



BRAKE CLEANER

Brake Cleaner is a fast acting and quick drying non-chlorinated, economical solvent de-greaser specifically designed for removing oil, dirt, and brake dust from a variety of surfaces. For use in all vehicle maintenance and brake repair shops.

FEATURES & BENEFITS

- **ENVIRONMENTALLY FRIENDLY**
Does not contain chlorinated solvents
- **FAST EVAPORATING**
Dries quickly and completely. Does not leave a residue
- **EFFECTIVE**
Cleans grease, oil, brake fluid, and dust without damaging the brake
- **ECONOMICAL**
Cost effective



DIRECTIONS

1. Fill sprayer with Brake Cleaner and pressurize according according to manufacturer's directions.
2. Spray onto brake rotors and calipers, wheel cylinders or drums to remove brake dust and grime.
3. Product should be captured in a container and disposed of properly.
4. Allow parts to air dry prior to reassembly.

NOTE:

Brake Cleaner is **EXTRMELY FLAMMABLE**. Do not smoke, weld or introduce any other type of ignition (sparks, elec. Motor, etc.) while using.

Respiratory protection should be worn when spraying to avoid breathing brake dust and product vapors.

NOTE: See reverse side for MSDS information and General Cautions for Use

MATERIAL SAFETY DATA SHEET

(COMPLIES WITH 29CFR 1910.1200)

SECTION I - CHEMICAL PRODUCT & COMPANY IDENTIFICATION

Identity (As Used on Label and List): Brake Cleaner
Product Class: Solvent based cleaner
Emergency Telephone Number: 800-535-5053 (INFOTRAC)
Telephone Number for Information: 763-509-7937
Distributor's Name and Address:
Ver-tech Labs
6801 Bleck Drive
Rockford MN 55373

SECTION II - COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components (Specific Chemical Identity):

Chemical	Common Name(s)	%
A	N-Hexane CAS #110-54-3	
B	2-propanol CAS #67-63-0	
C	Methanol CAS #1336-21-6	

SECTION III - HAZARDS IDENTIFICATION

Emergency Overview
Appearance and Odor: Clear liquid, solvent odor.
Primary Hazards: Flammable Posion
Potential Health Hazards
Route(s) of Entry: Skin Absorption: X Ingestion: X Inhalation: X
Eye: May cause irritation, blindness.
Skin: May cause irritation and can be absorbed through skin
Ingestion: Harmful if swallowed poison.
Inhalation: Overexposure may cause central nervous system effects including drowsiness, headaches, nausea, dizziness death and blindness .
Signs and Symptoms of Exposure: Irritation on direct contact.
Carcinogenicity: NTP? No IARC Monographs? No
OSHA Regulated? No
Target Organ (s): Liver, kidneys, lymphoid system, skin, blood, eyes and respiratory system.
Medical Conditions Generally Aggravated by Exposure: N. Av.
Health Hazards, Chronic: Overexposure may cause damage to one or more of the target organs listed above.

SECTION IV - FIRST AID MEASURES

Emergency and First Aid Procedures:
If Swallowed: Do not induce vomiting. Drink water in large amounts and call a physician immediately. Never give anything by mouth to an unconscious person. **Eye Contact:** Flush eyes with running water for at least 15 minutes. Obtain medical attention. **Skin Contact:** Flush thoroughly with cool water. Remove and wash contaminated clothing before reuse. If irritation persists seek medical attention.
Sources Used: Raw material data, general toxicology from the trade for similar products.

SECTION V - FIRE FIGHTING MEASURES

Flammability: -10 deg F **Auto ignition Temperature:** N. Av..
Flash Point (method used): (TCC)
Flammable Limits: N. Av. LEL >1.2 UEL
Extinguishing Media N. Av.
Water? X **Foam?** X **Water Fog?** X
Alcohol Foam? X **CO₂?** X **Dry Chemical?** X
Vaporizing Liquid? X **Other?**
Special Fire Fighting Procedures: Use self contained breathing apparatus .
Unusual Fire and Explosion Hazards: Vapors from this product may settle in low places.
Sensitivity to Mechanical Impact: None
Sensitivity to Static Discharge: None

SECTION VI - ACCIDENTAL RELEASE MEASURES

Steps to be Taken in Case Material is Released or Spilled:
Dike and contain spill with inert material (sand, earth, etc). Collect spill with mop, absorbent material (example: floor-dri) or vacuum. Thoroughly rinse affected area with water.

