

CITY OF GARDEN GROVE

FIRE DEPARTMENT

July 24, 2019

Request #4828 Burke D Walker G3 SoilWorks

Re: 14272 Commerce Drive, Garden Grove, CA 92843

Dear Mr. Walker,

Enclosed are the records found concerning the history of the above-mentioned site(s), especially as it pertains to fire code violation history, permits, the use, storage, or disposal of hazardous substances, and the installation or removal of underground flammable or combustible liquid storage tanks.

The City of Garden Grove Fire Department has utilized its best efforts to locate the records requested. However, the City makes no representation as to the accuracy of the records or that all records requested were retained or located. The City does not provide records on spills, leaks and clean-up, as that information is provided through the County of Orange Health Department.

Sincerely,

Amanda Pollock

Department Secretary



Hazardous Material Disclosure

Business Information / Chemical Inventory / Business Emergency Plan

GARDEN GROVE FIRE DEPARTMENT 11301 Acacia parkway Garden Grove, CA 92840 Bus. (714) 741-5600 Fax (714) 741-5640 Hazardous Materials Coordinator (714) 741-5636



			_		(714) 741	-5050	Data	and cololor
Add	dress: 4	272	COMMI	FACE	02		Date:	406/ 4/1/88
Oc	cupant or DBA:	TL	MACHINE	<u> </u>			File No:	
Ow	ner/Manager:	CHPÍS	770,1700	16114	WI FER	LEX SOTO	Db	714 852 5664
_		277010	TUTTER				Phone:	119 554 860
区	California Health required to retur Garden Grove Fi	and Safety C n the BEP pa re Department	code, Section 6.99 cket, Hazardous L HazMat Coord.	5, you are i Materials [(714) 741-5	required to p Disclosure F 5636	properly complete the orms, and all materia	Business Emergency I safety data sheets	Plan (BMP) packet. You are within fifteen (15) days to the
An	inspection at th	e above loc	ation/occupan	cv reveal	led the fol	owing violation(s)		
Viol	ation(s): CA He	ilth and Safe	for Corte Chaute	and the	ied the lot	owing violation(s)		
	Complete Hazaro	lous Materials	Disclosure packet	LICC OL-	CHE I AND I	lue 19, 82/29 et se	q., Calitornia Code	of Regulations (GCR)
	Failure to submit	a Business Er	nergency Plan. III	, nsc ona ISC 25505/	pter 6.95, 11 (a)(1)): CEC	tle 19 Div 2 Chapter 3,	, CFC 8001.3.2	
	railure to review	and/or revise t	he Business Eme	rgency Plar	n as required	[HSC 25505(b)&(c)]		
	Orientical invento	ry is incomplet	e and/or requires	update. IH	SC 255091			
	[HSC 25504(b)&(Response Plai c)i	n is inadequate a	nd/or does	not address	the following issues	and shall be immedia	ately revised and resubmitted:
		Procedures						
	☐ Mitigation F	rocedures						
		Procedures						9
	☐ Employee 1	_						
	Business Owner/C)perator page	is incomplete or n	eeds to be	updated. [H	SC 25509]		
	Site Map is incom	name, title, an olete or insuffi	d 24-hour number	r of emerge	ncy contact(s). [HSC 25509(a)(7)]	-	
	Failure to report a	release or thre	eatened release.	IHSC 2550 [.]	71			
	Failure to report a	change in bus	iness or chemical	inventory v	vithin 30 dav	s of the following even	nt(s): [HSC 25510]	
	L3 100 /8 01 1110	re increase in	the quantity of a c	lisclosed m	aterial		(0): [1100 25510]	TO the first
	Addition of a	a previously ur rusiness addre	disclosed materia	d.				
		usiness addre						
6		usiness name						
	Other (See o	comments belo	ow):					
Violat	tion(s): California	Fire Gode #	001. Articles 79	8.80, Titl	e 19 Part 9	, California Code of	Regulations (CCP)	
ш	Provide for second	ary containme	nt for hazardous r	naterials lic	uids and sol	ids (CFC 8003.1.3.3)	and general focial	
	Frovide spill contro	i for hazardou	s materials liquids	(CFC 8003	3.1.3.2)			
	Provide approved of	abinet if more	than 10 gallons o	f flammable	e liquids (CF	C 7902.5)		
	Provide placarding No Violations Fou	and signs (NF	PA 704, CFC Arti	cle 79 §790	1.9, Article 8	30 §8001.7-8)		
	ional Violations		oe:					
	TOTAL TIOIGLOTIO	4114/01 1101						
1	1016th.	-> MAY	37H					
	-V11-0	21 (/2.1			 ,			
2000								
		101		58				
Dear	/	m	1191			, 		
FC	onsible Party:(1100x	April	rgry		Re-inspection		-08
The al	ove are violation	is of Californ	ia law and requi	re immedi	ate correct	on. Failure to corre	ect violations is sub	ect to civil penalties
Fire D	ept. Inspector:	KM	ACIAS			ID #:		The second secon
Condi	tion Upon Re-ir	spection:		-			Date: 4 - 1	5-04
_AV	DITIONAL	TWO U	16686	11/29	1/0%			<u> </u>
	8.doc (05/06)		<u> </u>		-100			



FIRE SAFETY SURVEY GARDEN GROVE FIRE DEPARTMENT

Molecular 3 16 108 Mailhack card dua / / Mainenaction data

11301 Acacia Parkway, Garden Grove, CA 92842

File # 4061 Fire District 2721 Inspector E1 Shift A

Bus 714-741-5600 Fax 714-741-5	640 Next insp 3 / 2008
Occupant or DBA VACANT TL Machine	Business Phone (714)554-88
Address 14272 COMMERCE Dr	Suite Zip 92844
Property Owner Thanh LV	Phon
Emergency Contact Thanh L(/	Phone
Group S1 Load Sprinklers F/P/N	F 5 yr. Cert. 04/30/2002 Haz Mat
Fire Permits	n a
An inspection at the above location/occupany revealed t	
SIGNS	ASSEMBLY OCCUPANCIES
Provide address visible from the street (CFC 505.1)	Post maximum occupancy load sign (CFC 1004.3) Remove combustible decorative material (CFC 807.1.2)
Provide hazardous materials warning signs (CFC 2703.5)	Remove storage under stairway (CFC 315.2.2)
EXITS	ELECTRICAL SAFETY PRE-CAUTIONS
Provide approved panic hardware (CFC 1008.1.9)	Discontinue use of extension cords (CFC 605.6)
Remove locks, chains, bolts or bars from exit door (CFC 1008.1.8) Remove exit door/hardware (CFC 1008.1.8.5)	Keep 30" clear for access in front of electrical panel
Location	(CFC 605.3)
Remove exit obstruction (CFC 1028.3)	Provide/replace electricalcoversocketpower strip (CFC 605.1)
Provide illuminated exit sign(s) (CFC 1011.2)	Location
Provide and maintain approved emergency lighting (CFC 1006.1)	HAZ-MAT SAFETY PRE-CAUTIONS
ACCESS	Complete Hazardous Materials Disclosure packet
Provide outside Knox Box (CFC 506.1)	714-741-5636 (CFC 2701.5.1) Provide approved cabinet if more than 10 gal. flammable
Remove obstructions to fire apparatus access (CFC 503.4)	liquids (CFC 3404.3.4.3)
FIRE PROTECTION EQUIP. AND SYS.	Provide approved safety containers(s) for flammable
Provideextinguishers2A10BC40BCK (CFC 906.1)	liquids (CFC 3404.3.1)
Service and tag extinguisher(s) (CFC 901.6)	MISCELLANEOUS
Hang extinguisher(s) 3.5'-5' from floor (Title 19, Sec.567.6)	Lower storage18" below sprinklers or2' from ceiling (CFC 315.2.1)
Clean filters, ducts , hood above cooking surface (CFC 904.11.6.4)	Secure compressed gas cylinders (CFC 3003.5.3)
Service auto-extinguishing system semi-annually (CFC 904.11.6.3)	Post Business License Fire Department Permit
5 yr certification on sprinkler/standpipe system (Title 19, Sect. 904)	(CFC 105.6)
ADDITIONAL VIOLATIONS AND/OR NOTES	MO VIOLATIONS
	1
dusiness representative signature	Date 36.08
Increasing the February 25627	Pate 216 108

GARDEN GROVE



FIRE DEPARTMENT

HAZARDOUS MATERIALS DISCLOSURE PROGRAM

REPORTING FORMS PACKET

SHORT VERSION

FOR OFFICIAL USE ONLY								
FACILITY ID NO. 4061								
BUSINESS NAME TL machine omc								
BUSINESS ADDRESS 14272 Commerce Dive								
APPROVED BY 6 DATE 6/2011								
NEW BUSINESS YES NO UPDATE								
PICK 4D BUSLIST CALARP: CUPA: GIS								
FEE								



Business Info Form 1 - 03/06/03

CITY OF GARDEN GROVE FIRE DEPARTMENT

11301 Acacia Parkway, Garden Grove, CA 92842 (714) 741-5600 (714) 741-5636

FORM 1

Hazardous Materials Business Information Form

		Page	of	_1_
	BUSINESS INFORMATION	777		CANAL STREET
	FACILITY 3 0 0 3 5 BEGINNING DATE 5-19-2008		IDING DATE 2-31-20	208
	BUSINESS NAME TL MACHINE INC. 7		ISINESS PHONE	09
	BUSINESS SITE ADDRESS 14272 COMMERCE DRIVE			
	GARDEN GROVE 7 STATE CA	8 ZIP	9284	3
	DUN & BRADSTREET 874820228 10 SIC CODE (4 DIGIT #) 3728	11 FIR	RE DISTRICT 272	1
	ORANGE	5887		
	DANIEL NGUYEN			
	BUSINESS OWNE			
L	DWNER MAILING			
-	CITY 19 STATE	20 ZIP		2.
	ENVIRONMENTAL CONTACT		(t	-
C	ONTACT NAME			23
10	ONTACT MAILING ADDRESS			24
C	25 STATE	26 ZIP		27
	PRIMARY EMERGENCY CONTACTS	SEC	CONDARY	
N/	DANIEL NGUYEN 28 MAME QUANG LY	/		33
L	VPGM 29 TITLE FACILITIES		NAGER	34
<u>_</u>	HR. PHONE 31 24 HR. PHONE			35
L	GED #			36
	N/A N/A			37
DE:	ADDITIONAL LOCALLY COLLECTED INFORMATION SCRIBE THE TYPE OF BUSINESS OPERATION:	S TOTAL	# OF EMPLOYEES	39
BILI	LING ADDRESS (IFI	0 ATTENT		90 3
PRO	OPERTY OWNER NA	0.0	VALL NA	IVEN
Ce	THANH LY rtification: Based on my inquiry of those indiv			
SIG	ve personally examined and am familiar with the information submitted and believe the information is NATURE OF OWNER/OPERATOR OR DESIGNATION APPRESS AT ATIVE	true, acc	urate, and con	nplete.
	ME OF SIGNER (print) KEITH N. YOUNG 47 NAME OF DOCUMENT PREPARER (print		5-19-0	
TITL	E OF SIGNER 48 TITLE OF DOCUMENT PREPARER	KEITH		4
		CH SA	LES MG	14.



CITY OF GARDEN GROVE 11301 ACACIA PARKWAY GARDEN GROVE, CALIFORNIA 92842 (714) 741-5636

CUPA

FACILITY INFORMATIC

BUSINESS ACTIVITIES

					PageJ of
The state of the s	TY IDENTIF	AND THE STREET STREET OF THE STREET	III.	This	在 的思想是一种,这个人就是一种企业的
FACILITY ID# 3 0 0 3 5	1. EPA IC) # (Hazar	F L	Wa . C	aste Only) 200288876
BUSINESS NAME (Same as FACILITY NAME or DBA-Doing Busine	ess As)	-			
TL MACHINE, INC.			•		· · · · · · · · · · · · · · · · · · ·
	TIES DEC	escars in program, in this	Self-Tell		
NOTE: If you check	KYES to	any pa	aire) i	nis list
please submit the Business	Owner.	/Operat	tor I	ďè	niffication page
Does your facility		If Yes, p	leas	e c	complete these pages of the UPCF
A. HAZARDOUS MATERIALS	<u>/</u>			T	
Have on site (for any purpose) hazardous materials at or above significant gallons for liquids, 500 pounds for solids, or 200 cubic feet for compressed gases (include liquids in ASTs and USTs); or the applicable Federal threshold quantity for an extremely hazardous substance specified in 40 CFR Part 355, Appendix A or B; or hand radiological materials in quantities for which an emergency plan required pursuant to 10 CFR Parts 30, 40 or 70?	or () = = = = = = = = = = = = = = = = = =	ѕ ∏ио	2	t. .	✓ HAZARDOUS MATERIALS INVENTORY - CHEMICAL DESCRIPTION (Form 3)
B. UNDERGROUND STORAGE TANKS (USTs)	+			+	
Own or operate underground storage tanks?	YES	DE CO	5		/ UST FACILITY (Formerly SWRCB Form A) / UST TANK (one page per tank) (Formerly Form B)
2. Intent to upgrade existing or install new USTs?	YES	MNO	6	1	/ UST FACILITY / UST TANK (one per tank) / UST INSTALLATION - CERTIFICATE OF
				1	COMPLIANCE (one page per tank) (Formerly
Need to report closing a UST? ABOVE GROUND PETROLEUM STORAGE TANKS (ASTs)	YES	MNO	7.	1	Form C) UST TANK (closure portion-one page per tank)
Own or operate ASTs above these thresholds:		100			
- any tank capacity is greater than 660 gallons, or	☐ YES	DINO	8.	1	NO FORM REQUIRED TO CUPAS
 the total aggregate capacity for the entire facility (ASTs, drums and portable containers) greater than 1,320 gallons? 	<u>'</u>	<i>/</i> *			3 · 3
D. HAZARDOUS WASTE 1. Generate hazardous waste?	-			Ι.	
 Generate hazardous waste? Recycle more than 100 kg/month of excluded or exempted recyclable materials (per HSC §25143.2)? 	YES YES	A NO	9. 10.	1	FEPA ID NUMBER - provide at the top of this page RECYCLABLE MATERIALS REPORT (one per recycler)
3. Treat hazardous waste on site?	☐ YES	MNO	11.	1	ONSITE HAZARDOUS WASTE TREATMENT - FACILITY
	40			١.	(Formerly DTSC Forms 1772)
	l			1	ONSITE HAZARDOUS WASTE
	1				TREATMENT - UNIT (one page per unit) (Formerly DTSC Forms 1772A,B,C,D and L)
Treatment subject to financial assurance requirements (for Permit by Rule and Condition Authorization)?	☐ YES	Жino	12.	1	CERTIFICATION OF FINANCIAL ASSURANCE (Formerly DTSC Form 1232)
Consolidate hazardous waste generated at a remove site?	□ YES	, Dyno	13.	1	REMOTE WASTE/CONSOLIDATION SITE ANNUAL NOTIFICATION (Formerly DTSC Form 1196)
. Need to report the closure/removal of a tank that was classified waste and cleaned onsite?	YES	MNO	14.	1	HAZARDOUS WASTE TANK CLOSURE CERTIFICATION (Formerly DTSC Form 1249)
LOCAL REQUIREMENTS	,				21
ARP: California Accidental Release Prevention Program SC Chapter 6.95, Article 2, §25531 et seq	YES	□ио	15.	1	REGULATED SUBSTANCE REPORTING FORM (Orange County CUPA)
 Stationary Source with more than a Threshold Quantity of a Regulated Substance in a Process 		35			

