous system. Can cause nervous system depression. Potential cancer hazard.

**Revision: 12-01-05** 

#### **Emergency and First Aid Procedures**

**Inhalation:** Remove to fresh air. If not breathing, give artificial respiration. Get medical attention immediately.

Eye Contact: Immediately flush eyes with plenty of water. Get medical attention, if irritation persists.

**Skin Contact:** Immediately wash skin with soap and plenty of water. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.

**Ingestion:** GET MEDICAL ATTENTION IMMEDIATELY. Do not induce vomiting. *After first aid, get appropriate in-plant, paramedic, or community medical support.* 

### Section 7 - Spill, Leak, and Disposal Procedures

**Spill /Leak Procedures:** Eliminate all sources of ignition. Stop spill at source. Wear appropriate personal protective equipment (Sec. 8). Contain the spill to facilitate cleanup with absorbent. Use non-sparking tools and equipment. Transfer to disposal containers.

Containment: For large spills, dike far ahead of liquid spill for later disposal. Do not release into sewers or waterways.

**Disposal:** Contact your supplier or a licensed contractor for detailed recommendations. Follow applicable Federal, state and local regulations.

**Regulatory Requirements:** Follow applicable OSHA regulations (29 CFR 1910.120).

# **Section 8 - Exposure Controls / Personal Protection**

**Ventilation:** Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs (Sec. 2). Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.

**Respiratory Protection:** Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a MSHA/NIOSH-approved respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. For emergency or nonroutine operations (cleaning spills, reactor vessels, or storage tanks), wear an SCBA. *Warning! Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.* If respirators are used, OSHA requires a written respiratory protection program that includes at least: medical certification, training, fit-testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.

**Protective Clothing/Equipment:** Wear chemically protective gloves, boots, aprons, and gauntlets to prevent prolonged or repeated skin contact. Wear protective eyeglasses or chemical safety goggles, per OSHA eye- and face-protection regulations (29 CFR 1910.133). Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with contact lenses.

**Safety Stations:** Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area. **Contaminated Equipment:** Separate contaminated work clothes from street clothes. Launder before reuse. Remove this material from your shoes and clean personal protective equipment.

**Comments:** Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

## **Section 9 - Special Precautions and Comments**

**Handling Precautions:** Avoid prolonged breathing of vapor and contact with eyes, skin and clothing. Use in well ventilated area. Wash thoroughly after handling.

**Storage Requirements:** Keep away from heat, sparks and flame. Keep container closed when not in use. Contents under pressure. Do not expose to heat or store above 120 °F.

**California Proposition 65:** This product contains the following chemicals know to the state of California to cause cancer and/or reproductive toxicity: Perchloroethylene (Tetrachloroethylene).

#### **DOT Transportation Data (49 CFR 172.101):**

Part Number(s): 1420, 1425 Shipping Name: Consumer Hazard Class: ORM-D

Commodity ID No.: N/A

Packing Group: N/A

#### SARA Title III Section 313 Supplier Notification:

This product contains the following toxic chemicals subject to the reporting requirements of Section 313 of the emergency Planning & Community Right-To-Know-Act of 1986 & of 40CFR 372: Perchloroethylene (Tetrachloroethylene), and Methylene Chloride (Dichloromethane).

Prepared By: Alicia L. Reed

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