

Alameda County Health Care Service Agency
Department of Environmental Health
Environmental Health Laboratory

ALCO
HAZMAT
MAY 31 AM 11:40
FILE

ANALYTICAL REQUEST

Certification No. 1816

Laboratory No. 94-053

Sample Identification: Grove Valve & Regulator Co., 6529 Hollis St., Emeryville, CA

Analysis Requested By: Ron Owcarz

Date Collected: 5/18/94 Collected By: Ron Owcarz

Date Received By: 5/19/94 Received By: D. Wong

Analysis Requested: Nitrite, Heavy Metals: Cd, Cu, Cr, Pb, Ni, Zn.

Background Information: 2 green liquid samples were submitted for analysis.

ANALYTICAL RESULTS

Parameter	Observation or Results	
Sample#	RJ01-518	RJ02-518
Laboratory#	94-053-1	94-053-2
Nitrite	187.5ppm	2083ppm
Metal Content	See Attached Sheet for Details.	

Conclusions: _____

Date Analysis Completed: 5/26/94 Chemist: N. Leung

Approved: D.W.

Distribution: Ron Owcarz, Rafat Shahid, Ed Howell.

ANALYTICAL RESULTS

CAM METALS

Lab No.: 94-053-(1 & 2)				STLC	TTLIC	
Sample I.D.: RJO1-518 & RJO2-518				mg/L	mg/kg wet wt.	
Parameter	RJO1-518	RJO2-518	Concentration in ppm (TTLIC)	Analytical Method		
Antimony					15	500
Arsenic					5.0	500
Barium					100	10,000
Beryllium					0.75	75
Cadmium	0.3ppm	3.5ppm		7130	1.0	100
Chromium VI					5	500
Chromium	0.04ppm	0.49ppm		7190	560	2,500
Cobalt					80	8,000
Copper	0.32ppm	2.36ppm		7210	25	2,500
Lead	3.91ppm	39.1ppm		7420	5.0	1,000
Mercury					0.2	20
Molybdenum					550	3,500
Nickel	1.26ppm	6.1ppm		7520	20	2,000
Selenium					1.0	100
Silver					5	500
Thallium					7.0	700
Vanadium					24	2,400
Zinc	20ppm	200ppm		7950	250	5,000

Note: Since the STLC limits are based on an extract of 50g. diluted to 500ml.
the total metal concentration must exceed ten times the STLC limit before
the extract need be analyzed.



05M
OMNOCHEM

PAGE.

MATERIAL SAFETY DATA SHEET
(Similar to OSHA Form 20)

415-418-2311

**OMNI-CHEM
COMPANY, INC.**
70885

SECTION I

SUPPLIERS NAME: OMNI-CHEM COMPANY INC.

24 HR. EMERGENCY TELEPHONE NUMBER (916) 928-0300

ADDRESS: 1123 NORTH MARKET BLVD., SUITE #4, SACRAMENTO, CA 95834

CHEMICAL NAME

PRODUCT NAME

O-C SCS-77

CHEMICAL FAMILY

Rust preventive rinse aid

FORMULA:

PROPRIETARY

SECTION II - HAZARDOUS INGREDIENTS OF MIXTURES

CAS #	MATERIAL OR COMPONENT	%	THRESHOLD LIMIT VALUE
60-00-4	Ethylenediamine Tetraacetic tetrasodium salt	0 0 0	not established
7632000	Sodium Nitrite	0 0 0	not established

SECTION III - PHYSICAL DATA

BOILING POINT	above 212°F	MELTING POINT	N/A
DENSITY @ 25°C	= 1.26	VAPOR PRESSURE	25 mm Hg
VAPOR DENSITY (AIR = 1)	1	SOLUBILITY IN H ₂ O (1% BY WT)	miscible
VOLATILES BY VOL.	65%	EVAPORATION RATE (water = 1)	1
APPEARANCE AND ODOR	Light yellow liquid with no odor		

SECTION IV - FIRE AND EXPLOSION DATA

N/A

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE not established

EFFECTS OF OVEREXPOSURE Ingestion: flushed face, uneven heart beat, tremors, dizziness and nausea. Contact can irritate skin and temporarily yellow skin after prolonged contact.

EMERGENCY AND FIRST AID PROCEDURE

Eyes & Skin: Flush affected area for at least 15 minutes with copious amounts of water. Seek medical attention if irritation persists.

SECTION VI - REACTIVITY DATA

O-C SCS-77

CONDITIONS CONTRIBUTING TO INSTABILITY High temperatures and open flame. Avoid storage with combustibles.

INCOMPATIBILITY Acidic and reducing materials (e.g. cyanides, thiocyanates, thiosulfates, etc ammonium salts and combustible organics.

HAZARDOUS DECOMPOSITION PRODUCTS Oxides of nitrogen fumes.

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Small amounts usually can be flushed to sewer. Large spills scoop or mop up major amount. Absorb remainder onto siliceous absorbent. Dispose at chemical disposal site.

WASTE DISPOSAL METHOD

Dispose of only at official chemical disposal sites. Comply with all disposal regulations.

SECTION VIII - PROTECTIVE EQUIPMENT

VENTILATION N/A

PERSONAL PROTECTIVE EQUIPMENT

Minimum rubber gloves, chemical goggles or face shield. Other equipment: rubber boots and apron.

SECTION IX - SPECIAL PRECAUTIONS

STORE IN COOL DRY PLACE AWAY FROM ACIDS AND OTHER REDUCING AGENTS.

SECTION X - PERSONNEL SAMPLING PROCEDURE

N/A

Prepared by: C.G. Rudolph on July 8, 1985

INFORMATION PRESENTED HEREIN HAS BEEN COMPILED FROM SOURCES CONSIDERED TO BE DEPENDABLE AND IS ACCURATE AND RELIABLE TO THE BEST OF OUR KNOWLEDGE BELIEF, BUT IS NOT GUARANTEED TO BE SO, SINCE CONDITIONS OF USE ARE BEYOND OUR CONTROL. WE MAKE NO WARRANTIES, EXPRESS OR IMPLIED, EXCEPT THOSE THAT ARE STATED IN CORRESPONDING TECHNICAL LITERATURE.