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FORM 3

SE S	EPARTMEN													
	•	ADD	DELETE		REVISED .	± 1 = 2				Page	• <u> </u>	of		_
FACILT	3	0 0 3 5			98 BUS	SINESS NAM	FTL	MAC	CHIN	E	IN	Cs		
					I. FACII	ITY INF	ORMATION							
CHEMIC	CAL LOCATION	SITE	MAP	1		-7	, OIL	BA'	YRE	AR	YA	RN		,
CONFID	ENTIAL LOCA	TION	Yes	No	5 MAP	#	i		6 GRID		=7			
				1	I. CHEM	CAL INF	ORMATION	1		,				
CHEMIC	AL NAME	2: 4 = -	- · · · · · · ·	7	\		WASTE	Yes	8 TRAD	E SECRE	Ť	Yes	No.	11
COMMO		SLASO	201	400	<i>Y</i>	·				f EPCRA s		dions		
		LUTTI	NG -	OIL	/ Fi	N.				IS Chemica S is "Yes"		Yes	No.	12
CAS#	54742	-52-5	10 FIRE CODE	HAZARD CL	ASSES (supp	ied by GGFD))			100,	on announ	iii filasi be	LB3	13
TYPE(c)	eck one Kem only	a. PURE	міхти	RE	C. WASTI	14	RADIOACTIVE	Yes	- IXNo	15 C	URIES	KI/	4	16
PHYSICA (Check one	L STATE Numbriy)	a. solid	b. LIQUID	<u> </u>	GAS 17	FED HA CATEGO	ORIES	FIRE C	b. REACTI	_		SSURE RE		18
AVERAGE AMOUNT	DAILY	55 ¹⁹	MAXIMUM DAIL AMOUNT	Y	10	20 ANNU	JAL WASTE AMO	UNT 275	5 21 5	STATE WA			221	22
UNITS	a. GALL C. POUN If EHS, amo		CUBIC FEET ONS	23 DAYS	ON SITE	365	_		LARGEST CO	NTAINER	55	,)		25
(Check all	CONTAINER that apply)	D b. UNDER	EGROUND TANK RGROUND TANK NSIDE BLDG DRUM	I I NON	STIC DRUM METALLIC DR AL CONTAINE BOY	UM 📗	i. VAT L. FIBER DRUM I. BAG(S) L. BOX(S)	n. G o PL	YLINDER LASS CONTA ASTIC CONT I MACH OR E	AINER	☐ r. f	TANK WAC RAIL CAR TOTE BIN	30N	26
STORAGE	PRESSURE	A	a. AMBIENT		b. ABOV			c. BELOW AN						27
STORAGE	TEMPERATU	E X	a. AMBIENT		b. ABOV	E AMBIENT		c. BELOW AN	ABIENT		CRYOG	ENIC	31	28
%\	NT	HAZA	RDOUS CON	PONENT	(For mixto	ire or wast	te only)		EHS			CAS	S #	
145-6	5 29	SEVENE	LY HYDR	OTREA	hed 1	INERA	L O(L 30	☐ Yes	Ø\$n₀	31	64	742-	52-S	32
30-	15 ²⁹	EM	ULSIFI	erg	92	Inn	30	☐ Yes	13000	31	617	BB-	76-9	32
3	29		Ti.	-			30	☐ Yes	□ No	31			771	32
<u> </u>	29						30	☐ Yes	☐ No	31				32
	29			1760			30	☐ Yes	□ No	31				32
more hazar	dous compone	nts are present at gre	der than 1% by weig					nch additional a	sheets of pape	r capturing	the requi	red Informs	tion.	
				PL#	ACARDIN	G INFOR	RMATION							
INDOT #	# <u></u>	Refer to sh	ipping papers	or MSDS	NA	_ 33	94		PA 704 HA	•			ň.	
OT HAZ	'ARD CLA	ASS			NA	34		HEALTH (BLUE)	1+(1	XO)	•	EACTIVE (ELLOW)		
(1)			r to shipping p	papers or	MSDS	-		SPI	ECIAL A		WHITE	37	. 19	
PCRA	☐ YES	₽ NO				35	'L			Y.	OX/W			
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		If EPCRA,	Please Sign	Here		36		INVENTO						
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OBSOLETE PRODUCT - USE HATIL DEPLETED

SEDEN GRO
Con test to the
DEPARTMEN.

PEDERATION		_
ADD DELETE REVISED 1	Page of	
FACILITY 10# 3 0 0 3 5 BUSINESS NAME	TL MACHINE INC.	_
I. FACILITY INFORMA	IATION	
CHEMICAL LOCATION SITE MAP 1 F7	OIL BAY REAR YARD	
CONFIDENTIAL LOCATION Yes No 5 MAP#	6 GRID# 5 7	
II. CHEMICAL INFORMA	MATION	
CHEMICAL NAME BLASOCUT BC40 SW WAS	VASTE Yes 8 TRADE SECRET Yes No	11
COMMONNAME CUTTING - OIL /FLUID	9 An EHS Chemical Yes X No	12
CAS#64742-52-5 10 FIRE CODE HAZARD CLASSES (supplied by GGFD)	"If EHS is "Yes", all amounts must be LBS	13
HANDEY AND THE WASHINGTON	OACTIVE Yes - No 15 CURIES 1	16
PHYSICAUSTATE a. SOLID b. LIQUID c. GAS 17 FEDNAZARD CATEGORIES	a. FIRE b. REACTIVE c. PRESSURE RELEASE 1 d. ACUTE HEALTH c. CHRONIC HEALTH	8
AVERAGE DAILY 55 19 MAXIMUM DAILY 10 20 ANNUAL WAST	ASTE AMOUNT 3 21 STATE WASTE CODE 2	_ 2
UNITS a. GALLONS b. CUBIC FEET c. POUNDS d. TONS TEHS, amount must be in pounds.	24 LARGEST CONTAINER 55 25	 5
Check all that apply) a. ABOVEGROUND TANK b. UNDERGROUND TANK c. TANK INSIDE BLDG d. NONMETALLIC DRUM l. FIBER l. BAG(S) d. STEEL DRUM l. CARBOY l. BOX(S)	ER DRUM	3
STORAGE PRESSURE D. ABOVE AMBIENT D. ABOVE AMBIENT	c. BELOW AMBIENT 27	1
TORAGETEMPERATURE . AMBIENT D. ABOVE AMBIENT	C. BELOW AMBIENT d. CRYOGENIC 28	
%WT HAZARDOUS COMPONENT (For mixture or waste only)		Į
173-65 DEVEKELY HYDROTREFIED INNERAL OIL		⇃
30-50 29 EMULSITIERS	30 Yes 15No 31 68608-26-432	1
29	30 Yes No 31 32	
29	30 Yes No 31 32	
more hazardous components are present at greater than 1% by weight if non-carcinogenic, or 0.1% by weight if carcinog	30 Yes No 31 32	
PLACARDING INFORMATI		
NDOT# Refer to shipping papers or MSDS 33	NFPA 704 HAZARD DIAMOND FIRE (RED)	
Refer to shipping papers or MSDS Refer to shipping papers or MSDS	HEALTH (BLUE) SPECIAL WHITE OX/W 37	
X	MAKE AS MANY COPIES OF CHEMICAL INVENTORY FORM AS NEEDED	
vised 2/02 - haz-inven2.doc		



	DEPARTME													
		ADD	DELI	ETE	REVISED	1					Page	of		2
	ACILITY ID# 3	0 3	5		38	BUSINES	S NAME	MACH	TINE	. I	NC	•		
	you ground the same				I. FA	CILITY	INFOR	MATION						
С	HEMICAL LOCATION DO	(W	N EA	et d	SINE	OF	104	CIL ITY	, - N	leat	70	OIL BI	AY	4
	ONFIDENTIAL LOCAT			Yes 1	No 5	MAP#	-		•	6 GRID#	F-	7	-/	7
E	PCRA					EMICA	L INFO	RMATION			100			
C	HEMICAL NAME								Yes	8 TRADE	SECRET	Yes	2 40	11
	HOCUT	795	-NB							·If E	PCRA se	e instructions		
	COOLAN	<u></u>								1	Chemical		7	12
<u></u>	AS#			CODE HAZ	ARD CLASSES (supplied b	y GGFD)			TI ENS I	5 765 , 8	il amounts must be	LDO	13
4.47.4 F.J	64742 (PE (Check one Kem prily)		+ /			ACTE	14 R/	ADIOACTIVE	Yes	No	15 Cl	URIES	./^	16
2.75		a. sot	RE N. 1 Deb.	LIQUID	☐ c. GAS	9.7	FED HAZAI	Date of the last o		b. REACTIVE		c, PRESSURE RE	ELEASE	18
C	NYSICAL STATE neck pine item cnly)		, , , , ,		_		CATEGORI	ES /	ACUTE HEALT		_	e. CHRONIC HEA		
AV	ERAGE DAILY	55	19 MAXIMU AMOUNT	M DAILY 2	75 GA	L. 20	ANNUAL 4	WASTE AMOU	NT Sal De	21 ST	ATE WA	STE CODE 2	21	22
UN	IITS a. GALL	ons 🔲	b. CUBIC FEET		DAYS ON SIT	E				ARGEST CO				25
	c. POUN *If EHS, amou	IDS unt must be in p	d. TONS counds.			36	5			5	5 6	A-C	 	
	ORAGE CONTAINER neck all that apply)	b. ц с. Т	ABOVEGROUND T JINDERGROUND T TANK INSIDE BLD STEEL DRUM	TANK 🗍	F. PLASTIC DR i. NONMETALL g. METAL CON h. CARBOY	IC DRUM	L	VAT FIBER DRUM BAG(S) BOX(S)	O PL	'LINDER ASS CONTAI ASTIC CONTA MACH OR EC	INER	q. TANKWA	₹	26
ST	ORAGE PRESSURE		a. AMBIEN			ABOVE A	17		c. BELOW AN	BIENT				27
ST	ORAGE TEMPERATU	RE	a. AMBIEN	NT	□ b.	ABOVE A	MBIENT		c. BELOW AN	BIENT	a	. CRYOGENIC		28
Author	%WT	H	AZARDOUS	COMPC	NENT (For	mixture	or waste	only)		EHS			AS#	
1	30-600	M	NEVAL	9.L	•			30	☐ Yes	TXVo	31	64742	2-52-	532
2	29							30	☐ Yes	_ No	31			32
3	29							30	☐ Yes	□ No	31			32
4	29					•		30	☐ Yes	□ No	31			32
5	29							30	☐ Yes	□ No	31	_		32
if m	ore hazardous compon	ents are presen	t at greater than 19	6 by weight if					ach additional	sheets of pape	r capturin	g the required info	mation.	
	<u></u>		<u> </u>		PLACA	KDING	INFOR	MATION						
UN	IDOT#					NA	33			PA 704 HARE (RED) 🖠	_	DIAMOND	25	
		Refer	to shipping	papers or	MSDS	.1.			HEALT		0	REACTION (YELLO)		
DC	T HAZARD CL		Doforto obi		I NO TO THE	114	34		(BLUE)		$\times_{\mathcal{S}}^{\mathcal{O}}$		•	
	ODA THE		Refer to ship	hhirid bat	JEIS OF MIST	J3		·		ZARD *	<u></u>	OX/W.	27	
۲۲	CRA ☐ YES	□ N0					35							
	x	If ED	CRA, Pleas	o Sian U	lore		36	MA				F CHEMICA NEEDED	L	
		II EP	UNA, Fleas	e siyn H	6 16		-		UAAEIAL	JAT TOR	.II 73			

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DEPARTMENT				[ORIVI 3
ADD DELETE R	EVISED 1		Page	of	1
FACILITY 10# 3 0 0 3 5	98 BUSINESS NAME	L MACH	INE 7		
	I. FACILITY INFORMAT	ION		4(40)	
SITE MAP 1	, F7, C	OIL BAY	REAR Y	YARD	
CONFIDENTIAL LOCATION Yes No	5 MAP#		GRID# F	7	
	CHEMICAL INFORMA	TION			
CHEMICAL NAME MOBIL DIE 24	WAST	E Yes 8 7	RADE SECRET	•	Q No 1
MACHINE -OIL		1	* If EPCRA see i on EHS Chemical	Yes)	(No 1
CAS# 7440-66-6 10 FIRE CODE HAZARD CLA	SSES (supplied by GGFD)		f EHS is "Yes", all a	imounts must be LBS	1:
POPPE AND STATE OF THE POPPER	c. WASTE 14 RADIOACT	TIVE Yes - N	o 15 CURI	ES . /A	16
PHYSICAL STATE	CATEGORIES	a. FIRE b. RE	ACTIVE .	PRESSURE RELEA	SE 18
AVERAGE DAILY 55 19 MAXIMUM DAILY AMOUNT []	20 ANNUAL WASTE	d. ACUTE HEALTH		CHRONIC HEALTH	
UNITS A. GALLONS Db. CUBIC FEET 23 DAYS C	<u> </u>	[62]	STATE WASTE	22 ₁	
C. POUNDS d. TONS "IEHS, amount must be in pounds.	365	Z4 DANGES	CONTAINER	55	25
G. TANK INSIDE BLDG G. METAL CARBO	TALLIC DRUM . FIBER DR	I III CYLINDEF RUM I II. GLASS CO I O PLASTIC C I P. IN MACH C	ONTAINER CONTAINER	q. TANK WAGON] r. RAIL CAR] s. TOTE BIN] t. OTHER	26
STORAGE PRESSURE	b. ABOVE AMBIENT	C. BELOW AMBIENT		J C OTHER	27
	b. ABOVE AMBIENT	a. BELOW AMBIENT	d. CF	RYOGENIC	28
%WT HAZARDOUS COMPONENT	For mixture or waste only)	EHS		CAS#	
69 29 ZINC ALKENYL GA		30 Yes 23	lo 31	1440-66.	6 32
29 ZINC ALKYL DITT	LIOPHOSPHATE	30 ☐ Yes 28 CN	lo 31 6	8649-4	2-3 32
29		30 Yes N	o 31		32
29	-	30 ☐ Yes ☐ N	0 31		32
more hazardous components are present at greater than 1% by weight if non-carcinog		30 Yes N	o 31		32
PLAC	ARDING INFORMATION	c, attach additional sheets of p	paper capturing the	required information.	
NDOT# NA		NEDA 704	1147400 044		
Refer to shipping papers or MSDS	33	FIRE (RED)	HAZARD DIA	MOND	1
OT HAZARD CLASS NA	34	HEALTH (BLUE) →	$\hat{\mathcal{O}}$	REACTIVE (YELLOW)	
Refer to shipping papers or M	SDS	SPECIAL HAZARD	WH		
PCRA YES SONO	35	FRONU	V 1 ox/	W. "	
x	fv	MAKE AS MANY CO	PIES OF CH	IEMICAL	
If EPCRA, Please Sign Here	36	INVENTORY FO			