SECTION VII - HANDLING AND STORAGE

Precautions to be Taken in Handling and Storing:
Normal care in handling and storage.
Other Precautions: Keep out of reach of children. Keep from freezing.

SECTION VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory Protection (Specify Types): Appropriate NIOSH/MSHA approved respirator
Ventilation: **Local Exhaust:** At points of use **Special:** Not required
Mechanical (General): Ventilate to keep vapor levels below PEL and TLV, listed in Section XI. **Other:** Not required
Protective Gloves: Natural rubber or synthetic.

Eye Protection: Approved safety goggles or glasses. **Footwear:** Chemical resistant
Other Protective Clothing or Equipment: Not required

Work/Hygienic Practices: Do not contaminate food or beverages with cleaning chemicals.

SECTION IX - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point: Approximately 148 - 180°F **pH:** N. Ap.
Specific Gravity (H₂O) = 1: .6965
Vapor Density (Air = 1): > 1 **Odor Threshold:** N. Av.
Evaporation Rate (Butyl Acetate = 1): N. Av. **Oil/Water Distribution**
Solubility in Water: N. Ap. **Coefficient:** N. Av.
Vapor Pressure (MM HG): N. Av.
Melting Point: N. Ap.

SECTION X - STABILITY AND REACTIVITY

Stability: **Unstable:** **Stable:** X
Conditions to Avoid: N. Ap.
Incompatibility (materials to avoid): N. Av.
Hazardous Decomposition or By-products: N. Av.
Hazardous Polymerization: **May occur:** **Will not occur:** X
Conditions to Avoid: N. Ap.

SECTION XI - TOXICOLOGICAL INFORMATION

Chemical	OSHA PEL	ACGIH TLV	Recom.	LD50	LC50
A	50 ppm (skin)	50 ppm (skin)	50 ppm	1.48 g/kg (rat, oral)	N. Av.
B	400 ppm	400 ppm	N. Ap.	5,840 mg/kg (rat, oral)	12,000 ppm (rat,8H)
C	200 ppm	200 ppm	N. Av.	350 mg/kg (rat, oral)	4230 ppm (mice)

Teratogen, Mutagen, Reproductive Toxin Status: No known relevance to humans.
Toxicologically Synergistic Products: N. Av.

SECTION XII - ECOLOGICAL INFORMATION

Ecotoxicological Information: N. Av.
Chemical Fate Information: N. Av.

SECTION XIII - DISPOSAL CONSIDERATIONS

Waste Disposal Method:
Dispose of spilled material in accordance with local, state and federal regulations. Waste from normal cleaning procedures may be sewerred, depending on the materials and/or contaminants being cleaned as well as state, federal and local sewer commission regulations.
RCRA Hazard Class: D004, characteristic Flammable

SECTION XIV - TRANSPORT INFORMATION

Shipping Classification: Flammable liquid, n.o.s. (Hexane, Isopropanol), Class 3
UN Number: 1993
Packing Group: II

SECTION XV - PREPARATION DATA

Prepared By: Health and Safety Department
Telephone Number: 763-509-7937
Date: 10-11-2007

SECTION XVI - REGULATORY INFORMATION

US Federal Regulations
TSCA Status: All ingredients listed.
CERCLA Reportable Quality: N. Av.
SARA Title III
Section 302 Extremely Hazardous Chemicals: None
Section 311/312 Hazard Category: Immediate health, chronic health.
Section 313 Toxic Chemicals: N-Hexane, Methyl Alcohol

SECTION XVII - OTHER INFORMATION

None
N. Ap. - Not Applicable; N.Av. - Not Available

NFPA SYSTEM
3 A. Health Hazard 3 A. Fire Hazard 0 A. Reactivity Hazard

THE INFORMATION CONTAINED HEREIN IS BASED ON DATA CONSIDERED ACCURATE, HOWEVER NO WARRANTY IS EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF. MINUTEMAN INTERNATIONAL, INC. ASSUMES NO RESPONSIBILITY FOR PERSONAL INJURY OR PROPERTY DAMAGE TO VENDEES, USERS OR THIRD PARTIES CAUSED BY THE MATERIAL. SUCH VENDEES OR USERS ASSUME ALL RISKS ASSOCIATED WITH THE USE OF THE MATERIAL.