Alameda County Health Care Service Agency
Department of Environmental Health
Environmental Health Laboratory

ANALYTICAL REQUEST

Certification No. 1816

Laboratory No: 95-131

Sample Identification: Grove Valve & Regulator. 6521 Hollis Street

Analysis Requested By: Brian Oliva

Date Collected: 11/20/95

Collected By: Brian Oliva

Date Received: 11/20/95

Received By: N. Leung

Analysis Requested: Total Oil & Grease.

Background Information: 1 wastewater sample from the above location.

ANALYTICAL RESULTS

<u>Parameter</u>	<u>Observation or Results</u>
Sample#	1A112095
Laboratory#	95-131
Total Oil & Grease	2.1%

Conclusion:

Date Analysis Completed: 12/4/95

Chemist: N. Leung

Approved: *AS*

Distribution: Brian Oliva, Jun Makishima.

Alameda County Health Care Service Agency
Department of Environmental Health
Environmental Health Laboratory

ANALYTICAL REQUEST

Certification No. 1816
Laboratory No: 95-131

Sample Identification: **Grove Valve+Regulator, 6521 Hollis St.**
Analysis Requested By: **Briane Oliva**
Date Collected: **11/20/95** Collected By: **Briane Oliva**
Date Received: **11/20/95** Received By: **N. Leung**
Analysis Requested: **TPH-D, and Kerosene**
Background Information: **One (1) liquid sample submitted for analysis.**

ANALYTICAL RESULTS

Parameter		Observation or Results *	Regulatory Limits
Sample #	laboratory #	Diesel Results	Kerosene Results
1A112095	95-131-1	ND < 0.5 ppm (mg/L)	ND <0.5 ppm (mg/L)

Conclusion:

Date Analysis Completed: **11/27/95** Chemist: **N. Leung, R. Mankarious**

Approved: *DW*

Distribution: **Briane Oliva, Jun Makishima**

X03275*

MACHINE SHOP



Date Issued: 12/23/81
 Supersedes: 10/01/81

TEXACO
 MATERIAL SAFETY DATA SHEET

NOTE: Read and understand Material Safety Data Sheet before handling or disposing of product

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MATERIAL IDENTITY

Product Code and Name:
 00564 RUST PROOF OIL

0201

Chemical Name and/or Family or Description:
 Rustproofs

Manufacturer's Name and Address:
 Texaco Lubricants Company
 a Division of Texaco Refining and Marketing Inc.
 P.O. Box 4427, Houston, TX 77210-4427

Telephone Numbers:
 TRANSPORTATION EMERGENCY Company: (914) 831-3400
 HEALTH EMERGENCY Company: (914) 831-3400
 GENERAL MSDS ASSISTANCE (914) 838-7204
 TECHNICAL INFORMATION Fuels: (914) 838-7336; Lubricants/Antifreezes: (914) 838-7505
 Chemicals: (512) 459-6543

CHEMICAL NAME	
MANUFACTURER	DATE REVISION
CHEMTREC PHONE	
800-424-9300	

CHEMTREC: (800) 424-9300

2. COMPOSITION/INFORMATION ON INGREDIENTS

Product and/or Component(s) Carcinogenic According to: OSHA IARC NTP OTHER NONE

Composition:

Chemical/Common Name	CAS No.	Exposure Limit	Range in %
Kerosine (May also contain benzene in the range of 0.00-0.36%)	8008206	None Established	60.00 - 64.99
Solvent-dewaxed heavy paraffinic petroleum distillates	64742650	5mg/m3 OSHA (MIST) 5mg/m3 ACGIH (MIST) 10mg/m3 STEL (MIST)	35.00 - 49.99

Product is hazardous according to OSHA (1910.1200).
 Component(s) is hazardous according to OSHA or one or more state Right-to-Know laws.

3. HAZARD IDENTIFICATION

EMERGENCY OVERVIEW

Appearance and Odor: Clear, yellow liquid

WARNING STATEMENT

WARNING! FLAMMABLE LIQUID AND VAPOR
 MAY CAUSE DIZZINESS AND DROWSINESS
 ASPIRATION HAZARD IF SWALLOWED CAN ENTER LUNGS AND CAUSE DAMAGE
 HARMFUL IF INHALED
 MAY CAUSE EYE AND SKIN IRRITATION

HMIS		NFPA	
Health: 1	Reactivity: 0	Health: 1	Reactivity: 0
Flammability: 2	Special: -	Flammability: 2	Special: -

POTENTIAL HEALTH EFFECTS

Primary Route of Exposure:	EYE	SKIN	INHALATION	INGESTION
	X	X	X	-

REPORT NUMBER: 971
MSDS NO. P1104057
EFFECTIVE DATE: 08/27/89

VAN WATERS & ROGERS INC.
MATERIAL SAFETY DATA SHEET

PAGE: 001
VERSION: 002

PRODUCT: GLYCERINE, USP

ORDER NO:
PROD NO :

NO X - NO

VAN WATERS & ROGERS INC., SUBSIDIARY OF UNIVAR (206)884-3400
6100 CARILLON POINT, KIRKLAND, WA 98033

EMERGENCY ASSISTANCE

FOR EMERGENCY ASSISTANCE INVOLVING CHEMICALS CALL - CHEMTREC
(800)424-9300

FOR PRODUCT AND SALES INFORMATION

CONTACT YOUR LOCAL VAN WATERS & ROGERS BRANCH OFFICE AT
VWAR SAN JOSE 408-425-8700 SAN JOSE, CA

PRODUCT IDENTIFICATION

PRODUCT NAME: GLYCERINE, USP
COMMON NAMES/SYNONYMS:
GLYCERAL; GLYCERIN; GLYCEROL; GLYCYL ALCOHOL

CAS NO.: 56-81-1
VWAR CODE: T1104057

FORMULA C3 H8 O3
HAZARD RATING (NFPA 325B)
HEALTH: 1
FIRE: 1
REACTIVITY: 0
SPECIAL: NONE

DATE ISSUED: 06/89
SUPERCEDES: 01/87
HAZARD RATING SCALE:
0=MINIMAL 3=SERIOUS
1=SLIGHT 4=SEVERE
2=MODERATE

HAZARDOUS INGREDIENTS

COMPONENT	CAS NO.	%	EXPOSURE LIMITS, MG/M3			HAZARD ACGIH LIST
			OSHA PLC	ACGIH TLV (MIST)	OTHER LIMIT	
GLYCERINE	56-81-5	96 OR 99.5	NONE	10	NONE	ACGIH LIST
JAYER	7732-18-5	BALANCE	NONE	NONE	NONE	NONE