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FACILITY ID# 3	0 3 5		38	BUSINESS NAME	TL	MAC	HIN	E	INC.		
			I. FA	CILITY INFO	RMATION						
CHEMICAL LOCATIO	SITE	MAP	1 ,	F7	OIL	BAY	RE	FAR	YARD		
CONFIDENTIAL LOCA	ATION	Yes	No 5	MAP#			6 GRID		7		
			II. CHE	EMICAL INFO	ORMATION			,			
	MOBIL	VELOCIT	EOILN	0.6	WASTE	Yes		E SECRET	Yes	⊠ No	11
COMMON NAME	GEA	R - C	OIL				9 An EH	S Chemica	☐ Yes	No	12
CAS#64741	-89-5	<u> </u>	HAZARD CLASSES (£	supplied by GGFD)	·		11 EHS	is "Yes", a	all amounts must be	e LBS	13
TYPE (Check one tem pn)	a. PURE	MIXTUR	e Daw	ASTE 14 I	RADIOACTIVE	Yes -	DKN0	15 CI	URIES NA	7	16
PHYSICAL STATE (Check one Reminity)	a. solid	b. LIQUID	☐ c. GAS	17 FED HAZ CATEGOR	TES A	FIRE	b. REACTIV	_	c. PRESSURE R		18
AVERAGE DAMA	55 ¹⁹	MAXIMUM DAILY	110	20 ANNUA	L WASTE AMOU				e. CHRONIC HEA		22
UNITS a. GALL	ONS Db. C		23 DAYS ON SITE				MAX. NRGEST CO	NTAINER			25
C. POUN	unt must be in pounds	ONS		365					55		20
ORAGE CONTAINER (Check all that apply)	b. UNDER	GROUND TANK IGROUND TANK NSIDE BLDG DRUM	o. PLASTIC DRU f. NONMETALLIC g. METAL CONTA h. CARBOY	DRUM L	VAT FIBER DRUM BAG(S) BOX(S)	O PLA	INDER ASS CONTAI STIC CONTA	AINER	q. TANK WA	Į.	26
STORAGE PRESSURE	X	a. AMBIENT	☐ b. Al	BOVE AMBIENT		BELOW AMB					27
STORAGE TEMPERATU	re X	a. AMBIENT	□ b. At	BOVE AMBIENT		BELOW AMB	IENT	□ d.	CRYOGENIC		28
%VVT	HAZAI	RDOUS COM	PONENT (For m	ixture or waste	only)		EHS		CA	S#	
90-100 29	SOLVEN	IT REFINE	D LIGHT K	ARAFFINIC	DISTILLATE	☐ Yes	SIA	31	64741-	-89-5	32
5-10 ²⁹	STRAIGH	1T-RUN	MIDDLE D	ISTILLATE	30	☐ Yes	EN0	31	64741-	- 44-2	32
29					30	☐ Yes	□No	31			32
29					30	☐ Yes	□ No	31			32
more hazardous compone	nts are present at ores	ter then 1% by weigh	Wana cambanasia a	- A 44' h	30	☐ Yes	□ No	31			32
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** ACILITY D# 3 0 0 3 5	BUSINESS NAME	MACHINE	INC.
	FACILITY INFORMATION		
CHEMICAL LOCATION SITE MAP 1	F7, OIL	BAY REAR	YARD
CONFIDENTIAL LOCATION Yes No 5		6 GRID#	F7
II. C	HEMICAL INFORMATION	l	, .
CHEMICAL NAME MAKINO SPINDLE OF	WASTE	Yes 8 TRADE SECR	LI FES NO.
COMMON NAME SPINDLE-OIL		9 An EHS Chem	ical Yes No 1
CAS#	S (supplied by GGFD)	"If EHS is "Yes	, all amounts must be LBS
64771-72-8			
a. PURE LI c.	WASTE 14 RADIOACTIVE	Yes No 15	CURIES N/A 16
PHYSICAL STATE	17 FED HAZARD A. CATEGORIES D d.		☐ c. PRESSURE RELEASE 18 ☐ e. CHRONIC HEALTH
AVERAGE DAILY 55 19 MAXIMUM DAILY 11 C	20 ANNUAL WASTE AMOL		VASTE CODE 221 22
UNITS a. GALLONS b. CUBIC FEET 23 DAYS ON S c. POUNDS d. TONS If EHS, amount must be in pounds.	365	24 LARGEST CONTAINE	
JRAGE CONTAINER a ABOVEGROUND TANK 0 PLASTIC		m CYLINDER	Q. TANK WAGON 26
Check all that apply! b. Underground Tank f. Nonmeta g. Metal Co	LLIC DRUM II. FIBER DRUM	n. GLASS CONTAINER O PLASTIC CONTAINER P. IN MACH OR EQUIP	r. RAIL CAR s. TOTE BIN t. OTHER
STORAGE PRESSURE		c. BELOW AMBIENT	27
STORAGE TEMPERATURE a. AMBIENT	. ABOVE AMBIENT	c. BELOW AMBIENT	d. CRYOGENIC 28
%WT HAZARDOUS COMPONENT (Fo	or mixture or waste only)	EHS	CAS#
	OLEUM 30	☐ Yes DNo 31	6A771-72-8 32
2 2 29 NAPTHALENESULFOR		☐ Yes ☐ 60 31	25619-56-132
3 61 29 PHOSPHORODITHIOC	ACID 30	☐ Yes ☐ No 31	68649-42-332
4 29	30	☐ Yes ☐ No 31	32
If more hazardous components are present at content than 45 hours labely and	30	☐ Yes ☐ No 31	32
If more hazardous components are present at greater than 1% by weight if non-carcinogen PLACA	RDING INFORMATION	ch additional sheets of paper captur	ng the required information.
UNDOT#	33	NFPA 704 HAZARI	DIAMOND
Refer to shipping papers or MSDS	"	FIRE (RED)	.
DOT HAZARD CLASS	34	HEALTH +	REACTIVE (YELLOW)
Refer to shipping papers or MS	DS	SPECIAL HAZARD	WHITE OX/W. 37
EPCRA YES NO	35 L	(4)	OATTE.
x	MAK	E AS MANY COPIES O	F CHEMICAL
If EPCRA, Please Sign Here		INVENTORY FORM AS	
Revised 2/02 haz-inven2.doc			

THE FOLLOWING FORMS ARE FOR USE IN THE EVENT OF AN ACTUAL OR THREATENING HAZARDOUS MATERIALS EMERGENCY.

BUSINESS EMERGENCY PLAN

All businesses using, handling or storing hazardous materials that are required to disclose must complete a Business Emergency Plan. The occupancy groups listed below will be permitted to complete a short version of the business plan. The completion of the short form shall be considered the application required in the Health and Safety Code, Title 20, Chapter 6.95, Section 25503.5.

The Chief of the Garden Grove Fire Department in the role of the Administering Agency, allows the following types of businesses to file the short version of the Business Emergency Plan.

- 1. Gasoline/Diesel service stations. S-3 occupancies
- 2. Repair Garages. H-4 occupancies
- 3. Dry Cleaners
- 4. Businesses, at the Fire Chief's discretion, with less than 10 employees and using materials that are not considered highly or acutely toxic.

The Fire Chief exempts the following portions from the business plan. These exemptions have been established because the materials used in the abovementioned occupancies are common knowledge to first responding units. The materials pose no significant, unexpected hazard nor do they affect the ability of the administering agency to effectively respond to their release of a hazardous material and that there are unusual circumstances justifying this exemption.

Exemptions

- 1. Detailed evacuation plans.
- 2. Detailed key employee responsibilities.
- 3. Training outline.
- Detailed prevention outline.

The following Short Business Emergency Plan must be completed in order for the exemption to be granted.

BUSINESS EMERGENCY PLAN

Personnel Emergency Notifications and Responsibilities

Employee Evacuation and Staging Areas:

1. The type of alarm signal that will be used to initiate an evacuation at the facility (vocal, paging system, manual alarm, etc.).

1- PAGING SYSTEM 2- VOCAL-VIA MANAGERS

- 2. All employees shall be trained to evacuate the facility through at least one exit. Alternate exit routes shall be designated if available.
- 3. Staging areas shall be designated for all employees. Staging areas will be the location that all employees shall report to in the event of an emergency.

One person shall be designated to account for all personnel at the staging area. That person will be responsible for meeting the incoming Fire units and reporting the conditions known about the incident.

The Staging area is at the following location as shown on your site plan map:

EAST PARKING G3, G6 + WEST SIDE, SOUTH LOT B9

Employee Responsibilities:

At least one employee shall be responsible for the following minimum requirements in the event of an emergency response by the Fire Department.

1. Notify employees. Initiate evacuation procedures.

-> KEITH YOUNG.

- 2. Notify the Garden Grove Fire Department. Dial 911.
- 3. Try to identify the nature of the incident.
- 4. Report to the staging area and account for evacuated employees.
- 5. Report to the incoming fire units.
- 6. Activate any emergency mitigation procedures that area available at your business. (List below any mitigation procedures specific to your business, if any.)
 - USE FIRE EXTINGUISHERS AS NECESSARY
 - APPLY OIL ABSORBANT
 - ENSURE EXIT PATH IS CLEAR, DOORS OPERATIONAL
 - CONDUCT DRILLS PERIODICALLY

BUSINESS EMERGENCY PLAN

<u>Personnel Emergency Notifications and Responsibilities</u> (Continued)

<u>Training Requirements</u>

State law requires training of employees where the business uses, handles or stores hazardous materials.

Employee training provided on:

- Appointment of person/persons on site who are trained in key role positions. Emergency coordinator, evacuation coordinators, staging area supervisors and documenting officers.
- Procedures to follow during a release or threatened release of a hazardous material (evacuation to staging areas).
- Information contained in material safety data sheets.
- Warning labels/placards.
- Safe work practices.
- Use of on-site emergency equipment and supplies.
- Use and location of personal protective equipment.
- Any chemical, hazardous material or substance that could be encountered in his/her work area.
- On site alarm system for evacuation.
- Discuss possible release of hazardous materials scenario.

Emergency Notifications

A handler of hazardous materials is required to immediately report any release or threatened release of hazardous materials to the Garden Grove Fire Department. Failure to do so may result in criminal and/or civil prosecution.

Required Notifications

In the event of a release or threatened release of hazardous materials, it is State law to notify each of the following agencies.

Agency	Phone Numbers
Garden Grove Fire Department, Police, Paramedics	911
Office of Emergency Services (OES)	(800) 852-7550 or
•	(916) 427-4341
National Response Center	(800) 424-8802

) 427-4341 (800) 424-8802

BUSINESS EMERGENCY PLAN

Personnel Emergency Notifications and Responsibilities (Continued)

1. Drum storage and/or above ground tank storage areas:

Prevention

All materials are stored, used and handled within the guidelines of the Uniform Fire Code, N.F.P.A. standards, California Administrative Code, Titles 19 and 20.

This section is meant to initiate a Prevention Plan at your business and to assist in preventing a release, or threatened release, of a hazardous material. In the spaces provided, place a checkmark by the preventive actions which have been initiated by your business to abate hazards relating to hazardous material handling, use of storage.

Consideration shall include:

<u>×</u> a.	Isolation and separation of incompatible materials.
<u></u>	Diking areas to contain spills.
/_ c.	Storage on paved ground.
2. Compre	ssed and/or cryogenic gas storage areas:
110	Cylinder stored upright and secured.
MA b.	Isolation and/or separation of incompatible cylinders (oxygen and flammable gases, etc.).
3. General	;
<u> </u>	Safe work practices are exercised in daily routines.
<u> </u>	Employees who handle hazardous materials are properly trained.
<u>×</u> c.	Material Safety Data Sheets (MSDS) readily available for each hazardous material on the premises.
<u>)</u> d.	Labeling of all materials and storage areas with the product name and hazards associated with the product (drums, piping, tanks, etc.).
<u></u> e.	Uniform Fire Code (UFC) requires separation between outside hazardous material storage area or tanks and combustible materials (wood, bush, etc.).
<u></u> f.	Posting of "No Smoking" signs where appropriate.
	ENTIRE FACILITY - INDOORS

GARDEN GROVE FIRE DEPARTMENT

BUSINESS EMERGENCY PLAN

A BUSINESS IS REQUIRED BY LAW TO NOTIFY THE GARDEN GROVE FIRE DEPARTMENT WITHIN 30 DAYS OF ANY OF THE FOLLOWING EVENTS.

- 1. Change of business address.
- 2. Change of business ownership.
- 3. Change of business name.
- 4. Cessation of business operation (quitting business).
- 5. Use or handling of a previously undisclosed hazardous material.
- 6. A 100% increase in the quantity of a previously disclosed hazardous material.

Your business is required by State law (CFC 8001.3.2) to retain a copy of this entire Hazardous Materials Disclosure information, including the Business Plan, chemical inventory, material safety data sheets and site maps, for review by Fire Department personnel. State where your disclosure and Emergency Business Plan will be kept.

SITE PLAN#1,	C7,	WITH	"RIGHT	TO	KNOW"	IN	Fo
	-> A	TMSDS	5 Kio	5K	-		

Show location on site map also using symbol in the legend.

Note: A fee is charged for a replacement copy from the Garden Grove Fire Department.

I certify, under penalty of perjury, that the enclosed information is true and correct to the best of my knowledge. $\frac{1}{2}$

Signature:

Title:

Name:

TECH SALES A

Date:

5-20-2008

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Blaser Swisslube inc.

31 Hatfield Lane, Goshen, New York • Tel. (845) 294-3200 • Fax (845) 294-3102

HMIS

Regulated In/by: OSHA oil mist : 5 mg/m3

MSDS Blasocut

PRODUCT IDENTIFICATION

Manufacture:

Blaser Swisslube, Inc. 31 Hatfield Lane Goshen, NY 10924

USA

Emergency phone number USA:

Product name:

(845) 294-3200 Blasocut 2000 X

Product type:

Water-miscible mineral of

Prepared by: Date of issue:

OH & S Coordinator February 14, 2005

Supersedes:

Edition 1 of April 21, 2002

AIL 140, 670-40	Fire	1	
II based metalworking fluid	Reactivity	0	

PRODUCT COMPOSITION

Biasocut 2000 X is a mixture of:

%	CAS No:
45 - 65	64742-52-5
30 - 45	68608-26-4
	61790-44-1
	61791-12-6
5 ~ 15	61788-76-9
2 - 5	8016-28-2
	61788-66-7
2.5	90-43-7
	45 - 65 30 - 45 5 - 15

WHIMS (1%) CA Prop 65 Carcinogen MA(ma9), PA (E) NJ(Subst. 1439 MI(u4,u5)

- Odorant

< 0.1

Stabilizers Total

Na-benzoate; 2,3-pentandiol, 2-methyl; 2-propanol, 1-phenoxy; Ca-acetate; alpha-Tocopherol; citric acid; tartaric acid; ascorbic acid; ascorbylpalmitate; oleyiscarcosine; 1-hydroxyethyl-2-oleyi-imidazoline, giycerin and odorant < 2

Blasocut 2000 X does not contain as an ingredient: active sulfur, nitrites, formaldehyde or formaldehyde releasing substances, heavy metals (i.e. lead, mercury etc.), arsenic, PCB, PGT, TCDD or other dioxin related substances. Benzo(a)pyrene content less than 10 ppm (GC-MS

EMERGENCY & FIRST AID PROCEDURES

Skin contact:

Wash with plenty of soap and fresh water (good personal hygiene practices are sufficient). Remove any contaminated clothing and launder before reuse.

Eye contact:

Rinse with plenty of fresh water for 20 minutes. Consult physician if necessary.

Inhalation:

Remove to fresh air.

Ingestion:

Do not induce vomiting: pulmonary aspiration hazard. Consult a physician without delay. If involuntary vomiting occurs, keep mouth below hip level. Get medical attention.

FIRE & EXPLOSION HAZARD DATA

Flash point (COC):

> 270°F (132°C)

Auto ignition temperature:

572°F (300°C)

Explosion limits:

Not applicable

Hazardous combustion products:

Products formed under

abnormal conditions:

Oxides of carbon, nitrogen and traces of oxides of chlorine and sulfur, HCI.

Thermal decomposition of the concentrate above 176°F (80°C) may produce trace amounts of HCI.

NFPA 7041

Doc. No. 723.50€

Edition 2

Page 1 of 4

¹ See last page for explanations

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MSDS Blasocut

FIRE & EXPLOSION HAZARD DATA - continued-

Special fire fighting procedures:

Wear self-contained breathing apparatus when fighting fires in confined spaces.

Cool exposed containers with water mist to prevent pressure build-up.

Fire fighting media:

CO2, dry chemical, foam

Unusual fire or explosion hazards:

None

PRECAUTIONS FOR SAFE HANDLING & USE

Steps to be taken in case

material is released or spilled:

As with any other industrial lubricating oil, use oil-binding agents. Spills or leaks may cause slippery conditions. Prevent material from getting into storm sewers or surface waters.

Split emulsion with absorbing agents, salts or ultra-filtration. Dispose according to all applicable federal,

Waste disposal methods:

state and local regulations.

Precautions to be taken in handling/storing:

Avoid direct solar irradiation of concentrate containers.

Other precautions:

Do not store with strong oxidizers.

CONTROL MEASURES

Respiratory protection:

Not generally required.

Ventilation:

Ventilation sufficient to comply with recommended NIOSH exposure limit for metalworking fluids is

suggested.

Protective gloves:

Not generally required.

Eye protection:

Industrial safety glasses are recommended.

Other protective equipment or

clothing:

Standard work clothing and shoes.

Work/hygienic practices:

Thorough personal hygiene and clean working practices are sufficient.

CHEMICAL & PHYSICAL PROPERTIES OF THE COMPLETE PRODUCT

Volatiles in %:

Nil

Vapor pressure:

Not volatile

Boiling point:

572°F (300°C)

Pour point:

<-22°F (<-30°C)

pH @ 5%:

8.9 - 9.2

Specific gravity:

0.965 g/cm³

Viscosity:

133 mm²/sec @ 68°F (20°C)

39 mm²/sec @ 104°F (40°C)

Solubility in water:

Appearance and odor:

Light brown liquid / pleasant odor (almonds)

REACTIVITY DATA

Stability:

Stable

Conditions to avoid:

Avoid direct solar irradiation of containers. Good and safe housekeeping procedures suggest that all combustible materials be stored away from strong oxidizers.

incompatibility (materials to avoid):

Concentrate: Strong oxidizers

End use dilutions: Magnesium

Hazardous decomposition or

by-products:

Thermal decomposition (concentrate) above 176°F (80°C): Trace amounts of HCI.

