Health	1_
Flammability	0
Reactivity	0
Personal Protection	*

BOWMAN DISTRIBUTION MATERIAL SAFETY DATA SHEET

lealth	2
Flammability	1_
Reactivity	0
Specific Hazard	

NEPA Batings

MMIS Ratings *See Section VIII.	SECTION I	NFPA 308 Rating: NE
DUCT NAME		BOWMAN PART NO.
CUTTING TOOL COOLANT		19466 (page 1 of 2)
SUPPLIER	INFORMATION TELEPHONE NO.	24 HR. EMERGENCY TELEPHONE NO.
Bowman Distribution, Barnes Group Inc.	(216) 416-7200	(303) 623-5716
ADDRESS		DATE
1301 E. 9th St., Suite 700, Cleveland, Ohio		3/10/97
HAZARDOUS MATERIAL DESCRIPTION, PROPER SHIPPIN	IG NAME, HAZARD CLASS, HAZARD II	O NO. (49 CFR 172.101)
Consumer Commodity, ORM-D		
ADDITIONAL HAZARD CLASSES (as applicable)		
None		
CHEMICAL FAMILY	FORMULA	
Mixture	TM 4504	

SECTION II - HAZARDOUS INGREDIENTS

CAS REGISTRY NUMBER	%W	%V	CHEMICAL NAME(S)	OSHA PEL	ACGIH TLV	Other Limits	Listed as Carcinogen NTP, IARC or OSHA 1910(z) (specify)	
127-18-4	80-90		*Perchioroethylene	25 ppm	25 ppm	100 ppm	NTP, IARC	
75-09-2	1-10		*Methylene Chloride	25 ppm 50 ppm		-	NTP, LARC	
124-38-9	0.1.0111		Carbon Dioxide	10000 ppm	5000 ppm	30000 ppm	NO	
			The STEL for methylene chloride is					
	1		125 ppm (15 min. TWA); the action					
			level is 12.5 ppm (8 hr. TWA)	T T				

L 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.

SECTION III - PHYSICAL DATA

BOILING POINT 106 to 250 °	=°c	SPECIFIC GRAVITY (H ₂ O = 1)	MAXIMUM PERCENT VOC BY WEIGHT (%) % 86.7 Method used Calculated		
VAPOR PRESSURE	85-90 psig	PERCENT VOLATILE BY VOLUME (%)	N.A.	MELTING POINT	N.A.
VAPOR DENSITY (AIR = 1) Heavier than Air	4.0	EVAPORATION RATE (Butyl Acetate = 1)	>1		
SOLUBILITY IN WATER	NII	PH=	N.A.	PERCENT SOLID BY WEIGHT (%)	0
APPEARANCE AND ODOR				MATERIAL IS: LIQUID, GAS.	
Clear/Ethereal					

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT	method used	FLAMMABLE LIMITS	LEL	UEL
None_°F°C		None		
EXTINGUISHING MEDIA				
Use water fog, dry chemical or carbon d				
SPECIAL FIRE FIGHTING PROCEDURES				
Keep containers cool. Use equipment o	r shielding required to pr	rotect against bursting or venting o	containers.	
		<u></u>		
UNUSUAL FIRE AND EXPLOSION HAZAF	RDS		 	
Heated cans may burst.				
ABEL WARNING				
Contents under pressure.				
Collection attack biogeons.				······································

19466 (page 1 of 2)