PHYSICAL PROPERTIES

BOILING POINT, DEG F: 99.52-100 VAPOR PRESSURE, MM HG/20 DEG C: NIL
AT 760 MM HG: 96% RH 1.20 GG HG
MELTING POINT, DEG F: 37.8 VAPOR DENSITY (AIR=1) N/A

TEXACO
INDUSTRIAL HYGIENE, TOXIC
SAFETY DATA

Grove MSDS # 0513

X - 00240

Diesel fuel #2

NOTE: NO REPRESENTATION IS MADE AS TO
HEREIN. SEE PAGE 7 FOR CONDITION.

Trade Name and Synonyms 00449 DIESEL FUEL OIL	
Manufacturer's Name Texaco Inc.	Emergency Telephone No. (914) 831-3400 ext. 204
Address P.O. Box 509 Beacon, NY 12508	
Chemical Name and/or Family or Description Diesel Fuel	
THIS PRODUCT IS CLASSIFIED AS: <input checked="" type="checkbox"/> HAZARDOUS BY DEFINITION NO(S) 1,5,7,9,10 <input type="checkbox"/> NOT HAZARDOUS: ON ATTACHED EXPLANATION SHEETS	
WARNING STATEMENT: DANGER! CAUSES SEVERE SKIN BURNS MAY BE HARMFUL IF INHALED OR ABSORBED THROUGH SKIN COMBUSTIBLE	
OCCUPATIONAL CONTROL PROCEDURES	
Protective Equipment (Type) Eyes: Chemical type goggles or face shield optional. Skin: Exposed employes should exercise reasonable personal cleanliness; this includes cleansing exposed skin areas several times daily with soap and water, and laundering or dry cleaning soiled work clothing at least weekly. Gloves resistant to chemicals and petroleum distillates recommended. Inhalation: Supplied air respiratory protection for cleaning large spills or upon entry into tanks, vessels, or other confined spaces. Ventilation: Normal	
Permissible Concentrations: Air: None established.	
EMERGENCY AND FIRST AID PROCEDURES	
First Aid Eyes: As with most foreign materials, should eye contact occur, flush eyes with plenty of water. Skin: Wash exposed areas with soap and water. Ingestion: Do NOT induce vomiting. Aspiration may cause chemical pneumonia. Inhalation: Should symptoms noted under physiological effects occur, remove to fresh air. If not breathing, apply artificial respiration. Other Instructions: None.	

0018
3M

Duns No.: 00-617-3082

MATERIAL SAFETY
DATA SHEET



DIVISION: ELECTRICAL PRODUCTS DIVISION

TRADE NAME:

SCOTCHKOTE BRAND 306 LIQUID EPOXY COATING

3M I.D. NUMBER: 80-6100-8797-7 80-6100-8798-5 80-6100-8799-3 80-6100-8800-9
80-7003-0602-2

ISSUED: MARCH 2, 1989
SUPERSEDES: DECEMBER 21, 1988
DOCUMENT: 10-2569-1

1. INGREDIENT	C.A.S. NO.	PERCENT	EXPOSURE		LIMITS	
			VALUE	UNIT	TYPE	AUTH
PART A: BISPHENOL A - EPICHLOROHYDRIN COPOLYMER	25068-38-6	65.0 - 75.0	NONE	NONE	NONE	NONE
TOLUENE	108-88-3	10.0 - 15.0	100	ppm	TWA	ACGIH
TITANIUM DIOXIDE	13463-67-7	2.0 - 6.0	10	mg/m3	TWA	ACGIH
CHROME OXIDE	1308-38-9	1.0 - 5.0	0.5	mg/m3	TWA	ACGIH
TALC (NON-ASBESTIFORM)	14807-96-6	1.0 - 5.0	2	mg/m3	TWA	ACGIH
BENTONITE CLAY 27	71011-26-2	1.0 - 5.0	NONE	NONE	NONE	NONE
BENTONITE CLAY 34	68953-58-2	0.5 - 2.0	NONE	NONE	NONE	NONE
C.I. PIGMENT YELLOW 37	1306-23-6	0.5 - 2.0	0.05	mg/m3	TWA	ACGIH
PART B: TALC (NON-ASBESTIFORM)	14807-96-6	40.0 - 45.0	2	mg/m3	TWA	ACGIH
NONYL PHENOL	25154-52-3	15.0 - 20.0	NONE	NONE	NONE	NONE
N-OLEYLTRIMETHYLENEDIAMINE	7173-62-8	5.0 - 10.0	NONE	NONE	NONE	NONE
DIETHYLAMINOETHANOL	100-37-8	5.0 - 10.0	10	ppm	TWA	ACGIH
DIETHYLENTRIAMINE	111-40-0	1.0 - 5.0	1	ppm	TWA	ACGIH
ETHYL ALCOHOL	64-17-5	0.1 - 1.0	1000	ppm	TWA	ACGIH

SOURCE OF EXPOSURE LIMIT DATA:
- ACGIH: American Conference of Governmental Industrial Hygienists
- NONE: None Established

THIS PRODUCT CONTAINS THE FOLLOWING TOXIC CHEMICAL OR CHEMICALS 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:

- TOLUENE
- CHROME OXIDE
- C.I. PIGMENT YELLOW 37

2. PHYSICAL DATA

BOILING POINT:..... N/A
VAPOR PRESSURE:..... N/A
VAPOR DENSITY:..... N/A
EVAPORATION RATE:..... N/A
SOLUBILITY IN WATER:..... Nil
SP. GRAVITY:..... A:1.24 B:1.30
PERCENT VOLATILE:..... A:13 B:19
VOLATILE ORGANICS:..... N/D
pH:..... N/A
VISCOSITY:..... N/D
APPEARANCE AND ODOR: A:Green liquid B:Tan liquid

3. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT:..... A:74 B:52F Closed Cup
FLAMMABLE LIMITS - LEL:..... N/D
FLAMMABLE LIMITS - UEL:..... N/D

Abbreviations: N/D - Not Determined N/A - Not Applicable

Ceilcote, A Unit of General Signal
 Division address
 Ceilcote Company
 140 Sheldon Road
 Berea, OH 44017

Assistance
 Ceilcote (216) 243-0700
 24-hr emergency assistance
 CHEMTREC (800) 424-9300
 D.C. area (202) 483-7616

I Product Identification

Product Trade Name: P-370 Primer
 Product code number: 15-370-##-##
 Chemical family: Polyester resin, styrene and pigment mixture
 Chemical names: Polyester resin, styrene, and organic red-orange pigment mixture

II Hazardous Ingredients

Components	CAS Number	OSHA PEL	ACGIH TLV/TWA	STEL	Carcinogen listing
Styrene	100-42-5	100ppm	50ppm	100ppm	*

* See note in exposure data Section V

III Physical Data

Appearance: Orange liquid	Bulk density: 8.6 lbs/gal
Odor: Aromatic sweet odor	Boiling point: 293°F (145°C) (Styrene)
Vapor pressure: 5mm Hg @20°C (Styrene)	Solubility in water: Trace
Vapor density: Heavier than air	Percent volatile: Approximately 60%

IV Fire Protection Information

Flash point P.M.C.C. ASTM D 93: 73°F (23°C)

Limits of flammability ASTM E 681:
 Assessment for ventilation requirements when handling gases & vapors

lower limit: 1.1% (Styrene)
 upper limit: 6.1% (Styrene)

Autoignition temperature ASTM E 659:

914°F (490°C) (Styrene)

Fire fighting information

Extinguishing media: Water Fog, carbon dioxide, foam, dry chemical

Special fire fighting procedures: Self-contained respirator equipment and full protective clothing should be worn. Remove nearby containers if possible, otherwise cool with water spray.

Unusual fire & explosion hazards: At higher temperatures polymerization and vapors can cause pressure build up in sealed containers. Vapors heavier than air can concentrate, travel to source of ignitions, then flashback. Residue in container can ignite explosively.

Hazardous decomposition products: Acrid fumes, Carbon monoxide and dioxide, phenol derivatives, various hydrocarbons from incomplete combustion.

V Health Hazard Data

Effects of overexposure and health exposure data

ingestion: Intake can cause gastrointestinal irritation, nausea, vomiting, diarrhea, headache, and drowsiness. May cause chemical pneumonia if aspirated into lungs.
 Styrene oral LD₅₀ (rat) 4.37 g/kg.

skin absorption: No skin absorption hazards identified from data found.

skin contact: Prolonged contact may cause dryness, redness, and irritation.

inhalation: Vapors can be irritating to nose and mucous membranes. High styrene exposures may result in narcotic effect, headaches, and possibly asphyxiation.

eye contact: Contact can cause severe irritation, redness, tearing, blurred vision. May cause corneal injury.

additional health exposure data: *Animal and human data indicate that styrene monomer is not carcinogenic. The National Cancer Institute concluded from a chronic study in rats and mice that styrene was not carcinogenic. There is no epidemiology evidence that prolonged worker exposure caused tumors in humans. In 1982, IARC determined that there is only "limited evidence" of styrene inducing tumors in animals based on several equivocal studies.

Results of cell culture and live animal mutagenicity studies have been inconclusive. Styrene is not considered teratogenic, although a few animal studies indicate that exposure to very high levels may be a hazard to developing embryos.

Grove MSDS # 0283
 Dampney 124
 Endcor 790, thinner

MATERIAL SAFETY DATA SHEET

NPCA 1-82

FOR COATINGS, RESINS AND RELATED MATERIALS

(Approved by U.S. Department of Labor "Essentially Similar" to Form OSHA-20)

Section I

MANUFACTURER'S NAME **DAMPNEY COMPANY, INC.** DATE OF PREP **8/17/84**
 STREET ADDRESS **85 Paris Street** CITY STATE AND ZIP CODE **Everett, MA 02149**
 EMERGENCY TELEPHONE NO **CHEMTREC: (800)424-9300**
 INFORMATION TELEPHONE NO **617/389-2805**
 MANUFACTURERS CODE IDENTIFICATION **D124** TRADE NAME **Dampney 124 Thinner (formerly 790)**

Section II—HAZARDOUS INGREDIENTS

INGREDIENT	PERCENT (by wt)	CAS #	OCCUPATIONAL EXPOSURE LIMITS (8 hr TWA)	VAPOR PRESSURE (mm Hg)	TOXICITY DATA (Rat, oral, LD)
Toluene 230	58	108-88-3	100 ppm (skin)	28/25°C.	5.0/kg
2-Methoxyethanol 000	32	109-86-4	5 ppm (skin)*	6.2/20°C.	
Diacetone Alcohol 120	10	123-42-2	50 ppm	1.1/20°C.	4.0 g/kg
*ACGIH (1982 Intended Changes List); OSHA PEL is 25 ppm (skin)					

Section III—PHYSICAL DATA

BOILING RANGE **111-168°C.** VAPOR DENSITY **X**1.18 @ 20°C. MELTING POINT **11°C.**
 EVAPORATION RATE FASTER SLOWER THAN ETHER PERCENT VOLATILE BY VOLUME **100** WEIGHT PER GALLON **7.5 lbs.**

Section IV—FIRE AND EXPLOSION HAZARD DATA

FLAMMABILITY CLASSIFICATION OSHA II-Flammable FLASH POINT **45°F.** LEL **1.2**
 DOT _____

EXTINGUISHING MEDIA

FOAM "ALCOHOL" FOAM CO₂ DRY CHEMICAL WATER FOG OTHER

To cool fire-exposed containers.