Hazardous polymerization or

by-products:

Will not occur

Doc. No. 723.505

Edition 2

Page 2 of 4

Blaser Swissiube inc.

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MSDS Biasocut

HEALTH HAZARD DATA

LD of concentrate:

> 5 g/kg (calculated)

Health hazards (acute/chronic):

Not established

Skin irritation:

Negative

Eye irritation:

Negative

Carcinogenicity:

Contains 2.5% o-phenylphenol (CA Prop 65 Carcinogen; Date of listing: August 4, 2000)

Routes of entry:

· Inhalation:

+ Skin: • Ingestion:_

Accidental only

Unlikely

Ames test:

Negative

Signs and symptoms of exposure:

None established

Medical conditions generally

aggravated by exposure:

Not established

OSHA regulated:

No

WHMIS regulated:

D-2, contains 2.5% OPP

Exposure limits:

NIOSH Recommended exposure limit for Metalworking fluids: 0.5mg/ m³

OSHA 29 CFR 1910.1000 for oil mist in air:

5 mg/m³

ACGIH: TLV for oil mist in air:

5 mg/m³

The Mineral oil used in Biasocut passes iP346 for DMSO extractable PNA. Benzo(a)pyrene content less than 10 ppm (GC-MS method).

ENVIRONMENTAL, REGULATORY AND SUPPLEMENTAL INFORMATION

NFPA Storage:

III B

EPCRA (SARA Title III) Section 313 Toxic Chemical (40 CFR 372.65): Blasacut 2000 X contains 2.5% "/ 2-PHENYLPHENOL (CAS No.: 90-43-7)

SARA Title III hazard information:

• Immediate health (acute): · Reactive hazard:

No No Delayed health (chronic): Sudden pressure release: Yes

• Fire Hazard:

No

RCRA / Hazardous Waste:
Blasocut 2000 X, Art. 870-40, as sold, does not meet the criteria of a hazardous waste as defined under 40 CFR 261, in that it does not exhibit the sold in the criteria of a hazardous waste under Subpart D. It is the end user's responsibility the characteristics of a hazardous waste of Subpart C, nor is it listed as a hazardous waste under Subpart D. It is the end user's responsibility to determine the regulatory status of the waste at the time of disposal.

All Ingredients of Blasocut 2000 X are listed on the TSCA Chemical Substances Inventory.

Clean Air Act:

Blascout 2000 X does not contain nor is it manufactured with ozone depleting substances as defined in the Federal Clean Air Act Amendments of 1990, sections 602 and 611.

Canadian DSL / NDSL Information:
All ingredients of Blasocut 2000 X are listed on Canadian DSL.

<u>DOT:</u>
This product is not considered hazardous under current DOT regulations.

This product is classified as oil. Spills into or leading to surface waters that cause a sheen should be reported to the National Response Center at 1-800-424-8802.

Doc. No. 723.506

Edition 2

Page 3 of 4

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MSDS Blasocut

ENVIRONMENTAL, REGULATORY AND SUPPLEMENTAL INFORMATION continued

Canadian National Pollutant Release Inventory (NPRI) Substances (C. Gaz. Pt. I, 133:7, 372 (2/13/99) and 133:17, 1089 (4/24/99))
Biasocut 2000 X contains: O-PHENYLPHENOL (2.5%)

California Proposition 65 List of Chemicals Known to the State to Cause Cancer or Reproductive Toxicity (Cal. Code Regs, tit. 22, sec. 12000): O-PHENYLPHENOL (2.5%); CA Prop 65 Carcinogen; Date of listing: August 4, 2000

Massachusetts Right-to-Know Substance List (Mass. Gen. Laws Ann. ch. 111F): 2-PHENYLPHENOL (2.5%) Citation codes: ma9: Toxic Chemical Release Substances. 52 FR 21152 (6/4/87). Subject to SARA Title III.

Michigan Critical Materials Register (1/1/96): Michigan Natural Resources and Environmental Protection Act ((Act 451 of 1994, section 324.3111): O-PHENYLPHENOL (2.5%) Michigan Parameter Number is: 00090-43-7; Citation codes: u4, u5

New Jersey Right-to-Know Substances (N.J. Stat. Ann. Section 34:5A-5): [s1] [1,1'-BIPHENYL] -2-OL (2.5%); NJ Substance Number 1439 [s8] O-PHENYLPHENOL (2.5%); NJ Substance Number 1439

1999 New Jersey Community Right-to-Know Survey; N.J. Environmental Hazardous Substances (EHS) List.: [s4] 2-PHENYLPHENOL(2.5%); NJ Substance Number 1439; NJ Reporting Threshold is: 500 lbs.

New Jersey Spill Tax List (N.J. Admin, Code, Title 7, Chap. 1E, App. A (May 1997), [s4] 2-PHENYLPHENOL (2.5%)

Pennsylvania: 2-PHENYLPHENOL (2.5%) Environmental Hazard (subject to release reporting) E

HMIS Ratings	0	1	2	3	4
Health, Fire, Reactivity	Minimal	Slight	Moderate	Serious	Evinence
NFPA 704 Ratings				Conous	Extreme
(Under Fire Conditions)					
Health Hazard	Normal Material	Slightly Hazardous	Hazardous	Extreme danger	Donath
Fire (Flash Point)	Will not Burn	>200°F	100-200°F	73-100°F	Deadly <73°F
Reactivity	Stable	Unstable if heated	Violent Chemical change	Shock and Heat may	May detonate
				detonate	inay doubliate

Dac. No. 723,50€

Edition 2

Page 4 of ∠

Blaser Swisslube inc.

31 Hatfield Lane, Goshen, New York • Tel. (845) 294-3200 • Fax (845) 294-3102

Blaser.

HMIS

Exposure Limits: OSHA: 5mg/m³

Health

Reactivit

Fire

MSDS Blasocut

PRODUCT IDENTIFICATION

Manufacture:

Blaser Swisslube, Inc. 31 Hatfield Lane Goshen, NY 10924 USA

Emergency phone number USA:

(845) 294-3200

Blasocut BC40SW Blasocut BC20SW

Art. No. 40018 Art. No. 40017

Product type:

Product name:

Water-miscible mineral oil based metal working fluid

Prepared by:

OH & S coordinator

Date of Issue:

February 14, 2005 -

Supersedes:

Edition 2 of May 9, 2003

PRODUCT COMPOSITION

Blasocut BC40SW and BC20SW is a mixture of:

In annual 22 4		
Ingredient	%	CAS No:
Severely hydrotreated mineral oil	45 - 65	64742-52-5
Emulsifiers Polar additives	30 - 50	68608-26-4 67701-22-8 68154-86-9
	1 - 5	8019-28-2 61788-66-7
Chlorinated paraffin (C ₁₈₋₂₀ , less than 50% chlorine)	5 - 15	61788-76-9
Stabilizers and inhibitors:	1-5	

Carrosion and fungi inhibitors; Na-benzoate; 2-propanol, 1-phenoxy; Ca-acetate; elpha-Tocopherol; citric acid; tartaric acid; ascorbic acid; ascorbylpalmitate; oleyiscarcosine; 1-hydroxyethyl-2-oleyi-imidazoline, giycerin and odorant

Blasocut does not contain as an ingredient: active sulfur, phenois, nitrites, formaldehyde or formaldehyde releasing substances, heavy metals (i.e. lead, mercury etc.), arsenic, PCB, PCT, TCDD or other dioxin related substances. Benzo(a)pyrene content less than 10 ppm (GS-MS method).

EMERGENCY & FIRST AID PROCEDURES

Skin contact:

Wash with plenty of soap and fresh water (good personal hygiene practices are sufficient). Remove any contaminated clothing and launder before reuse.

Eye contact:

Rinse with plenty of fresh water for 20 minutes. Consult physician if necessary.

Inhalation:

Remove to fresh air

Ingestion:

Do not induce vomiting, pulmonary aspiration hazard. Consult a physician without delay. If involuntary vomiting occurs, ensure mouth is below hip level. Get medical attention.

FIRE & EXPLOSION HAZARD DATA

Flash point: (COC):

240°F (116°C)

Auto ignition temperature:

Not determined

Explosion limits:

Not applicable

Hazardous combustion products:

Products formed under

abnonnal conditions:

Oxides of carbon, nitrogen and traces of oxides of sulfur and chlorine, HCl

Thermal decomposition of the concentrate above 176°F may produce trace amounts of HCI.

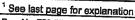
Fire fighting media:

CO2, dry chemical, foam

Special fire fighting procedures:

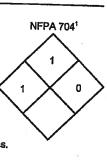
Wear self-contained breathing apparatus when fighting fires in confined spaces. Cool exposed containers with water mist to prevent pressure build-up.

Unusual fire or explosion hazards:



Edition 3

Page 1 of 3



Biaser Swisslube Inc.

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Blaser.

MSDS Blasocut

PRECAUTIONS FOR SAFE HANDLING & USE

Steps to be taken in case

material is released or spilled:

As with any other industrial lubricating oil, use oil-binding agents. Spills or leaks may cause slippery

conditions. Prevent material from getting into storm sewers or surface waters.

Waste disposal methods:

Split emulsion with absorbing agents, salts or ultra-filtration. Dispose according to all applicable

federal, state and local regulations.

Precautions to be taken in

handling/storing:

Avoid direct solar irradiation of concentrate containers.

Other precautions:

Do not store with strong oxidizers.

CONTROL MEASURES

Respiratory protection:

Not generally required.

Ventilation:

Ventilation sufficient to comply with recommended NIOSH exposure limit for metalworking fluids is

suggested.

Protective gloves:

Not generally required.

Eye protection:

Industrial safety glasses are recommended.

Other protective equipment or

clothing:

Standard work clothing and shoes.

Work/hygienic practices:

Thorough personal hygiene and clean working practices are sufficient.

CHEMICAL & PHYSICAL PROPERTIES OF THE COMPLETE PRODUCT

Volatiles in %:

NII

Vapor pressure:

Not volatile

Bolling point:

Not applicable < -22°F (< -30°C)

Pour point: Solubility in water:

Emulsifies

Specific gravity:

40018: 0.98 g/cm3

40017: 0.97g/cm³

pH @ 5% after 24 hrs:

8.9 - 9.2

Viscosity: **

40018: 55 mm²/s @ 104°F (40°C)

40017: 53mm²/s @ 104°F (40°C)

Appearance and odor:

Light brown liquid / pleasant odor (almonds)

REACTIVITY DATA

Stability:

Stable

Conditions to avoid:

Avoid direct solar irradiation of concentrate containers. Good and safe housekeeping procedures suggest that all combustible materials be stored away from strong oxidizers.

Incompatibility (materials to avoid):

Hazardous decomposition or

byproducts:

Concentrate: Strong oxidizers

End use dilutions: Magnesium

Hazardous polymerization or

byproducts:

Thermal decomposition (concentrate) above 176°F (80°C): Trace amounts of HCI

Will not occur

Doc. No. 723.559

Edition 3

Page 2 of 3

Blaser Swisslube Inc.

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MSDS Biasocut

HEALTH HAZARD DATA

LD of concentrate:

> 5 g/kg (calculated)

Health hazards (acute/chronic):

None

Skin sensitizing:

Not expected to be sensitizing

Eye irritation:

Not expected to be initiating

Carcinogenicity:

None of the ingredients are listed in OSHA, NTP or IARC

Routes of entry:

• Inhalation: Unlikely

+ Skin:

· ingestion: Accidental only

Signs and symptoms of exposure: None established -

Medical conditions generally aggravated by exposure:

Not established

OSHA regulated:

No

Exposure limits:

NIOSH Recommended exposure limit for Metalworking fluids: 0.5mg/ m³

OSHA 29 CFR 1910.1000 for oil mist in air:

5 mg/m³ 5 mg/m³

ACGIH: TLV for oil mist in air:

The Mineral oil used in Blasocut passes IP346 for DMSO extractable PNA-Benzo(a)pyrene content less than 10 ppm (GC-MS method).

ENVIRONMENTAL, REGULATORY AND SUPPLEMENTAL INFORMATION

NFPA Storage:

III B

SARA Title III Information:

• Immediate health (acute):

No

· Reactive hazard:

· Fire hazard:

No

Delayed health (chronic):

No

Sudden pressure release:

No

Blasocut does not contain any ingredients listed on the SARA Title III, Section 313 list or CERCLA List of Chemicals.

RCRA / Hazardous Waste: Blasocut, as sold, does not meet the criteria of a hazardous waste as defined under 40CFR 261, in that it does not exhibit the characteristics of a hazardous waste of subpart C, nor is it listed as a hazardous waste under subpart D. It is the end-user's responsibility to determine the regulatory status of the waste at the time of disposal and dispose of according to all applicable federal, state and local regulations

<u>TSCA:</u> All ingredients of Blasocut are listed on the TSCA Chemical Substances inventory.

Cenadian DSL / NDSL information: All ingredients of Biasocut are listed on Canadian DSL.

Clean Air Act: Biasocut does not contain nor is it manufactured with ozone depleting substances as defined in the Federal Clean Air Act Amendments of 1990, sections 602 and 611.

<u>DOT</u>: Blasocut is not considered hazardous under current DOT regulations.

<u>Spills:</u> This product is classified as oil. Spills into or leading to surface waters that cause a sheen should be reported to the National Response Center at 1-800-424-8802.

HMIS Ratings	Ū	1	2	3	4
Health, Fire, Reactivity	Minimal	Slight	Moderate	Serious	
NFPA 704 Ratings				canons	Extreme
(Under fire conditions)					
Health Hazard	Normal Material	Slightly Hazardous	Hazardous	Estente deces	
Fire (Flash Point)	Will not Burn	>200°F	100-200°F	Extreme danger 73-100°F	Deadly <73°F
Reactivity	Stable	Unstable If heated	Violent Chemical change	Shock and Heat may	May detonate
				detonate	indy colonela

Doc. No. 723.559

Edition 3

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Houghton International Inc.

Revision Date: 08/15/2006

Material Safety Data Sheet HOCUT 795-NB

1. Chemical Product and Company Identification

Product Name

HOCUT 795-NE

Emergency

24 HOUR - (800) 424-9300

Company Name

Houghton International Inc.

www.houghtoninti.com

Phone Number

(CHEMTREC)

Madison & Van Buren Aves

FAX

(610) 666-1376

Valley Forge, PA 19482

Customer Service

(888) 459-9844

Telephone

Website

(610) 666-4000

2. Hazardous Ingredients

Component	Cas No	% by Weight	Hazards
Mineral Oil	64742-52-5	30-60	TLV: 5 mg/m³ as oil mist PEL: 5 mg/m³ as oil mist STEL: 10 mg/m³ as oil mist Other:

N/E - Not Established; N/A - Not Applicable; Mfr - Manufacturer Recommendation

3. Hazards Identification

Primary Entry Routes

EYES, SKIN, INHALATION

Acute Effects

Inhalation

INHALATION OF MISTS MAY CAUSE IRRITATION OF THE UPPER

RESPIRATORY TRACT.

Eye

MAY CAUSE EYE IRRITATION.

Skin

PROLONGED OR REPEATED SKIN CONTACT MAY CAUSE IRRITATION.

Ingestion

INGESTION MAY CAUSE NAUSEA OR DISCOMFORT. ASPIRATION MAY

CAUSE LUNG DAMAGE.

Carcinogenicity

THIS PRODUCT DOES NOT CONTAIN ANY COMPONENT REPORTABLE AS A

CARCINOGEN UNDER 29 CFR 1910.1200.

Medical Conditions Aggravated by LongTerm PRE-EXISTING SKIN AND RESPIRATORY CONDITIONS MAY BE AGGRAVATED BY EXPOSURE.

Exposure

Chronic Effects

SEE ABOVE EFFECTS.

HMIS:

428952

Page : Continued on Next Page



Houghton international inc.

Revision Date: 08/15/2006

Material Safety Data Sheet HOCUT 795-NE

3. Hazards identification - continued

Healtr

Flammability

C

Reactivity

4. First Aid Measures

Inhalation

IF INHALED, REMOVE TO A SOURCE OF FRESH AIR.

Eye Contact

FLUSH EYES WITH WATER FOR 15 MINUTES. CONSULT PHYSICIAN.

Skin Contact

WASH SKIN WITH SOAP AND WATER. REMOVE CONTAMINATED CLOTHING

AND LAUNDER BEFORE REUSING. CONSULT PHYSICIAN IF IRRITATION

PERSISTS.