N.A. - Not Applicable N.E. - Not Established N.D. - Not Determined

SECTION V - HEALTH HAZARD DATA

100					// V			
EALTH HAZ	ARDS (ACU	TE AND	CHRONIC - I	NCLUE	E TARG	ET ORGAN EFFECTS) 1 of s	skin. Effects are reversible. Long term exposure
ay cause di	zzmess or r	tione of	venor mey co	conce	na liver	or kidney damage. T	10 SC	olvents listed have been reported to affect the central
woule extets	m Aeniret	ion haz	and if awallow	ed Eve	and skh	n Irritant. May irritate	aso	ratory tract. Deliberately concentrating and inhaling
a vanor of the	ne contents	may be	harmful or fa	tal Me	athylene	chloride will have an	effec	ct on the cardiovascular system. Perchioroethylene
W/ 001100 0F	leen and h	rain dar	nege. May car	ISO CAT	diac abn	ormalities, inhalation	of h	Igh concentrations of metrylene chloride vapor over
ng periods	of time (ve	ers) has	caused cano	er in la	boratory	animais. Perchioroe	tryle	one is listed as a carcinogen per NTP and IARC.
= -			REXPOSURE			<u> </u>		
GNS AND S	Miculty in i	oreathir	ig. Skin - redi	: ness. I	naestion	- vomiting.		
RIMARY RO	UTES OF E	NTRY	Inhalation X		kin Conte		cify)) Eye Contact
				لــــــــــــــــــــــــــــــــــــ				
MERGENCY	AND FIRST	AID P	ROCEDURES	Give O	xygen.	Do not induce vomiti	ng. \	Wash eyes and skin with water for 15 minutes. Get
edical help.	Never adn	inister	adrenalin folk /ATED BY EXF		E SAGLGXDC	osure.		
sart Disease	, Respirato	ry Disc	rders.	00011	h			
ARNING	•				_	<u> </u>		
ila product	contains ch	<u>iemical</u>	s known to the	e State	of Califo	ornia to cause cancer		
				SEC	TION	VI - REACTIVI	TY	DATA
	UNSTABL	ĒΙ	CONDITIONS					
TADII ITV		- i						
TABILITY	STABLE	х			•			
			High Temper	ratures				
ICOMPATIB	LITY (mate	rials to a	void)					
_			ong alkalies.	·				
IAZARDOUS	DECOMPO	SITION	PRODUCTS:	er. hvd	rogen ch	nloride, phoegene.		
I III O WIII CO	compose a	MAY O		1 1		TIONS TO AVOID		
AZARDOUS	3	WIAT	COOR		001151			
OLYMERIZ	ATION	WILL	OT OCCUR	x				
		*******	.01 000011	^	None			
-			OFOTI			PILL OR LEAK	DE	POCEDURES
							FF	
TEPS TO BE	E TAKEN IN nt sweeping	CASE	MATERIAL IS F	(ELEAS	eriai. Pu	it into container. Disj	0080	as hazardous waste.
00 2500180								
VASTE DISF	OSAL MET	HOD reete in	accordance v	ulth FP	A RCRA			<u>, </u>
ilahosa as i	IdZBIGOGO F	14010 111						
					`			
ERCLA (Su 100 lbs. (Per	perfund) RE	PORTA	BLE QUANTIT	Y (in ib:	3.)			
ICRA HAZA	RDOUS WA	STE NO). (40 CFR 261	.33)				
F002.								
VOLATILE O	RGANIC CO	MPOU	ND (VOC)	X TI	neoretica	1 11.3 lb/gal		
as packaged	, minus wate	er)	ae 30/	= .	-1-41	th/mal		
	<u> </u>		86.7%	^	nalytical	lb/gal		
		9	SECTION '	VIII -	SPEC	CIAL PROTECT	ПО	N INFORMATION
RESPIRATO	RY PROTEC	TION (specify type) r if TLV limit is					
Jee NIOSH	pproved re	spirato	r if TLV limit is	excee	ded.	<u> </u>		
	TLOCA	FXHA	UST (specify re	ate)				SPECIAL
/ENTILATIO	N Yes	_						None
TEITHE THE	MECH	ANICAL	. (general) (spe	cify rat	B)			OTHER None
ROTECTIVE	None	enecify	hma)			EYE PROTECTION (speci	
ione require	d. If aprayl	ng.				Wear eye protection	<u>'</u>	
THER PRO	TECTIVE E	BUIPME	NT			WORK/HYGIENIC PF	ACT	TICES
ong sleeve	s, long pan	8						g. Wash hands after use.
			SE	CTIC	XI NC	- SPECIAL PR	<u>E</u> C	AUTIONS
PRECAUTIO	NS TO BE	AKENI	N HANDLING	AND S	ORING			
Keep away 1	rom heat, s	parks,	or open flame	s. Stor	e at tem	peratures below 120°	г.	
OTHER PRE	CAUTIONS		- · ·					the MOOL conveyed recolarity
When using	more than	one ha	f can continu	ously o	r more t	han one can consecu	uve	iy, use NIOSH-approved respirator.

19466 (page 2 of 2)

N.A. - Not Applicable N.E. - Not Established N.D. - Not Determined BOWMAN DISTRIBUTION, BARNES GROUP INC. 1301 E. 9th St., Suite 700, Cleveland, Ohio 44114-1824 Telephone No. (219) 416-7200 24 Hour Emergency No. (303) 623-5716 3/10/97