UNUSUAL FIRE AND EXPLOSION HAZARDS

Fire and explosion hazard when heated. Vapors can flow along surfaces to distant ignition sources and flash back.

Special Fire Fighting Procedures: Use air-supplied breathing equipment for enclosed areas in a fire situation.

0147
DAMPNEY

SECTION I - PRODUCT IDENTIFICATION

Manufacturer: DAMPNEY CO INC
85 PARIS ST

Information Phone: 617 389 2805
Emergency Phone: 617 389 2805

Product Class: EVERETT INDUSTRIAL COATING
Trade Name : ~~XXXXXXXXXXXXXXXXXXXX~~
Product Code : 750A
C.A.S. Number: N/A

MA 02149

Hazard Ratings: Health - 4
none -> extreme Fire - 3
0 ----> 4 Reactivity - 0

SECTION II - HAZARDOUS INGREDIENTS

Ingredients	CAS #	Weight %	Exposure Limits		VP mm Hg
			ACGIH/TLV	OSHA/PEL	
XYLENE	1330-20-7	14.	100 ppm	100	6.6
1-METHOXY-2-PROPANOL	107-98-2	9.1	100 ppm	100	10.9
*ZINC CHROMATE PIGMENT	11103-86-9	9.7	.05 mg/M3	.05	

This material is confirmed human CARINOGENIC (LUNGS AND RESPIRATORY TRACT) because of Chrome content LD50=0.6

SECTION III - PHYSICAL DATA

Boiling Range: 243 - 286 Deg. F
Cap. Rate: 0.68 x n-Butyl Acetate
Volatiles volume: 41.8 %
Appearance: RED LIQUID

Vapor Density: Heavier than Air.
Liquid Density: Heavier than Water.
Wgt per gallon: 13.32 Pounds.
V.O.C.: 3.49

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flammability Class: 1C

Flash Point: 81 F

LEL : 1. %

-EXTINGUISHING MEDIA:

FOAM, ALCOHOL FOAM, CO2, DRY CHEMICAL. WATER FOG MAY BE INEFFECTIVE BUT SHOULD BE USED TO COOL FIRE-EXPOSED CONTAINERS TO PREVENT PRESSURE BUILD UP AND POSSIBLE AUTO-IGNITION OR EXPLOSION WHEN EXPOSED TO EXTREME HEAT.

-SPECIAL FIREFIGHTING PROCEDURES:

USE FULL PROTECTION EQUIPMENT INCLUDING SELF CONTAINED BREATHING APPARATUS FOR RESPIRATORY PROTECTION IN FIGHTING FIRES IN INCLOSED OR CONFINED SPACES, OR AS OTHERWISE NEEDED. MINIMIZE BREATHING GASES, VAPORS, FUMES OR DECOMPOSITION PRODUCTS.

-UNUSUAL FIRE & EXPLOSION HAZARDS:

DURING EMERGENCY CONDITIONS, OVEREXPOSURE TO DECOMPOSITION PRODUCTS MAY CAUSE A HEALTH HAZARD. SYMPTOMS MAY NOT BE IMMEDIATELY APPARENT. OBTAIN MEDICAL ATTENTION.

SECTION V - HEALTH HAZARD DATA

-PERMISSIBLE EXPOSURE LEVEL:

SEE SECTION II



0711
Omni-Chem

MATERIAL SAFETY DATA SHEET
(Similar to OSHA Form 20)

**OMNI-CHEM
COMPANY, INC.**
70885

SECTION I

SUPPLIERS NAME: OMNI-CHEM COMPANY INC.

24 HR. EMERGENCY TELEPHONE NUMBER (916) 928-0300

ADDRESS: 1123 NORTH MARKET BLVD., SUITE #4, SACRAMENTO, CA 95834

CHEMICAL NAME

PRODUCT NAME

O-C SCS-77

CHEMICAL FAMILY

Rust preventive rinse aid

FORMULA:

PROPRIETARY

SECTION II - HAZARDOUS INGREDIENTS OF MIXTURES

CAS #	MATERIAL OR COMPONENT	%	THRESHOLD LIMIT VALUE
60-00-4	Ethylenediamine Tetraacetic tetrasodium salt		not established
7632000	Sodium Nitrite		not established

SECTION III - PHYSICAL DATA

BOILING POINT	above 212°F	MELTING POINT	N/A
DENSITY @ 25°C	= 1.26	VAPOR PRESSURE	25 mm Hg
VAPOR DENSITY (AIR = 1)	1	SOLUBILITY IN H ₂ O (% BY WT.)	miscible
% VOLATILES BY VOL.	65%	EVAPORATION RATE (water = 1)	1
APPEARANCE AND ODOR	Light yellow liquid with no odor		

SECTION IV - FIRE AND EXPLOSION DATA

N/A

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE not established

EFFECTS OF OVEREXPOSURE Ingestion: flushed face, uneven heart beat, tremors, dizziness and nausea. Contact can irritate skin and temporarily yellow skin after prolonged contact.

EMERGENCY AND FIRST AID PROCEDURE

Eyes & Skin: Flush affected area for at least 15 minutes with copious amounts of water. Seek medical attention if irritation persists.