Ingestion

IF INGESTED, DO NOT INDUCE VOMITING. CONSULT PHYSICIAN.

Note to Physicians

NO SPECIFIC ANTIDOTE KNOWN. BASED ON INDIVIDUAL REACTIONS OF THE PATIENT, THE PHYSICIAN'S JUDGMENT SHOULD BE USED TO CONTROL

SYMPTOMS AND CLINICAL CONDITIONS.

N/A - Not Applicable

5. Fire Fighting Measures

Flash Point

N/A

Autoignition Temperature

N/D

LEL

N/D

UEL

N/D

Extinguishing Media

USE CARBON DIOXIDE, DRY CHEMICAL OR FOAM. USE WATER TO COOL

CONTAINERS EXPOSED TO FIRE.

Unusual Fire or Explosion

Hazards

NO UNUSUAL FIRE OR EXPLOSION HAZARDS.

Fire Fighting Instructions

WEAR PROTECTIVE GEAR DURING FIREFIGHTING.

NFPA:

Health

Page 2 Continued on Next Page

428952

^{*} indicates that there may be chronic health effects present



Houghton international inc

Revision Date: 08/15/2006

Waterial Safety Data Sheet HOCUT 795-NE

5. Fire Fighting Measures - continuec

Flammability

0

Reactivity

Ċ

Special

N/A

N/A - Not Applicable; ND - Not Determined; > - Greater Than; < - Less Than

6. Accidental Release Measures

Spill or Release Procedures

APPLY DRY ABSORBENT MATERIAL AND SWEEP UP. FLUSH AREA WITH WATER AND MOP UP THOROUGHLY.

7. Handling and Storage

Handling Precautions

USE WITH ADEQUATE VENTILATION. AVOID CONTACT WITH EYES, SKIN AND CLOTHING. WASH THOROUGHLY AFTER HANDLING. DO NOT ADD NITRITES

TO THIS PRODUCT.

Storage Requirements

STORE SEPARATELY FROM OXIDIZERS. KEEP CONTAINERS CLOSED WHEN NOT IN USE. STORE IN A COOL, DRY, WELL VENTILATED AREA. IF FROZEN OR EXPOSED TO EXTREME HIGH TEMPERATURES, BRING TO ROOM

TEMPERATURE AND MIX THOROUGHLY BEFORE USING.

8. Exposure Controls/Personal Protection

Engineering Controls

PROVIDE GENERAL AND/OR LOCAL EXHAUST VENTILATION TO MAINTAIN AIRBORNE CONCENTRATIONS BELOW THE EXPOSURE LIMITS IN SECTION 2.

Personal Protective Equipment

Eye/Face Protection

WEAR SAFETY GOGGLES OR SAFETY GLASSES WITH SIDE SHIELDS.

Skin Protection

WEAR GLOVES AND LONG SLEEVES TO MINIMIZE SKIN EXPOSURE. USE APRON OR OVERALLS IF SPLASHING IS EXPECTED.

Respiratory Protection

USE AN APPROVED RESPIRATOR (SEE 29CFR1910.134) IF APPLICABLE

EXPOSURE LIMITS ARE EXCEEDED.

Other

EYE WASH AND SAFETY SHOWER RECOMMENDED.



Houghton international inc

Revision Date: 08/15/2006

Material Safety Data Sheet HOCUT 795-NE

8. Exposure Controls/Personal Protection - continued

Comments

USE OF GLOVES AND OTHER SKIN PROTECTION DEPENDS ON THE DURATION OF EXPOSURE AND THE TASK BEING PERFORMED. IF NECESSARY, CHEMICALLY RESISTANT GLOVES SUCH AS NEOPRENE. NITRILE OR EQUIVALENT MATERIALS MAY BE USED.

EMULSIFIES

215°F

N/D

<1

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

9. Physical and Chemical Properties

Appearance HAZY AMBER COLOR LIQUID Water Solubility Odor MILD AMINE ODOR **Boiling Point** Vapor Pressure N/D Freezing/ Melting (mmHg) Point Vapor Density N/D **Evaporation Rate** (Air = 1)(BuAc = 1)Specific Gravity 0.94 (Water = 1)pH (Neat) 10.4 pH (Dilution)

N/D - Not Determined; N/A - Not Applicable; > - Greater Than; < - Less Than

5

9.7

10. Stability and Reactivity

Stability

pΗ

THIS PRODUCT IS STABLE AT ROOM TEMPERATURE IN CLOSED CONTAINERS UNDER NORMAL STORAGE AND HANDLING CONDITIONS.

Chemical Incompatibilities

At Percent :

STRONG OXIDIZERS

Hazardous Decomposition **Products**

THERMAL; OXIDES OF CARBON AND NITROGEN

Hazardous Polymerization

HAZARDOUS POLYMERIZATION WILL NOT OCCUR.

Page 4 Continued on Next Page



Houghton International inc

Revision Date: 08/15/2006

Material Safety Data Sheet HOCUT 795-NB

11. Toxicological information

NO DATA AVAILABLE

12. Ecological Information

NO DATA AVAILABLE

13. Disposal Considerations

Disposal

FOLLOW PERTINENT REGULATIONS FOR DISPOSAL. IT IS THE RESPONSIBILITY OF THE PRODUCT USER TO DETERMINE AT THE

RESPONSIBILITY OF THE PRODUCT USER TO DETERMINE, AT THE TIME OF DISPOSAL, WHETHER A MATERIAL CONTAINING THE PRODUCT OR DERIVED FROM THE PRODUCT SHOULD BE CLASSIFIED AS A HAZARDOUS WASTE.

(40 CFR 261.20-24)

RCRA Hazardous Waste

Number

N/A

14. Transportation Information

Proper Shipping Name

NOT HAZARDOUS UNDER DOT, AIR OR IMO REGULATIONS.

15. Regulatory Information

TSCA Section 8(b)

ALL OF THE COMPONENTS IN THIS PRODUCT ARE ON THE TSCA

INVENTORY.

CERCLA Reportable

Quantity

NONE

SARA Title III, Section 313

THIS PRODUCT CONTAINS NO TOXIC CHEMICAL SUBJECT TO THE

REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III OF THE

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 AND 40

CFR PART 372.

Ozone Depleting

Substances

THIS PRODUCT WAS NOT MANUFACTURED, DOES NOT CONTAIN, AND WAS

NOT PACKAGED USING ANY CLASS I OR CLASS II OZONE DEPLETING

SUBSTANCE AS DEFINED BY THE CLEAN AIR ACT.



Houghton international inc

Material Safety Data Sheet HOCUT 795-NE

Revision Date: 08/15/2006

16. Other information

Prepared By

GARY CARL

Titie

MANAGER, PRODUCT SAFETY

Disclaimer: The information presented herein has been compiled from sources considered to be dependable and is accurate as of the date issued. However, since data, safety standards, and government regulations are subject to change and the conditions of handling and use are beyond our control, Houghton International makes no warranty regarding the accuracy of such data or its suitability for any purchaser's use or for any consequence of its use. The data in this MSDS relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process. Safe handling and use remains the responsibility of the purchaser and the purchaser has the sole responsibility to determine the suitability of the materials for any use and the manner of use contemplated. Houghton international assumes no responsibility for injury to the recipient or to third persons or for any damage to any property and the recipient assumes all such risks.

ExonMobil

602623-88 MOBIL DTE 24 MATERIAL SAFETY DATA BULLETIN

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: MOBIL DTE 24

SUPPLIER: EXXONMOBIL OIL CORPORATION

3225 GALLOWS RD. FAIRFAX, VA 22037

24 - Hour Health and Safety Emergency (call collect): 609-737-4411

24 - Hour Transportation Emergency: CHEMTREC: 800-424-9300 202-483-7616

LUBES AND FUELS: 281-834-3296

Product and Technical Information:

Lubricants and Specialties: 800-662-4525 800-443-9966

Fuels Products: 800-947-9147 MSDS Fax on Demand: 713-613-3661

MSDS on Internet: http://www.exxon.com http://www.mobil.com

2. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAMES AND SYNONYMS: SEVERE TREAT MIN. OILS & ADDITIVES

GLOBALLY REPORTABLE MSDS INGREDIENTS:

None.

See Section 8 for exposure limits (if applicable).

3. HAZARDS IDENTIFICATION

Under normal conditions of use, this product is not considered hazardous according to regulatory guidelines (See section 15).

EMERGENCY OVERVIEW: Amber Liquid. Note: Pressurized mists may form a flammable mixture. DOT ERG No. : NA

POTENTIAL HEALTH EFFECTS: Under normal conditions of intended use, this

product does not pose a risk to health. Excessive exposure may result in eye, skin or respiratory irritation.

For further health effects/toxicological data, see Section 11.

4. FIRST AID MEASURES

EYE CONTACT: Flush thoroughly with water. If irritation occurs, call a physician.

SKIN CONTACT: Wash contact areas with soap and water. Remove and clean oil soaked clothing daily and wash affected area. INJECTION INJURY WARNING: If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a physician as a surgical emergency. Even though initial symptoms from high pressure injection may be minimal or absent, early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury.

INHALATION: Not expected to be a problem. However, if respiratory irritation, dizziness, nausea, or unconsciousness occurs due to excessive vapor or mist exposure, seek immediate medical assistance. If breathing has stopped, assist ventilation with a mechanical device or mouth-to-mouth resuscitation.

INGESTION: Not expected to be a problem. Seek medical attention if discomfort occurs. Do not induce vomiting.

5. FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA: Carbon dioxide, foam, dry chemical and water fog.

SPECIAL FIRE FIGHTING PROCEDURES: Water or foam may cause frothing. Use water to keep fire exposed containers cool. Water spray may be used to flush spills away from exposure. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.

SPECIAL PROTECTIVE EQUIPMENT: For fires in enclosed areas, fire fighters must use self-contained breathing apparatus.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Note: Pressurized mists may form a flammable mixture.

COMBUSTION PRODUCTS: Fumes, smoke, carbon monoxide, sulfur oxides, aldehydes and other decomposition products, in the case of incomplete combustion.

Flash Point C(F): > 201(394) (ASTM D-92).

Flammable Limits (approx.% vol.in air) - LEL: 0.9%, UEL: 7.0% NFPA HAZARD ID: Health: 0, Flammability: 1, Reactivity: 0

6. ACCIDENTAL RELEASE MEASURES

NOTIFICATION PROCEDURES: Report spills/releases as required to appropriate authorities. U.S. Coast Guard and EPA regulations require immediate reporting of spills/releases that could reach any waterway including intermittent dry creeks. Report spill/release to Coast Guard National Response Center toll free number (800)424-8802. In case of accident or road spill notify CHEMTREC (800) 424-9300. PROCEDURES IF MATERIAL IS RELEASED OR SPILLED:

LAND SPILL: Shut off source taking normal safety precautions. Take measures to minimize the effects on ground water. Recover by pumping or contain spilled material with sand or other suitable absorbent and remove mechanically into containers. If necessary, dispose of adsorbed residues as directed in Section 13.

WATER SPILL: Confine the spill immediately with booms. Warn other ships in the vicinity. Notify port and other relevant authorities. Remove from the surface by skimming or with suitable absorbents. If permitted by regulatory authorities the use of suitable dispersants should be considered where recommended in local oil spill procedures.

ENVIRONMENTAL PRECAUTIONS: Prevent material from entering sewers, water sources or low lying areas; advise the relevant authorities if it has, or if it contaminates soil/vegetation.

PERSONAL PRECAUTIONS: See Section 8

7. HANDLING AND STORAGE

HANDLING: High pressure injection under the skin may occur due to the rupture of pressurized lines. Always seek medical attention. No special precautions are necessary beyond normal good hygiene practices. See Section 8 for additional personal protection advice when handling this product.

STORAGE: Keep containers closed when not in use. Do not store in open or unlabelled containers. Store away from strong oxidizing agents and combustible materials. Do not store near heat, sparks, flame or strong oxidants.

SPECIAL PRECAUTIONS: Prevent small spills and leakages to avoid slip hazard.

EMPTY CONTAINER WARNING: Empty containers retain residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Do not attempt to refill or clean container since residue is difficult to remove. Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

OCCUPATIONAL EXPOSURE LIMITS:

When mists/aerosols can occur, the following are recommended: 5 mg/m3 (as oil mist) - ACGIH Threshold Limit Value (TLV), 10 mg/m3 (as oil mist) - ACGIH Short Term Exposure Limit (STEL), 5 mg/m3 (as oil mist) - OSHA Permissible Exposure Limit (PEL)

VENTILATION: If mists are generated, use adequate ventilation, local exhaust or enclosures to control below exposure limits.

RESPIRATORY PROTECTION: If mists are generated, and/or when ventilation is not adequate, wear approved respirator.

EYE PROTECTION: If eye contact is likely, safety glasses with side

shields or chemical type goggles should be worn.

SKIN PROTECTION: Not normally required. When splashing or liquid contact can occur frequently, wear oil resistant gloves and/or other protective clothing. Good personal hygiene practices should always be followed.

9. PHYSICAL AND CHEMICAL PROPERTIES

Typical physical properties are given below. Consult Product Data Sheet for specific details.

APPEARANCE: Liquid

COLOR: Amber ODOR: Mild

ODOR THRESHOLD-ppm: NE

pH: NA

BOILING POINT C(F): > 316(600)

MELTING POINT C(F): NA

FLASH POINT C(F): > 201(394) (ASTM D-92)

FLAMMABILITY (solids): NE AUTO FLAMMABILITY C(F): NA EXPLOSIVE PROPERTIES: NA OXIDIZING PROPERTIES: NA

VAPOR PRESSURE-mmHg 20 C: < 0.1

VAPOR DENSITY: > 2.0 EVAPORATION RATE: NE

RELATIVE DENSITY, 15/4 C: 0.86-0.89

SOLUBILITY IN WATER: Negligible PARTITION COEFFICIENT: > 3.5

VISCOSITY AT 40 C, cSt: 30.4

VISCOSITY AT 100 C, cSt: 5.0

POUR POINT C(F): < -18(0)

FREEZING POINT C(F): NE

VOLATILE ORGANIC COMPOUND: NE

DMSO EXTRACT, IP-346 (WT.%): <3, for mineral oil only NA=NOT APPLICABLE NE=NOT ESTABLISHED D=DECOMPOSES

FOR FURTHER TECHNICAL INFORMATION, CONTACT YOUR MARKETING REPRESENTATIVE

10. STABILITY AND REACTIVITY

STABILITY (THERMAL, LIGHT, ETC.): Stable.

CONDITIONS TO AVOID: Extreme heat and high energy sources of ignition. INCOMPATIBILITY (MATERIALS TO AVOID): Strong oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS: Product does not decompose at ambient temperatures.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL DATA

---ACUTE TOXICOLOGY---

ORAL TOXICITY (RATS): Practically non-toxic (LD50: greater than 2000 mg/kg). ---Based on testing of similar products and/or the components.

- DERMAL TOXICITY (RABBITS): Practically non-toxic (LD50: greater than 2000 mg/kg). ---Based on testing of similar products and/or the components.
- INHALATION TOXICITY (RATS): Practically non-toxic (LC50: greater than 5 mg/1). ---Based on testing of similar products and/or the components.
- EYE İRRITATION (RABBITS): Practically non-irritating. (Draize score: greater than 6 but 15 or less). ---Based on testing of similar products and/or the components.
- SKIN IRRITATION (RABBITS): Practically non-irritating. (Primary Irritation Index: greater than 0.5 but less than 3). ---Based on testing of similar products and/or the components.
- OTHER ACUTE TOXICITY DATA: Although an acute inhalation study was not performed with this product, a variety of mineral and synthetic oils, such as those in this product, have been tested. These samples had virtually no effect other than a nonspecific inflammatory response in the lung to the aerosolized mineral oil. The presence of additives in other tested formulations (in approximately the same amounts as in the present formulation) did not alter the observed effects.

--- SUBCHRONIC TOXICOLOGY (SUMMARY) ---

No significant adverse effects were found in studies using repeated dermal applications of similar formulations to the skin of laboratory animals for 13 weeks at doses significantly higher than those expected during normal industrial exposure. The animals were evaluated extensively for effects of exposure (hematology, serum chemistry, urinalysis, organ weights, microscopic examination of tissues etc.).

