

Health	1
Flammability	0
Reactivity	0
Personal Protection	*

BOWMAN DISTRIBUTION MATERIAL SAFETY DATA SHEET

Health	
Flammability	
Reactivity	
Specific Hazard	

HMIS Ratings
*See Section VIII.

SECTION I

NFPA Ratings
NFPA 30B Rating: NR

PRODUCT NAME BRAKE CLEANER		BOWMAN PART NO. 19440 (page 1 of 2)
SUPPLIER Bowman Distribution, Barnes Group Inc.	INFORMATION TELEPHONE NO. (216) 391-7200	24 HR. EMERGENCY TELEPHONE N (303) 623-5716
ADDRESS 850 East 72nd Street, Cleveland, OH 44103		DATE 5/12/93
HAZARDOUS MATERIAL DESCRIPTION, PROPER SHIPPING NAME, HAZARD CLASS, HAZARD ID NO. (49 CFR 172.101) Consumer Commodity, ORM-D, UN 1956		
ADDITIONAL HAZARD CLASSES (as applicable) None		
CHEMICAL FAMILY Mixture	FORMULA TM 620	

SECTION II - HAZARDOUS INGREDIENTS

CAS REGISTRY NUMBER	%W	%V	CHEMICAL NAME(S)	OSHA PEL	ACGIH TLV	Other Limits	Listed as Carcinogen NTP, IARC or OSH. 1910(z) (specify)
71-55-6	73		*1,1,1-Trichloroethane	350	350	450	NO
127-18-4	24		*Perchloroethylene	25	50 (Skin)	200	YES (IARC)
124-38-9	3		Carbon Dioxide	5000	5000	30000	NO
TOTAL	100						

ALL CHEMICAL COMPOUNDS MARKED WITH AN ASTERISK () ARE TOXIC CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT (SARA) OF 1986 AND 40 CFR PART 372.

†1,1,1-Trichloroethane contains an inhibitor package which includes 1.5% tert-butyl alcohol (75-85-0), 0.5% 1,2-butylene oxide (106-88-7), and 1.9% dimethoxymethane (109-87-5). Tert-butyl alcohol and 1,2-butylene oxide are subject to the reporting requirements of Section 313 of SARA Title III.

SECTION III - PHYSICAL DATA

BOILING POINT 162 to 252 °F 73 to 122 °C	SPECIFIC GRAVITY (H ₂ O = 1) 1.5	MAXIMUM PERCENT VOC BY WEIGHT (%) % 25 Method used Calculated
VAPOR PRESSURE @ 70 °F 21 °C <input type="checkbox"/> mm Hg <input checked="" type="checkbox"/> psi 100	PERCENT VOLATILE BY VOLUME (%) 100	
VAPOR DENSITY (AIR = 1) Heavier than air. 4.0	EVAPORATION RATE (Butyl Acetate = 1) >1	
SOLUBILITY IN WATER None	PH = N.A.	PERCENT SOLID BY WEIGHT (%) N.A.
APPEARANCE AND ODOR Clear/solvent odor.	MATERIAL IS: LIQUID & GAS.	

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT None °F _____ °C method used	FLAMMABLE LIMITS	LEL None	UEL None
EXTINGUISHING MEDIA Water fog, dry chemical, or carbon dioxide.			
SPECIAL FIRE FIGHTING PROCEDURES Keep containers cool. Use equipment or shielding required to protect against bursting or venting containers.			
UNUSUAL FIRE AND EXPLOSION HAZARDS Heated containers may burst.			

SECTION V - HEALTH HAZARD DATA

HEALTH HAZARDS (ACUTE AND CHRONIC - INCLUDE TARGET ORGAN EFFECTS)
 May cause dizziness or narcosis in high vapor concentrations and will cause defatting of skin. Effects are reversible. Long-term exposure (years) to high concentrations of vapor may cause lung, liver, or kidney damage. The solvents listed have been reported to affect the central nervous system. Eye and skin irritant. Aspiration hazard, if swallowed. May irritate respiratory tract. Perchloroethylene may cause damage to brain and spleen. May cause cardiac abnormalities.

CONDITIONS TO AVOID

See Above.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

Exhalation: Difficulty in breathing. Skin: Redness. Ingestion: Vomiting.

PRIMARY ROUTES OF ENTRY Inhalation Skin Contact Other (specify) Ingestion

EMERGENCY AND FIRST AID PROCEDURES

Give Oxygen. Do not induce vomiting. Gastric lavage. Wash eyes and skin with water. Never administer adrenalin following overexposure.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

Heart disease, respiratory disorders.

SECTION VI - REACTIVITY DATA

STABILITY	UNSTABLE		CONDITIONS TO AVOID
	STABLE	X	High Temperatures.

COMPATIBILITY (materials to avoid)
 The above solvents are incompatible with strong oxidizers. Not compatible with active metals.

HAZARDOUS DECOMPOSITION PRODUCTS:
 In fire will decompose to water, carbon dioxide, halogen acids, and phosgene.

HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR	X	None

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
 Use absorbent sweeping compound to soak-up material. Put into container. Dispose as hazardous waste.

FASTEST DISPOSAL METHOD
 Dispose as hazardous waste in accordance with EPA RCRA.

RCRA (Superfund) REPORTABLE QUANTITY (in lbs.)

RCRA HAZARDOUS WASTE NO. (40 CFR 261.33)
 302

VOLATILE ORGANIC COMPOUND (VOC) Theoretical 2.7 lb/gal
 as packaged, minus water) Analytical _____ lb/gal
 25%

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (specify type)
 Self-contained breathing apparatus, if above TLV limit exceeding.

VENTILATION	LOCAL EXHAUST (specify rate) Yes	SPECIAL None
	MECHANICAL (general) (specify rate) None	OTHER None
PROTECTIVE GLOVES (specify type) None required, if spraying.		EYE PROTECTION (specify type) Wear eye protection.
OTHER PROTECTIVE EQUIPMENT Long sleeves, long pants.		WORK/HYGIENIC PRACTICES Do not smoke while using. Wash hands after using.

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING
 Keep away from heat, sparks, or open flames. Store at temperatures below 120° F.

OTHER PRECAUTIONS
 When spraying more than one half can continuously or more than one can consecutively, use NIOSH-approved respirator.