MSDS - 231



For use as a general purpose
 Lubricant
 Part No. 00024 00927
 00924 00216
 00027 02128
 00205
 00255

HOLT LLOYD CORPORATION

MATERIAL SAFETY DATA SHEET

SECTION I

MANUFACTURER'S NAME Holt Lloyd Corporation	TRADE NAME LPS® 2 General Purpose Lubricant
ADDRESS (NUMBER, STREET) 4647 Hugh Howell Road	CHEMICAL FAMILY Petroleum Hydrocarbons
ADDRESS (CITY, STATE, ZIP) Tucker, GA 30084-5096	Telephone # (404) 934-7800
HAZARDOUS MATERIALS DESCRIPTION AND PROPER SHIPPING NAME (49 CFR 172.101) COMPOUND, BOILER, PRESERVING, LIQUID NMFC 50093 SUB 2 BRL/CL55 CONSUMER COMMODITY ORM-D	EMERGENCY TELEPHONE NO. 1-800-424-9300
	Chemtrec
Aerosol: ORM-D-AIR Bulk: Non-Restricted	MANUFACTURER'S D-U-N-S NO. 04-221-6549

SECTION II-INGREDIENTS

INGREDIENTS	%	OSHA PEL	TLV (UNITS)
Aliphatic Hydrocarbon CAS #64742-96-7	70	500ppm	200 ppm
Petroleum Oil (Severely Hydro-treated) CAS #64742-53-6	5-10	5mg/m ³ *	N.E.
Non Hazardous Proprietary Blend	8-12	N.E.	N.E.
Carbon Dioxide (Aerosol Only) CAS #124-38-9	2-3	N.E.	5,000
* oil mist			

SECTION III-PHYSICAL DATA

BOILING POINT (°F)	325	SPECIFIC GRAVITY (H₂O=1)	0.84
VAPOR PRESSURE (mmHg)	100°F < 2	PERCENT VOLATILE BY VOLUME (2)	70
VAPOR DENSITY (AIR=1)	4.7	EVAPORATION RATE (n-Butyl Acetate=1)	<.07
SOLUBILITY IN WATER	Nil		
APPEARANCE AND ODOR Light amber liquid - slight odor			

SECTION IV-FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (METHOD USED)	175°F T.C.C.	FLAMMABLE LIMITS of diluent	LEL 1%	UEL 6%
EXTINGUISHING MEDIA Foam, Carbon Dioxide or dry chemical				
SPECIAL FIRE FIGHTING PROCEDURES Do not use water. Treat as combustible petroleum distillates.				
UNUSUAL FIRE AND EXPLOSION HAZARDS Excessive heat caused by fire will cause aerosols to burst.				

N.E.=Not Established

100458
M E R I A L S A F E T Y D A T A S H E E T

Master Builders, Inc. 23700 Chagrin Blvd. Cleveland, OH 44122 216-831-5500	24-HOUR CHEMTREC 800-424-9300 D.C. Area: 483-7616	Master Builders Technologies, Ltd. 3637 Weston Road Toronto, Ont. M9L 1W1 416-741-3830
---	---	---

Prepared by: Department of Safety & Environment
Revision Date: 11/06/91

Page 1 of 4
Code : 50450

1. PRODUCT NAME: FLAKELINE 251

Chemical Family: Polyester resin, styrene, and SiO₂ mixture

2. HAZARDOUS INGREDIENTS:	CASNO	EXPOSURE LIMITS ^a			CONTENT
		TLV	STEL	PEL	
Styrene	100-42-5	50ppm	100ppm	50ppm	39%

a) Refer to Section 7, Health Hazard Data for LD/LC(50).

3. PHYSICAL DATA:

Boiling Point (C) :	145 (Styrene)	Water/Oil Dist.	
Percent Volatile:	approx. 40	Coefficient:	N.D.
Freezing Point (C) :	N.D.	Solubility	
Vapor Pressure		in Water:	insoluble
@20(C):	5mm Hg (Styrene)	Specific Gravity:	1.19
Vapor Density:	Heavier than air	pH:	N.D.
Odor Threshold:	.08 ppm (Styrene)	Evaporation Rate:	N.D.
Appearance:	Pigmented liquid	Odor:	Aromatic sweet
	N.D. = Not Determined		N.A. = Not Applicable

4. FIRE AND EXPLOSION HAZARD DATA: HMIS Hazard Rating No. 3 (Serious Hazard)

Flash Point: 34(C) (93(F)) Method: Pensky Martin C.C.

Auto-Ignition Temp.: 490(C) (Styrene)

Limits of Flammability: LEL: 1.1% (Styrene) UEL: 6.1% (Styrene)

Extinguishing Media: Carbon dioxide, foam, dry chemical and water fog.

Special Fire & Unusual Hazards: At higher temperature polymerization and vapors can cause pressure build up in sealed containers. Vapors heavier than air can concentrate, travel to source of ignitions, and flash back. Residue in container can ignite explosively. Electrical grounding is recommended for containers.

5. REACTIVITY DATA: HMIS Hazard Rating No. 1 (Slight Hazard)

Stability: Avoid excessive catalyst and heat. This product must be mixed according to directions for safety. Excessive heat and fume generation can occur if improperly handled. Not sensitive to mechanical impact.

1488 X-2186
01366

- PRODUCT IDENTIFICATION

COMPANY NAME: Calgon Vestal Laboratories

ADDRESS: 5035 Manchester Avenue
St. Louis, MO 63110

PRODUCT NAME: Surround

Synonyms: Detackifier/Dispersant

Tel. No.: (314) 535-1810
Night: (314) 862-2000
CHEMTREC: (800) 424-9300

Product No.: 1660

II - HAZARDOUS INGREDIENTS OF MIXTURES

MATERIAL: (CAS#)	% By Wt.	TLV	PEL
#Ethylene Glycol (107-21-1)	5	50 ppm (ceiling)	50ppm (ceiling)
#Formaldehyde* (50-00-0) *STEL=2ppm	<0.3	1 ppm	1 ppm
# Ingredient subject to reporting under Section 313 of Title III (SARA) and 40 CFR 372.			

III - PHYSICAL DATA

Vapor Pressure, mm Hg: like H2O	Vapor Density (Air=1)60-90F: like H2O
Evaporation Rate(ether=1): N/A	% Volatile by wt 90-93
Solubility in H2O: Complete	pH @ Solution N/A
Freezing Point F: @30F	pH as Distributed: 1.5-1.8
Boiling Point F: >212	Appearance: Slightly hazy liquid
Specific Gravity H2O=1 @25C: 1.035	Odor: Slight chemical odor

IV - FIRE AND EXPLOSION

Flash Point F: >200F (TCC)

Flammable Limits: N/A

Extinguishing Media: Product is not flammable or combustible. Use water spray, CO2 or dry chemical to cool area around fire and extinguish fires.