---REPRODUCTIVE TOXICOLOGY (SUMMARY) ---

No teratogenic effects would be expected from dermal exposure, based on laboratory developmental toxicity studies of major components in this formulation and/or materials of similar composition.

---CHRONIC TOXICOLOGY (SUMMARY)---

Repeated and/or prolonged exposure may cause irritation to the skin, eyes or respiratory tract. Overexposure to oil mist may result in oil droplet deposition and/or granuloma formation. For mineral base oils: Base oils in this product are severely solvent refined and/or severely hydrotreated. Chronic mouse skin painting studies of severely treated oils showed no evidence of carcinogenic effects. These results are confirmed on a continuing basis using various screening methods such as Modified Ames Test, IP-346, and/or other analytical methods. For synthetic base oils: The base oils in this product have been tested in the Ames assay and other tests of mutagenicity with negative results. These base oils are not expected to be carcinogenic with chronic dermal exposures.

---SENSITIZATION (SUMMARY)---

Not expected to be sensitizing based on tests of this product, components, or similar products.

			 	-
12.	ECOLOGICAL	INFORMATION		
	_			

ENVIRONMENTAL FATE AND EFFECTS:

- In the absence of specific environmental data for this product, this assessment is based on information for representative products.
- ECOTOXICITY: Available ectoxicity data (LL50 >1000 mg/L) indicates that adverse effects to aquatic organisms are not expected from this product.
- MOBILITY: When released into the environment, adsorption to sediment and soil will be the predominant behavior.
- PERSISTENCE AND DEGRADABILITY: This product is expected to be inherently biodegradable.
- BIOACCUMULATIVE POTENTIAL: Bioaccumulation is unlikely due to the very low water solubility of this product, therefore bioavailability to aquatic organisms is minimal.

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL: Product is suitable for burning in an enclosed, controlled burner for fuel value. Such burning may be limited pursuant to the Resource Conservation and Recovery Act. In addition, the product is suitable for processing by an approved recycling facility or can be disposed of at an appropriate government waste disposal facility. Use of these methods is subject to user compliance with applicable laws and regulations and consideration of product characteristics at time of disposal.

RCRA INFORMATION: The unused product, in our opinion, is not specifically listed by the EPA as a hazardous waste (40 CFR, Part 261D), nor is it formulated to contain materials which are listed hazardous wastes. It does not exhibit the hazardous characteristics of ignitability, corrosivity, or reactivity. The unused product is not formulated with substances covered by the Toxicity Characteristic Leaching Procedure (TCLP). However, used product may be regulated.

14. TRANSPORT INFORMATION

USA DOT: NOT REGULATED BY USA DOT.

RID/ADR: NOT REGULATED BY RID/ADR.

IMO: NOT REGULATED BY IMO.

IATA: NOT REGULATED BY IATA.

STATIC ACCUMULATOR (50 picosiemens or less): YES

15. REGULATORY INFORMATION

- US OSHA HAZARD COMMUNICATION STANDARD: When used for its intended purposes, this product is not classified as hazardous in accordance with OSHA 29 CFR 1910.1200.
- EU Labeling: Product is not dangerous as defined by the European Union Dangerous Substances/Preparations Directives. EU labeling not required.
- Governmental Inventory Status: All components comply with TSCA, EINECS/ELINCS and AICS.
- U.S. Superfund Amendments and Reauthorization Act (SARA) Title III: This product contains no "EXTREMELY HAZARDOUS SUBSTANCES".

SARA (311/312) REPORTABLE HAZARD CATEGORIES: None.

This product contains no chemicals subject to the supplier notification requirements of SARA (313) toxic release program.

The following product ingredients ar	e cited on the	lists below:
CHEMICAL NAME	CAS NUMBER	LIST CITATIONS *
ZINC ALKENYL CARBOXAMIDE (0.64%)		22
ZINC (ELEMENTAL ANALYSIS) (0.06%)	7440-66-6	22
ZINC ALKYL DITHIOPHOSPHATE	68649-42-3	22
(0.67%)		

		R	REGULATORY	LIS	TS SEAR	CHEI)		
1=ACGIH ALL	6=IARC	1	11=TSCA	4	16=CA	P65	CARC	21=LA	RTK
2=ACGIH A1	7=IARC	2A	12=TSCA	5a2	17=CA	P65	REPRO	22=MI	293
3=ACGIH A2	8=IARC	2B	13=TSCA	5e	18=CA	RTK		23=MN	RTK
4=NTP CARC	9=OSHA	CARC	14=TSCA	6	19=FL	RTK		24=NJ	RTK
5=NTP SUS	10=OSHA	Z	15=TSCA	12b	20=IL	RTK		25=PA	RTK
								26=RI	RTK

* EPA recently added new chemical substances to its TSCA Section 4 test rules. Please contact the supplier to confirm whether the ingredients in this product currently appear on a TSCA 4 or TSCA 12b list.

Code key:CARC=Carcinogen; SUS=Suspected Carcinogen; REPRO=Reproductive

16. OTHER INFORMATION

USE: HYDRAULIC OIL

NOTE: PRODUCTS OF EXXON MOBIL CORPORATION AND ITS AFFILIATED COMPANIES ARE NOT FORMULATED TO CONTAIN PCBS.

Health studies have shown that many hydrocarbons pose potential human health risks which may vary from person to person. Information provided on this MSDS reflects intended use. This product should not be used for other applications. In any case, the following advice should be considered:

INDUSTRIAL LABEL

Under normal conditions of intended use, this product does not pose a risk to health. Excessive exposure may result in eye, skin or respiratory irritation. Always observe good hygiene measures. First Aid: Wash skin with soap and water. Flush eyes with water. If overcome by fumes or vapor, remove to fresh air. If ingested do not induce vomiting. If symptoms persist seek medical assistance. Read and understand the MSDS before using this product.

Information given herein is offered in good faith as accurate, but without guarantee. Conditions of use and suitability of the product for particular uses are beyond our control; all risks of use of the product are therefore assumed by the user and WE EXPRESSLY DISCLAIM ALL WARRANTIES OF EVERY KIND AND NATURE, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE IN RESPECT TO THE USE OR SUITABILITY OF THE PRODUCT. Nothing is intended as a recommendation for uses which infringe valid patents or as extending license under valid patents. Appropriate warnings and safe handling procedures should be provided to handlers and users. Alteration of this document is strictly prohibited. Except to the extent required by law, republication or retransmission of this document, in whole or in part, is not permitted. Exxon Mobil Corporation and its affiliated companies assume no responsibility for accuracy of information unless the document is the most current available from an official ExxonMobil distribution system. Exxon Mobil Corporation and its affiliated companies neither represent nor warrant that the format, content or product formulas contained in this document comply with the laws of any other country except the United States of America.

Prepared by: ExxonMobil Oil Corporation Environmental Health and Safety Department, Clinton, USA



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MATERIAL SAFETY DATA SHEET

SECTION 1

PRODUCT AND COMPANY IDENTIFICATION

PRODUCT

Product Name: MOBIL VELOCITE OIL NO. 6
Product Description: Base Oil and Additives
Product Code: 600668-00, 970334

Intended Use: Circulating/gear oil

COMPANY IDENTIFICATION

Supplier:

EXXON MOBIL CORPORATION

3225 GALLOWS RD.

FAIRFAX, VA. 22037 USA

24 Hour Health Emergency

609-737-4411 800-424-9300

Transportation Emergency Phone ExxonMobil Transportation No.

281-834-3296 713-613-3661

MSDS Requests
Product Technical Information

800-662-4525, 800-947-9147

MSDS Internet Address

http://www.exxon.com, http://www.mobil.com

SECTION 2

COMPOSITION / INFORMATION ON INGREDIENTS

Reportable Hazardous Substance(s) or Complex Substance(s)

Name	CAS#	Concentration*
SOLVENT REFINED LIGHT PARAFFINIC DISTILLATE (PETROLEUM)	64741-89-5	90 - 100%
STRAIGHT-RUN MIDDLE DISTILLATES	64741-44-2	5 - 10%

^{*} All concentrations are percent by weight unless material is a gas. Gas concentrations are in percent by volume.

SECTION 3

HAZARDS IDENTIFICATION

This material is considered to be hazardous according to regulatory guidelines (see (M)SDS Section 15).

POTENTIAL HEALTH EFFECTS

If swallowed, may be aspirated and cause lung damage. Frequent or prolonged contact may defat and dry the skin, leading to discomfort and dermatitis. May be irritating to the eyes, nose, throat, and lungs. High-pressure injection under skin may cause serious damage.

Target Organs: Skin |

ENVIRONMENTAL HAZARDS

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

NFPA Hazard ID:

Health: 0

Flammability: 1

Reactivity: 0

HMIS Hazard ID:

Health: 0*

Flammability: 1

Reactivity: 0



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NOTE: This material should not be used for any other purpose than the intended use in Section 1 without expert advice. Health studies have shown that chemical exposure may cause potential human health risks which may vary from person to person.

SECTION 4

FIRST AID MEASURES

INHALATION

Remove from further exposure. For those providing assistance, avoid exposure to yourself or others. Use adequate respiratory protection. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance. If breathing has stopped, assist ventilation with a mechanical device or use mouth-to-mouth resuscitation.

SKIN CONTACT

Wash contact areas with soap and water. If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a physician as a surgical emergency. Even though initial symptoms from high pressure injection may be minimal or absent, early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury.

EYE CONTACT

Flush thoroughly with water. If irritation occurs, get medical assistance.

INGESTION

Seek immediate medical attention. Do not induce vomiting.

NOTE TO PHYSICIAN

If ingested, material may be aspirated into the lungs and cause chemical pneumonitis. Treat appropriately.

SECTION 5

FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

Appropriate Extinguishing Media: Use water fog, foam, dry chemical or carbon dioxide (CO2) to extinguish flames.

Inappropriate Extinguishing Media: Straight Streams of Water

FIRE FIGHTING

Fire Fighting Instructions: Evacuate area. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply. Firefighters should use standard protective equipment and in enclosed spaces, self-contained breathing apparatus (SCBA). Use water spray to cool fire exposed surfaces and to protect personnel.

Hazardous Combustion Products: Aldehydes, Sulfur oxides, Oxides of carbon, Incomplete combustion products, Smoke, Fume

FLAMMABILITY PROPERTIES

Flash Point [Method]: >154C (309F) [ASTM D-92]

Flammable Limits (Approximate volume % in air): LEL: N/D UEL: N/D

Autoignition Temperature: N/D



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SECTION 6

ACCIDENTAL RELEASE MEASURES

NOTIFICATION PROCEDURES

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations. In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations. US regulations require reporting releases of this material to the environment which exceed the applicable reportable quantity or oil spills which could reach any waterway including intermittent dry creeks. The National Response Center can be reached at (800)424-8802.

PROTECTIVE MEASURES

Avoid contact with spilled material. Warn or evacuate occupants in surrounding and downwind areas if required due to toxicity or flammability of the material. See Section 5 for fire fighting information. See the Hazard Identification Section for Significant Hazards. See Section 4 for First Aid Advice. See Section 8 for Personal Protective Equipment.

SPILL MANAGEMENT

Land Spill: Stop leak if you can do it without risk. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.

Water Spill: Stop leak if you can do it without risk. Confine the spill immediately with booms. Warn other shipping. Remove from the surface by skimming or with suitable absorbents. Seek the advice of a specialist before using dispersants.

Water spill and land spill recommendations are based on the most likely spill scenario for this material; however, geographic conditions, wind, temperature, (and in the case of a water spill) wave and current direction and speed may greatly influence the appropriate action to be taken. For this reason, local experts should be consulted. Note: Local regulations may prescribe or limit action to be taken.

ENVIRONMENTAL PRECAUTIONS

Large Spills: Dike far ahead of liquid spill for later recovery and disposal. Prevent entry into waterways, sewers, basements or confined areas.

SECTION 7

HANDLING AND STORAGE

HANDLING

Avoid contact with skin. Prevent small spills and leakage to avoid slip hazard.

Static Accumulator: This material is a static accumulator.

STORAGE

Do not store in open or unlabelled containers.

SECTION 8

EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMIT VALUES

Exposure limits/standards (Note: Exposure limits are not additive)



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Source	Form	Limit / S	tandard	Note	Source
SOLVENT REFINED LIGHT PARAFFINIC DISTILLATE (PETROLEUM)	Mist.	STEL	10 mg/m3	N/A	ACGIH
SOLVENT REFINED LIGHT PARAFFINIC DISTILLATE (PETROLEUM)	Mist.	TWA	5 mg/m3	N/A	ACGIH
STRAIGHT-RUN MIDDLE DISTILLATES	Stable Aerosol.	TWA	5 mg/m3	N/A	ExxonMobil
STRAIGHT-RUN MIDDLE DISTILLATES	Vapor.	TWA	200 mg/m3	N/A	ExxonMobil

Exposure limits/standards for materials that can be formed when handling this product: When mists / aerosols can occur, the following are recommended: 5 mg/m³ - ACGIH TLV, 10 mg/m³ - ACGIH STEL, 5 mg/m³ - OSHA PEL.

NOTE: Limits/standards shown for guidance only. Follow applicable regulations.

ENGINEERING CONTROLS

The level of protection and types of controls necessary will vary depending upon potential exposure conditions. Control measures to consider:

Adequate ventilation should be provided so that exposure limits are not exceeded.

PERSONAL PROTECTION

Personal protective equipment selections vary based on potential exposure conditions such as applications, handling practices, concentration and ventilation. Information on the selection of protective equipment for use with this material, as provided below, is based upon intended, normal usage.

Respiratory Protection: If engineering controls do not maintain airborne contaminant concentrations at a level which is adequate to protect worker health, an approved respirator may be appropriate. Respirator selection, use, and maintenance must be in accordance with regulatory requirements, if applicable. Types of respirators to be considered for this material include:

No special requirements under ordinary conditions of use and with adequate ventilation.

For high airborne concentrations, use an approved supplied-air respirator, operated in positive pressure mode. Supplied air respirators with an escape bottle may be appropriate when oxygen levels are inadequate, gas/vapor warning properties are poor, or if air purifying filter capacity/rating may be exceeded.

Hand Protection: Any specific glove information provided is based on published literature and glove manufacturer data. Glove suitability and breakthrough time will differ depending on the specific use conditions. Contact the glove manufacturer for specific advice on glove selection and breakthrough times for your use conditions. Inspect and replace worn or damaged gloves. The types of gloves to be considered for this material include:

If prolonged or repeated contact is likely, chemical resistant gloves are recommended. If contact with forearms is likely, wear gauntlet style gloves.

Eye Protection: If contact is likely, safety glasses with side shields are recommended.

Skin and Body Protection: Any specific clothing information provided is based on published literature or manufacturer data. The types of clothing to be considered for this material include:



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If prolonged or repeated contact is likely, chemical, and oil resistant clothing is recommended.

Specific Hygiene Measures: Always observe good personal hygiene measures, such as washing after haridling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Discard contaminated clothing and footwear that cannot be cleaned. Practice good housekeeping.

ENVIRONMENTAL CONTROLS

See Sections 6, 7, 12, 13.

SECTION 9

PHYSICAL AND CHEMICAL PROPERTIES

Typical physical and chemical properties are given below. Consult the Supplier in Section 1 for additional data.

GENERAL INFORMATION

Physical State: Liquid Color: Pale Yellow Odor: Characteristic Odor Threshold: N/D

IMPORTANT HEALTH, SAFETY, AND ENVIRONMENTAL INFORMATION

Relative Density (at 15 C): 0.844

Flash Point [Method]: >154C (309F) [ASTM D-92]

Flammable Limits (Approximate volume % in air): LEL: N/D UEL: N/D

Autoignition Temperature: N/D Boiling Point / Range: N/D

Vapor Density (Air = 1): > 2 at 101 kPa

Vapor Pressure: < 0.013 kPa (0.1 mm Hg) at 20 C

Evaporation Rate (n-butyl acetate = 1): N/D

pH: N/A

Log Pow (n-Octanol/Water Partition Coefficient): > 3.5

Solubility in Water: Negligible

Viscosity: 9.3 cSt (9.3 mm2/sec) at 40 C Oxidizing Properties: See Sections 3, 15, 16.

OTHER INFORMATION

Freezing Point: N/D Melting Point: N/A

Pour Point: -12°C (10°F)

DMSO Extract (mineral oil only), IP-346: < 3 %wt

SECTION 10

STABILITY AND REACTIVITY

STABILITY: Material is stable under normal conditions.

CONDITIONS TO AVOID: Excessive heat. High energy sources of ignition.

MATERIALS TO AVOID: Strong oxidizers

HAZARDOUS DECOMPOSITION PRODUCTS: Material does not decompose at ambient temperatures.



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HAZARDOUS POLYMERIZATION: Will not occur.

SECTION 11

TOXICOLOGICAL INFORMATION

ACUTE TOXICITY

Route of Exposure	Conclusion / Remarks
Inhalation	
Toxicity: No end point data.	Minimally Toxic. Based on assessment of the components.
Irritation: No end point data.	Elevated temperatures or mechanical action may form vapors, mist, or fumes which may be irritating to the eyes, nose, throat, or lungs. Based on assessment of the components.
Ingestion	
Toxicity: No end point data.	Minimally Toxic. Based on assessment of the components.
Skin	
Toxicity: No end point data.	Minimally Toxic. Based on assessment of the components.
Irritation: No end point data.	Negligible irritation to skin at ambient temperatures. Based on assessment of the components.
Eye	
Irritation: No end point data.	May cause mild, short-lasting discomfort to eyes. Based on assessment of the components.

CHRONIC/OTHER EFFECTS

For the product itself:

Small amounts of liquid aspirated into the lungs during ingestion or from vomiting may cause chemical pneumonitis or pulmonary edema.

Additional information is available by request.

The following ingredients are cited on the lists below: None.

-- REGULATORY LISTS SEARCHED--

1 = NTP CARC

3 = IARC 1

5 = IARC 2B

2 = NTP SUS

4 = IARC 2A

6 = OSHA CARC

SECTION 12

ECOLOGICAL INFORMATION

The information given is based on data available for the material, the components of the material, and similar materials.

ECOTOXICITY

Material -- Expected to be harmful to aquatic organisms. May cause long-term adverse effects in the aquatic environment.

MOBILITY

More volatile component -- Highly volatile, will partition rapidly to air. Not expected to partition to sediment and wastewater solids.

Majority of components -- Low solubility and floats and is expected to migrate from water to the land. Expected



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to partition to sediment and wastewater solids.

PERSISTENCE AND DEGRADABILITY

Biodegradátion:

Majority of components -- Expected to be inherently biodegradable

Atmospheric Oxidation:

More volatile component - Expected to degrade rapidly in air

BIOACCUMULATION POTENTIAL

Majority of components — Has the potential to bioaccumulate, however metabolism or physical properties may reduce the bioconcentration or limit bioavailability.

SECTION 13

DISPOSAL CONSIDERATIONS

Disposal recommendations based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.

DISPOSAL RECOMMENDATIONS

Product is suitable for burning in an enclosed controlled burner for fuel value or disposal by supervised incineration at very high temperatures to prevent formation of undesirable combustion products.

REGULATORY DISPOSAL INFORMATION

RCRA Information: The unused product, in our opinion, is not specifically listed by the EPA as a hazardous waste (40 CFR, Part 261D), nor is it formulated to contain materials which are listed as hazardous wastes. It does not exhibit the hazardous characteristics of ignitability, corrositivity or reactivity and is not formulated with contaminants as determined by the Toxicity Characteristic Leaching Procedure (TCLP). However, used product may be regulated.

Empty Container Warning Empty Container Warning (where applicable): Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. DO NOT PRESSURISE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

SECTION 14

TRANSPORT INFORMATION

LAND (DOT): Not Regulated for Land Transport

LAND (TDG): Not Regulated for Land Transport

SEA (IMDG): Not Regulated for Sea Transport according to IMDG-Code

AIR (IATA): Not Regulated for Air Transport



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SECTION 15

REGULATORY INFORMATION

OSHA HAZARD COMMUNICATION STANDARD: When used for its intended purpose, this material is classified as hazardous in accordance with OSHA 29CFR 1910.1200.

NATIONAL CHEMICAL INVENTORY LISTING: DSL, ENCS, EINECS, IECSC, TSCA, AICS, KECI, PICCS

EPCRA: This material contains no extremely hazardous substances.

SARA (311/312) REPORTABLE HAZARD CATEGORIES: Delayed Health.

SARA (313) TOXIC RELEASE INVENTORY: This material contains no chemicals subject to the supplier notification requirements of the SARA 313 Toxic Release Program.

The Following Ingredients are Cited on the Lists Below:

Chemical Name	CAS Number	List Citations
DIPHENYLAMINE	122-39-4	5
SOLVENT REFINED LIGHT PARAFFINIC DISTILLATE (PETROLEUM)	64741-89-5	1, 17, 18
STRAIGHT-RUN MIDDLE DISTILLATES	64741-44-2	17

-- REGULATORY LISTS SEARCHED --

		CI EIG I G GEMICOI IED.	
1 = ACGIH ALL	6 = TSCA 5a2	11 = CA P65 REPRO	16 = MN RTK
2 = ACGIH A1	7 = TSCA 5e	12 = CA RTK	17 = NJ RTK
3 = ACGIH A2	8 = TSCA 6	13 = IL RTK	18 = PA RTK
4 = OSHA Z 1	9 = TSCA 12b	14 = LA RTK	19 = RI RTK
5 = TSCA 4	10 = CA P65 CARC	15 = MI 293	10 - 11/1/11

Code key: CARC=Carcinogen; REPRO=Reproductive

SECTION 16	OTHER MICORICATION
OF CHICK ID	OTHER INFORMATION

N/D = Not determined, N/A = Not applicable

THIS SAFETY DATA SHEET CONTAINS THE FOLLOWING REVISIONS:

No revision information is available.

PRECAUTIONARY LABEL TEXT:

Contains: SOLVENT REFINED LIGHT PARAFFINIC DISTILLATE (PETROLEUM) CAUTION!

HEALTH HAZARDS

Repeated exposure may cause skin dryness or cracking. If swallowed, may be aspirated and cause lung damage. Target Organs: Skin |

Eye: Flush thoroughly with water. If irritation occurs, get medical assistance.



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Oral: Seek immediate medical attention. Do not induce vomiting.

Skin: Wash contact areas with soap and water. If product is injected into or under the skin, or into any part of the body, regardless of the appearance of the wound or its size, the individual should be evaluated immediately by a physician as a surgical emergency. Even though initial symptoms from high pressure injection may be minimal or absent, early surgical treatment within the first few hours may significantly reduce the ultimate extent of injury.

FIRE FIGHTING MEDIA

Use water fog, foam, dry chemical or carbon dioxide (CO2) to extinguish flames.

SPILL/LEAK

Land Spill: Stop leak if you can do it without risk. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.

Water Spill: Stop leak if you can do it without risk. Confine the spill immediately with booms. Warn other shipping. Remove from the surface by skimming or with suitable absorbents. Report spills as required to appropriate authorities. Seek the advice of a specialist before using dispersants.

Not intended or suitable for use in or around a household or dwelling.

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MHC: 2A, 0, 0, 0, 0, 1

PPEC: C

DGN: 2007289XUS (553809)

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MATERIAL SAFETY DATA SHEET

Prepared to U.S. OSHA, CMA, ANSI and Canadian WHMIS Standards

MAKINO NUMBER 201055 & 201106

PARIL

What is the material and what do I need to know in an emergency?

1. PRODUCT IDENTIFICATION

TRADE NAME (AS LABELED):

MAKINO SPINDLE OIL

CHEMICAL NAME/CLASS: PRODUCT CODE NUMBER:

Paraffin Oil 201055, 201106

PRODUCT USE:

Machine Lubricant

SUPPLIER/MANUFACTURER'S NAME: ADDRESS:

MAKINO

.

7680 Innovation Way Mason, Ohio 45040-8003

U.S. BUSINESS PHONE: EMERGENCY PHONE:

1-513-528-7040

EMERGENCY PHONE: FAX:

1-513-398-1717 November 8, 2001

DATE OF PREPARATION:

2. COMPOSITION and INFORMATION ON INGREDIENTS.

CHEMICAL NAME	CAS#	% w/w	EXPOSURE LIMITS IN AIR					
•			ACGIH	i		OSHA		
:			TLV mg/m³	STEL mg/m³	PEL mg/m³	STEL mg/m³	Mg/m ³	OTHER mg/m³
Naphthalenesulfonic Acid, Dinonyl-, Barium Salt (exposure limits are for barium, soluble compounds, as barium)	25619-56-1	<1	0.5, A4 (Not Classifiable as a Human Carcinogen)	NE	0.5	NE	NE	NIOSH REL: TWA = 0.5 DFG MAK: TWA = 0.5 (total dust)
Paraffins (Petroleum), Normal (exposure limits are for oil mist, mineral)	64771-72-8	<99	5	10	5	NE	2500	NIOSH REL: TWA = 5 STEL = 10
Phosphorodithioic Acid, 0.0-Di- C1-C14 Alkyl Esterzincasalts	68649-42-3	<1	NE	NE	NE	NE	NE	NE
Other low hazard constituents. The hazard constituents are each protection of the process of the second concentration.	he other low esent in less	Balance	NE	NE	NE	NE	NE	NE

NE = Not Established. C = Ceiling Limit. See Section 16 for Definitions of Terms Used.

NOTE: All WHMIS required information is included. It is located in appropriate sections based on the ANSI Z400.1-1993 format.

3. HAZARD IDENTIFICATION

EMERGENCY OVERVIEW: This clear, coloriess liquid has a mineral spirit odor. This product may be initiating to contaminated tissue. This product must be substantially preheated for Ignition to become a potential hazard: it is not reactive. It involved in a fire, this product may decompose to produce carbon dioxide, carbon monoxide, and banum and phosphoro compounds. Emergency responders must wear the personal protective equipment suitable for the situation to which they are responding.

SYMPTOMS OF OVER-EXPOSURE BY ROUTE OF EXPOSURE: The most significant routes of occupational over-exposure are inhalation and contact with skin and eyes. The symptoms of over-exposure to this product are as follows:

INHALATION: If vapors, mists, or sprays of this product are inhaled, they may imitate the nose, throat, and lungs. Inhalation of high concentrations of dense oil mists may lead to oil pneumonia.

CONTACT WITH SKIN or EYES: Contact with the eyes may cause imitation and reddening. Skin contact may cause reddening, discomfort, and imitation. Prolonged or repeated over-exposures may cause defatting, oil acne, redness, itching, inflammation, and cracking with possible secondary infection. Contact with heated material may cause thermal burns.

SKIN ABSORPTION: Skin absorption is not known to be a potential route of over-exposure for any component of this product.

INGESTION: Ingestion is not anticipated to be a likely route of occupational exposure. If this product is swallowed, it may irritate the mouth, throat, esophagus, and other tissues of the digestive system. Symptoms may include nausea, vomiting, and diarrhea. Aspiration of this product may cause lung damage, which may be life threatening.

INJECTION: Accidental injection of this product, via laceration or puncture by a contaminated object, may cause pain and imitation in addition to the wound.

HEALTH EFFECTS OR RISKS FROM EXPOSURE: An Explanation in Lay.

Terms. In the event of over-exposure, the following symptoms may be observed:

HAZARDOUS MATERIAL INFORMATION SYSTEM HEALTH (BLUE) FLAMMABH-ITY (RED) 1 REACTIVITY (YELLOW) 0 PROTECTIVE EQUIPMENT C EYES RESPIRATORY HANDS BOOM 뎔 SEE SECTION B For routine industrial applications

ACUTE: This product may be imitating to eyes, skin, mucous membranes, and any other exposed tissue. If inhaled, imitation of the respiratory system may occur with coughing and difficulty breathing. Inhalation of high concentrations of dense oil mists may lead to oil pneumonia. Ingestion of this product may cause nausea, vomiting, diarrhea, and lung damage related to aspiration.

CHRONIC: Prolonged or repeated skin over-exposures may cause defatting, oil acne, redness, itching, inflammation, and cracking with possible secondary infection.

PART II What should I do if a hazardous situation occurs?

4. FIRST-AID MEASURES

SKIN EXPOSURE: If this product contaminates the skin, immediately begin decontamination with copious amounts of soap and running water. Minimum flushing is for 15 minutes. Remove exposed or contaminated clothing, taking care not to contaminate eyes. Contaminated individual must seek medical attention if symptoms persist.

EYE EXPOSURE: If this product's liquid or vapors enter the eyes, open contaminated individual's eyes while under gently running water. Use sufficient force to open eyelids. Have victim "roll" eyes. Minimum flushing is for 15 minutes. Do not interrupt flushing. Contaminated individual must seek medical attention if symptoms persist.

INHALATION: If vapors, mists, or sprays of this product are inhaled, remove victim to fresh air. If necessary, use artificial respiration to support vital functions. Remove or cover gross contamination to avoid exposure to rescuers. Contaminated individual must seek medical attention if symptoms persist.

4. FIRST-AID MEASURES (Continued)

INGESTION: If this product is swallowed, CALL PHYSICIAN OR POISON CONTROL CENTER FOR MOST CURRENT INFORMATION. If professional advice is not available, do not induce vomiting. Rinse mouth with water immediately. Victim should drink milk, egg whites, or large quantities of water. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or unable to swallow. Contaminated individual must seek medical attention.

Contaminated individuals must be taken for medical attention if symptoms persist. Rescuers should be taken for medical attention, if necessary. Take a copy of label and MSDS to physician or health professional with victim.

5. FIRE-FIGHTING MEASURES

FLASH POINT, °C (method): 108°C (226.4°F)

AUTOIGNITION TEMPERATURE, °C: Not fiammable.

FLAMMABLE LIMITS (in air bý volume, %): Lower (LEL): Not applicable.

Upper (UEL): Not applicable.

FIRE EXTINGUISHING MATERIALS:

Water Spray: YES

Carbon Dioxide: YES Dry Chemical: YES

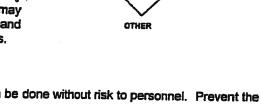
Foam: YES Halon: YES

Other: Any "ABC" Class.

UNUSUAL FIRE AND EXPLOSION HAZARDS: This product must be substantially preheated for ignition to become a potential hazard. Contact with heated material may cause thermal burns. When involved in a fire, this material may decompose and release carbon dioxide, carbon monoxide, and barium and phosphorous compounds.

Explosion Sensitivity to Mechanical Impact: Not sensitive. Explosion Sensitivity to Static Discharge: Not sensitive.

SPECIAL FIRE-FIGHTING PROCEDURES: Move containers from fire area if it can be done without risk to personnel. Prevent the spread of any released product to strong oxidizers. Incipient fire responders should wear eye protection. Structural firefighters must wear Self-Contained Breathing Apparatus and full protective equipment. Contaminated fire equipment should be cleaned with soap and water. If this product is involved in a fire, fire run-off water should be contained to prevent possible environmental damage.



NFPA RATING

FLAMMABILITY

1

0

REACTIVITY

1

HEALTH

6. ACCIDENTAL RELEASE MEASURES

SPILL AND LEAK RESPONSE: Uncontrolled releases should be responded to by trained personnel using pre-planned procedures. Proper protective equipment should be used. In case of a large spill, clear the affected area, protect people, and respond with trained personnel.

In the event of a non-incidental release, minimum Personal Protective Equipment should be Level C: triple-gloves (rubber gloves and nitrile gloves over latex gloves), chemical resistant suit and boots, hard-hat, and Air-Purifying Respirator with high-efficiency particulate filter. Level B: (Self Contained Breathing Apparatus) would be required in environments where oxygen level are less than 19.5% or unknown. If necessary, allow oil to cool down before clean up begins. Absorb spilled liquid with polypads or other suitable absorbent materials. Rinse area with soap and water solution. Decontaminate the area thoroughly. Place all spill residue in a suitable container and seal. Dispose of in accordance with Federal, State, and local hazardous waste disposal regulations (see Section 13, Disposal Considerations).

PART III How can I prevent hazardous situations from occurring?

7. HANDLING and STORAGE

WORK PRACTICES AND HYGIENE PRACTICES: As with all chemicals, avoid getting this product ON YOU or IN YOU. Wash thoroughly after handling this product. Do not eat or drink while handling this product. Avoid breathing vapors, mists, or sprays of this product. All work practices should minimize the generation of splashes and aerosols. Clean up spills of this product quickly and thoroughly, oil contaminated surfaces can be slippery. Remove contaminated clothing immediately.