Special Fire Fighting Procedures: When exposed to fire, fire fighters should wear self-contained breathing apparatus and protective clothing. Toxic gases may be released during fire and decomposition of product.

Unusual Fire and Explosion Hazards: None known.

V - REACTIVITY DATA

Stability - Conditions to avoid: Stable

Incompatibility: Strong bases and strong oxidizing agents. Material corrodes iron, copper and aluminum.

Hazardous Decomposition Products: Thermal decomposition may produce carbon monoxide, carbon dioxide, formaldehyde, hydrogen chloride, ammonia or oxides of nitrogen.

Conditions Contributing to Hazardous Polymerization: None known.

890
Porter

MATERIAL SAFETY DATA SHEET

NPVLA 6-70

(Approved by Department of Labor "Essentially Similar" to Form LSB-005-4)

T-13

4X

Section I

1033210
LARGE ASSEMBLY

MANUFACTURER'S NAME
PORTER PAINT CO.

ADDRESS
400 SOUTH 13 STREET

CITY, STATE, AND ZIP CODE
LOUISVILLE, KY. 40201

EMERGENCY TELEPHONE NO.
502 583-2701

CHEMICAL NAME AND SYNONYMS
Thinner

TRADE NAME
T-13 Taret Thinner

CHEMICAL FAMILY
NA

FORMULA
NA

SECTION II - HAZARDOUS INGREDIENTS

PAINTS, PRESERVATIVES, & SOLVENTS					ppm
PIGMENTS	%	TLV (Units)	SOLVENTS	%	TLV (Units)
			Aromatic Hydrocarbon	90	100
CATALYST			ADDITIVES		
VEHICLE			OTHERS		
HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES				%	TLV (Units)

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)	176	SPECIFIC GRAVITY (H ₂ O=1)	0.86 ± 0.02
VAPOR PRESSURE (mm Hg.)	16.6	PERCENT VOLATILE BY VOLUME (%)	100
VAPOR DENSITY (AIR=1)	3.5	EVAPORATION RATE (Bu-Ac=1) (Alcohol)	3.3
SOLUBILITY IN WATER	Appreciable		
APPEARANCE AND ODOR	Water white transparent liquid.	Aromatic hydrocarbon odor.	

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (METHOD USED) 53° F Pensky-Martens CC

FLAMMABLE LIMITS
Lel 1.0

EXTINGUISHING MEDIA
Foam, CO₂, or dry chemical

ADDITIONAL FIRE FIGHTING PROCEDURES
Smother with suitable extinguishing media. In absence of electricity, use water spray to reduce burning rate. Wear self-contained breathing equipment.

UNUSUAL FIRE AND EXPLOSION HAZARDS
None

X00317

MATERIAL SAFETY DATA SHEET

MANUFACTURER'S NAME:

EMERGENCY TELEPHONE NO.:

PRECISION TECH COATINGS CORP
1220 4TH STREET
BERKELEY CA 94710

510-283-5775

INFORMATION TELEPHONE NO.:

DATE OF PREPARATION: 06-15-1994

510-525-3600

SECTION I - PRODUCT IDENTIFICATION

PRODUCT NUMBER: 380A1
PRODUCT NAME: 380A1 ALUMINIUM H.S. EN.
PRODUCT CLASS: ALKYD AIR DRY ENAMEL

PROPOSITION 65 STATEMENT

All Precision products contain detectable amounts of materials on the list published by CA as known to cause cancer or reproductive harm.

SECTION II - HAZARDOUS INGREDIENTS

* Substances on SARA Title III, Section 313 List.

Emissions or releases must be reported annually.

INGREDIENT	CAS NUMBER	WEIGHT PERCENT	OCCUPATIONAL EXPOSURE LIMITS	VAPOR PRESSURE @ 20°C
VM&P NAPHTHA	8030-30-6	10	300PPM TLV TWA ACGIH	2.0 20C
* XYLENE	1330-20-7	1.35	100PPM TLV TWA ACGIH	31.0 20C
MINERAL SPIRITS 75	8052-41-3	10	200PPM TLV TWA ACGIH	2.0 20C
* ISOBUTYL ALCOHOL	78-83-1	< 5.0%	50PPM TLV TWA ACGIH	9.6 20C
DIETHYLENEDIAMINE	108-01-0	< 0.5%	Not established	0.0 20C
* METHYL ETHYL KETONE	78-93-3	< 5.0%	200PPM TLV TWA ACGIH	70.0 20C

SECTION III - PHYSICAL DATA

BOILING RANGE: 226-310 °F

VAPOR DENSITY: HEAVIER THAN AIR

EVAPORATION RATE: SLOWER THAN ETHER **% VOLATILE VOLUME:** 43.04 **WT/GAL:** 8.93

Conforms to BAAQMD Reg 8 Rule 19, Para 302.2

Air Dry Coating V.O.C. 340 gms/l (2.8#/gall)

MATERIAL SAFETY DATA SHEET

FOR COATINGS, RESINS AND RELATED MATERIALS

Y 02099

DATE OF PREPARATION- 5/04/94

PAGE

MSDS PREPARED BY : WISCONSIN PROTECTIVE COATINGS
 MANUFACTURER'S NAME : WISCONSIN PROTECTIVE COATINGS
 ADDRESS : 614 ELIZABETH STREET
 ADDRESS : P.O. BOX 8147
 CITY, STATE : GREEN BAY, WI 54308

EMERGENCY TELEPHONE NO. DAY: (414) 437-6561 NIGHT: (800) 424-9300
 INFORMATION TELEPHONE NO. DAY: (414) 437-6561 NIGHT:

SECTION I -- PRODUCT IDENTIFICATION

MANUFACTURER'S CODE IDENTIFICATION: 0030T0000-02 LAST MOD. DATE : 12/23/86
 PRODUCT CLASS: THINNER
 TRADE NAME: PLASITE #30 THINNER