7. HANDLING and STORAGE (Continued)

STORAGE AND HANDLING PRACTICES: All employees who handle this material should be trained to handle it safely. Use in well-ventilated location. Open containers slowly on a stable surface. Containers of this product must be properly labeled. Emy containers may contain residual liquid or vapors; therefore, empty containers should be handled with care. Empty oil pans of th. product routinely.

Store containers in a cool, dry location, away from direct sunlight, sources of intense heat, or where freezing is possible. S away from incompatible materials (see Section 10, Stability and Reactivity). Material should be stored in secondary containers or in a diked area, as appropriate. Keep container tightly closed when not in use. Storage areas should be made of fire resistant materials. If appropriate, post warning signs in storage and use areas. Inspect all incoming containers before storage to ensure containers are properly labeled and not damaged.

PROTECTIVE PRACTICES DURING MAINTENANCE OF CONTAMINATED EQUIPMENT: Follow practices indicated in Section 6 (Accidental Release Measures). Make certain that application equipment is locked and tagged-out safely. If necessary, allow oil to cool down before decontamination begins. Decontaminate equipment using a soap and water solution. Follow decontamination with a triple rinse with water before maintenance begins. Collect all rinsates and dispose of according to applicable Federal, State, or local procedures.

8. EXPOSURE CONTROLS - PERSONAL PROTECTION

VENTILATION AND ENGINEERING CONTROLS: None necessary under normal conditions of use. Use with adequate ventilation to ensure exposures are below limits in Section 2 (Composition and Information on Ingredients). If necessary, vent material to outside, taking appropriate precautions to prevent environmental contamination. Ensure eyewash/safety shower stations are available near where this product is used.

RESPIRATORY PROTECTION: Maintain airborne contaminant concentrations below exposure limits listed in Section 2 (Composition and Information on Ingredients), if applicable. If respiratory protection is needed, use only protection authorized in 29 CFR 1910.134 or applicable State regulations. Use supplied air respiration protection if oxygen levels are below 19.5% or are

NIOSH RECOMMENDATIONS FOR OIL MIST (MINERAL), A RELATED COMPOUND, CONCENTRATIONS IN AIR:

UP TO 50 mg/m3: Respirator with high-efficiency particulate filter(s); or Supplier Air Respirator (SAR). UP TO 125 mg/m3:

SAR operated in a continuous-flow mode; or powered air-purifying respirator with high-efficiency particular

UP TO 250 mg/m3:

Full-facepiece respirator with high-efficiency particulate filter(s); or SAR with a tight-fitting facepiece operated in a continuous-flow mode; or powered air-purifying respirator with tight-fitting facepiece and high-efficiency particulate filter, or full-facepiece SCBA; or full-facepiece SAR.

EVAPORATION RATE (n-BuAc = 1): Not established.

FREEZING/MELTING POINT: -12.5°C [9.5 degrees F]

BOILING POINT: Not established.

pH: Not applicable.

UP TO 2500 mg/m³: Positive pressure SAR.

EMERGENCY OR PLANNED ENTRY INTO UNKNOWN CONCENTRATIONS OR IDLH CONDITIONS: Positive pressure, fullfacepiece SCBA; or positive pressure, full-facepiece SAR with an auxiliary positive pressure SCBA. ESCAPE:

Full-facepiece respirator with high-efficiency particulate filter(s); or escape-type SCBA.

EYE PROTECTION: Splash goggles or safety glasses.

HAND PROTECTION: Wear vinyl rubber or neoprene gloves for routine industrial use. Use triple gloves for spill response, as stated in Section 6 (Accidental Release Measures) of this MSDS.

BODY PROTECTION: Use body protection appropriate for task. An apron or other impermeable body protection is suggested. Fullbody chemical protective clothing is recommended for emergency response procedures.

9. PHYSICAL and CHEMICAL PROPERTIES

RELATIVE VAPOR DENSITY (air = 1): Not established.

SPECIFIC GRAVITY @ 15°C(59°F) (water = 1): 0.7811 SOLUBILITY IN WATER: Negligible.

VAPOR PRESSURE, mm Hg @ 20°C: Negligible.

ODOR THRESHOLD: Not available.

LOG WATER/OIL DISTRIBUTION COEFFICIENT: Not available.

APPEARANCE AND COLOR: This clear, colorless liquid has a mineral spirit odor.

HOW TO DETECT THIS SUBSTANCE (warning properties): The odor may be a distinguishing characteristic of this product.

10. STABILITY and REACTIVITY

STABILITY: Stable.

DECOMPOSITION PRODUCTS: Carbon dioxide, carbon monoxide, barium and phosphorous compounds.

MATERIALS WITH WHICH SUBSTANCE IS INCOMPATIBLE: Strong oxidizing agents.

HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS TO AVOID: Contact with incompatible materials.

PART IV Is there any other useful information about this material?

11. TOXICOLOGICAL INFORMATION

TOXICITY DATA: No specific toxicology data are available for components greater than 1 percent in concentration. Toxicological data for a related compound are provided below. -

MINERAL OIL, PETROLEUM DISTILLATES, LIGHT PARAFFINIC (a related compound):

Skin Imitancy (rabbit) = 500 mg Moderate imitation effects

Mutation in Microorganisms (Salmonella typhimurium) = 5 μL/plate

LD (oral, rat) > 5 g/kg

LD (skin, rabbit) > 2 g/kg

SUSPECTED CANCER AGENT: The components of this product are not found on the following lists: FEDERAL OSHA Z LIST. NTP, IARC, and CAL/OSHA and therefore are not considered to be, nor suspected to be, cancer causing agents by these agencies.

IRRITANCY OF PRODUCT: This product may be irritating to contaminated tissue, especially after prolonged contact.

SENSITIZATION OF PRODUCT: This product contains no component known to be a sensitizer with prolonged or repeated use.

REPRODUCTIVE TOXICITY INFORMATION: Listed below is information concerning the effects of this product and its components

Mutagenicity: This product is not reported to cause mutagenic effects in humans.

Embryotoxicity: This product is not reported to produce embryotoxic effects in humans.

Teratogenicity: This product is not reported to cause teratogenic effects in humans.

Reproductive Toxicity: This product is not reported to cause reproductive toxicity effects in humans.

A mutagen is a chemical which causes permanent changes to genetic material (DNA) such that the changes will propagate through generational lines. An embryotoxin is a chemical which causes damage to a developing embryo (i.e. within the first eight weeks of pregnancy in humans), but the damage does not propagate across generational lines. A teratogen is a chemical which causes damage to a developing fetus, but the damage does not propagate across generational lines. A reproductive toxin is any substance which interferes in any way with the reproductive process.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Pre-existing dermatitis, other skin conditions, and respiratory disorders may be aggravated by over-exposure to this product.

RECOMMENDATIONS TO PHYSICIANS: Treat symptoms and eliminate over-exposure.

BIOLOGICAL EXPOSURE INDICES: Currently there are no Biological Exposure Indices (BEIs) associated with the components of this product.

12. ECOLOGICAL INFORMATION

ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.

ENVIRONMENTAL STABILITY: This product will slowly decompose under environmental conditions to carbon dioxide and a

EFFECT OF MATERIAL ON PLANTS or ANIMALS: This product may be harmful to plant and animal life if released into the

EFFECT OF CHEMICAL ON AQUATIC LIFE: This product can float on water and prevent oxygen from entering the water system. vhich can adversely affect or kill aquatic plant and animal life.

13. DISPOSAL CONSIDERATIONS

PREPARING WASTES FOR DISPOSAL: Waste disposal must be in accordance with appropriate Federal, State, and lor regulations. This product, if unaltered by use, may be disposed of by treatment at a permitted facility or as advised by your loc hazardous waste regulatory authority.

EPA WASTE NUMBER: Not applicable to wastes consisting only of this product.

14. TRANSPORTATION INFORMATION

THIS MATERIAL IS NOT HAZARDOUS AS DEFINED BY 49 CFR 172.101 BY THE U.S. DEPARTMENT OF TRANSPORTATION

PROPER SHIPPING NAME:

Not applicable.

HAZARD CLASS NUMBER and DESCRIPTION:

Not applicable.

UN IDENTIFICATION NUMBER: PACKING GROUP:

Not applicable,

DOT LABEL(S) REQUIRED:

Not applicable.

EMERGENCY RESPONSE GUIDEBOOK NUMBER(1993):

Not applicable.

Not applicable.

NORTH AMERICAN EMERGENCY RESPONSE GUIDEBOOK NUMBER (1996): Not applicable.

MARINE POLLUTANT: This product does not contain any components which are designated by the Department of Transportation to be Marine Pollutants (49 CFR 172.101, Appendix B).

TRANSPORT CANADA TRANSPORTATION OF DANGEROUS GOODS REGULATIONS: THIS MATERIAL IS NOT CONSIDERED AS DANGEROUS GOODS.

15. REGULATORY INFORMATION

SARA REPORTING REQUIREMENTS: The components of this product are subject to the reporting requirements of Sections 302, 304, and 313 of Title III of the Superfund Amendments and Reauthorization Act, as follows:

Component	SARA 302	SARA 304	SARA 313
Naphthalenesulfonic Acid, Dinonyl-, Barium Salt (Barium Compound Category)	No	No .	Yes
Paraffins (Petroleum), Normal	No	No	No
Phosphorodithioic Acid, 0.0-Di-C1-C14 Alkyl Esterzincasalts (Zinc Compounds Category)	No	No	Yes

SARA THRESHOLD PLANNING QUANTITY: Not applicable.

TSCA INVENTORY STATUS: All components of this product are listed on the TSCA Inventory.

CERCLA REPORTABLE QUANTITY (RQ): Not applicable.

OTHER FEDERAL REGULATIONS: Not applicable.

STATE REGULATORY INFORMATION: The components of this product listed in Section 2 (Composition and Information on Ingredients) are covered under specific State regulations, as denoted below:

Alaska - Designated Toxic and Hazardous Substances: Barium Compounds.

California - Permissible Exposure Limits for Chemical Contaminants: None.

Florida - Substance List: None.

Illinois - Toxic Substance List: Barium Compounds, Zinc Compounds.

Kansas - Section 302/313 List: None.

Massachusetts - Substance List: None.

Minnesota List Hazardous Substances: Barium Compounds.

Missouri - Employer Information/Toxic Substance List: None.

New Jersey - Right to Know Hazardous Substance List: Barium Compounds, Zinc Compounds.

North Dakota - List of Hazardous Chemicals, Reportable Quantities: Zinc Compounds.

Pennsylvania - Hazardous Substance List: None.

Rhode Island - Hazardous Substance List: Barium Compounds.

Texas - Hazardous Substance List: Barium Compounds.

West Virginia - Hazardous Substance List: Barium Compounds.

Wisconsin - Toxic and Hazardous Substances: Barium Compounds.

15. REGULATORY INFORMATION (Continued)

CALIFORNIA PROPOSITION 65: No component of this product is on the California Proposition 65 lists.

LABELING (Precautionary Statements): CAUTION! MAY IRRITATE EYES AND SKIN. MAY CAUSE GASTRIC DISCOMFORT IF SWALLOWED. ASPIRATION HAZARD IF SWALLOWED—CAN ENTER LUNGS AND CAUSE DAMAGE. MAY BE IRRITATING IF INHALED. CONTACT WITH HEATED MATERIAL MAY CAUSE THERMAL BURNS. Do not get into eyes, on skin, or on clothing. Avoid breathing vapors, sprays, or mists. Do not take internally. Use with adequate ventilation and employ respiratory protection when exposed to mists or sprays. When handling, wear chemical splash goggles, rubber gloves, and protective clothing as appropriate. Wash thoroughly after handling. Keep container closed when not in use. FIRST-AID: In case of contact, immediately flush skin or eyes for at least 15 minutes. If inhaled, move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If ingested, do not induce vomiting. Get medical attention. IN CASE OF FIRE: Use dry chemical, water spray, or alcohol foam. IN CASE OF SPILL: Absorb with polypads or other neutral material. Place in a suitable container. Refer to MSDS for addition information.

TARGET ORGANS: Skin, eyes.
WHMIS SYMBOLS: Not applicable.

16. OTHER INFORMATION

PREPARED BY:

CHEMICAL SAFETY ASSOCIATES, Inc. 9163 Chesapeake Drive, San Diego, CA 92123-1002 (619) 565 - 0302 November 8, 2001

DATE OF PRINTING:

The information given here is considered to be correct and is offered for your consideration, investigation, and verification. No warranties, expressed or implied, since the use of our products is beyond our control. Statements concerning the use of MAKINO products are not be construed as

DEFINITIONS OF TERMS

A large number of abbreviations and acronyms appear on a MSDS. Some of these which are commonly used include the following:

CAS # This is the Chemical Abstract Service Number which uniquely identifies each constituent. It is used for computer-related searching.

EXPOSURE LIMITS IN AIR:

ACGIH - American Conference of Governmental Industrial Hygienists, a professional association which establishes exposure limits.

TLV - Threshold Limit Value - an airbome concentration of a substance which represents conditions under which it is generally believed that nearly all workers may be repeatedly exposed without adverse effect. The duration must be considered, including the 8-hour Time Weighted Average (TWA), the 15-minute Short Term Exposure Limit, and the instantaneous Ceiling Level. Skin absorption effects must also be considered.

OSHA - U.S. Occupational Safety and Health Administration.

PEL - Permissible Exposure Limit - This exposure value means exactly the same as a TLV, except that it is enforceable by OSHA. The OSHA Permissible Exposure Limits are based in the 1989 PELs and the June, 1993 Air Contaminants Rule (Federal Register: 58: 35338-35351 and 58: 40191). Both the current PELs and the vacated PELs are indicated. The phrase, "Vacated 1989 PEL," is placed next to the PEL which was vacated by Court Order.

IDLH - Immediately Dangerous to Life and Health - This level represents a concentration from which one can escape within 30-minutes without suffering escape-preventing or permanent injury. The DFG - MAK is the Republic of Germany's Maximum Exposure Level, similar to the U.S. PEL. NIOSH is the National institute of Occupational Safety and Health, which is the research arm of the U.S. Occupational Safety and Health Administration (OSHA). NIOSH issues exposure guidelines called Recommended Exposure Levels (RELs). When no exposure guidelines are established, an entry of NE is made for reference.

FLAMMABILITY LIMITS IN AIR:

Much of the information related to fire and explosion is derived from the National Fire Protection Association (NFPA). <u>LEL</u> - the lowest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source. <u>UEL</u> - the highest percent of vapor in air, by volume, that will explode or ignite in the presence of an ignition source.

TOXICOLOGICAL INFORMATION:

Possible health hazards as derived from human data, animal studi from the results of studies with similar compounds are present Definitions of some terms used in this section are: LD - Lethal Dos (solids & liquids) which kills 50% of the exposed animals; LC, - Leth: Concentration (gases) which kills 50% of the exposed animals; ppn concentration expressed in parts of material per million parts of air c water, mg/m² concentration expressed in weight of substance pe volume of air, mg/kg quantity of material, by weight, administered to test subject, based on their body weight in kg. Data from several source are used to evaluate the cancer-causing potential of the material. The sources are: IARC - the International Agency for Research on Cancer NTP - the National Toxicology Program, RTECS - the Registry of Toxic Effects of Chemical Substances, OSHA and CAL/OSHA. IARC and NTP rate chemicals on a scale of decreasing potential to cause human cancer with rankings from 1 to 4. Subrankings (2A, 2B, etc.) are also used. Other measures of toxicity include TDLo, the lowest dose to cause a symptom and TCLo the lowest concentration to cause a symptom TDo, LDLo, and LDo, or TC, TCo, LCLo, and LCo, the lowest dose (or concentration) to cause death. BEI - Biological Exposure Indices, represent the levels of determinants which are most likely to be observed in specimens collected from a healthy worker who has been exposed to chemicals to the same extent as a worker with inhalation exposure to the

REGULATORY INFORMATION:

This section explains the impact of various laws and regulations on the material. EPA is the U.S. Environmental Protection Agency. WHMIS is the Canadian Workplace Hazardous Materials Information System. DOT and TC are the U.S. Department of Transportation and the Transport Canada, respectively. Other acronyms used are Superfund Amendments and Reauthorization Act (SARA); the Toxic Substance Control Act (TSCA); Marine Pollutant status according to the TT; California's Safe Dinking Water Act (Proposition 65). Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund); and various state regulations. This section also includes information on the precautionary warnings which appear on the material's package label.