REF# 0030T0000-01

SECTION II -- INGREDIENTS/HAZARDOUS INGREDIENTS

INGREDIENT	CAS#	% BY WEIGHT	TLV MG/M3	PEL MG/M3	SEC 313
TOLUENE, METHYLBENZENE*	*108-88-3	* 10%-30%	* 188.000*	375.000*	Yes
3METHOXY3PROPOXYPROPANOL DIPROPYLGLYCOMETHYLEETHER	*20324-32-7	* 1%-5%	* N/A	* N/A	
NEUTYLALCOHOL/BUTANOL @	*71-36-3	* 5%-10%	* 152.000*	300.000*	Yes
ETHANOL, ETHYL ALCOHOL	*64-17-5	* 30%-70%	*1880.000*	1900.000*	
ISOPROPYL ALCOHOL	*67-63-0	* 5%-10%	* 985.000*	980.000*	Yes
METHYL ALCOHOL, METHANOL	*67-56-1	* 1%-5%	* 262.000*	260.000*	Yes
METHYL ISO-BUTYL KETONE	*108-10-1	* 0%-1%	* 205.000*	410.000*	Yes

EHS: "Extremely Hazardous Substance" under SARA Title III found in the Federal Register of April 22, 1987, pp. 13397-13410.

SEC. 313: "Toxic Chemical" under SARA Title III found in the Federal Register of June 4, 1987, pp. 21168-21179.

X03828

SECTION I - PRODUCT: THINNER #10

(0510S1NL)

Date: 09/23/93 Replaces 09/11/93 - VLF

CHEMTREC TRANSPORTATION EMERGENCY PHONE NO.: 800-424-9300

PITTSBURGH POISON CONTROL CENTER HEALTH EMERGENCY NO.: 412-681-6669

SECTION II - HAZARDOUS INGREDIENTS EXPOSURE LIMITS

CHEMICAL NAME	(A)	(B)	(C)	(D)	(E)
XYLENE	1330-20-7	100%	100 PPM	150 PPM	NE

CHEMICAL NAME	HAZARDOUS INGREDIENTS (F)	ADDITIONAL DATA (G)
XYLENE	4300MG/KG RAT, ORAL 15000 PPM/4HRS RAT, INHALATION	NO/YES/1,2,3

TABLE (A) CAS NUMBER (B) LESS THAN WT (C) TLV-TWA (D) STEL (E) CEILING (F) TOXICITY DATA (LD50/Route, LC50/Route) (G) SARA 302/SARA 313/ SARA 311-312 CATEGORIES/CERCLA. NE = not established, NR = not required, NO = no. Color Pigment Mixture may contain Iron Oxides, Titanium Dioxide, Carbon Black, and other particulates not otherwise regulated in varying amounts depending on color of product.

WHMIS CLASSIFICATION: B2 -- D2B
 HMIS/NFPA CLASSIFICATION: HEALTH 2, FLAMMABILITY 3, REACTIVITY 0,
 PERSONAL PROTECTION CODE G, NFPA FIRE FIGHTING PHASE 4

SECTION III - PHYSICAL DATA:

BOILING RANGE: 279F(137C)-284F(140C). VAPOR DENSITY: Heavier than air.
 EVAPORATION RATE: Slower than ether. VOLATILE BY WEIGHT 100 %. VOLATILE BY VOLUME: 100 %. PRODUCT WT/GAL: 7.2 LBS/U.S.GAL. 0.87 sp gr.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA:

FLAMMABILITY CLASSIFICATION: FLASH POINT: 83 F(28C) (Setaflash) LEL 1.0 % UEL 7.0 %.
 OSHA-PAINT/RELATED/MATERIAL/CLASS/3/PGIII, DOT-PAINT RELATED MATERIAL, CLASS 3, UN1263, PGIII, CANADIAN TDGA: PAINT RELATED MATERIAL, CLASS 3, UN1263, PGIII
 EXTINGUISHING MEDIA: Dry Chemical, Foam, Carbon Dioxide, Water Fog.
 UNUSUAL FIRE AND EXPLOSION HAZARDS: Vapors are heavier than air and will accumulate. Vapors will form explosive concentrations with air. Vapors travel long distances and will flashback. Use mechanical ventilation when necessary to keep percent vapor below the "Lower Explosion Level" (LEL).
 SPECIAL FIRE FIGHTING PROCEDURES: Evacuate hazard area of unprotected personnel. Use a NIOSH approved self-contained breathing unit and complete body protection. Cool surrounding containers with water in case of fire exposure.

GLIDDEN

MATERIAL SAFETY DATA SHEET

The information contained herein is based on data available at the time of preparation of this data sheet and is intended to be reliable. However, no warranty is expressed or implied regarding the accuracy of this data. The Glidden Company shall not be responsible for the use of this information, or of any product, method or apparatus mentioned and you must make your own determination of its suitability and completeness for your own use, for the protection of the environment, and the health and safety of your employees and users of this material.

Complies with OSHA hazard communication standard 29CFR1910.1200.

4501 Series, 5539, 5540	
HMIS Rating	
Health	*2
Flammability	2
Reactivity	0

4570	
HMIS Rating	
Health	*3
Flammability	2
Reactivity	0

*See Health Hazard Data for chronic health information.

Prepared
November, 1988

THE GLIDDEN COMPANY
925 Euclid Avenue
Cleveland, Ohio 44115
Emergency Telephone No.
(216) 826-5586

**GLID-GUARD® Alkyd
Industrial Enamel No. 4501 Series;
GLID-GUARD® Silicone
Alkyd Enamel Nos. 5539, 5540**

FIRE & EXPLOSION HAZARD DATA

DOT Proper Shipping Name: Paint, UN 1263

Hazard Class: Combustible Liquid

Extinguishing Media: Dry chemical or foam

Unusual Fire and Explosion Hazards: Closed containers may explode when exposed to extreme heat or fire. Vapors can form explosive mixtures in air at elevated temperatures. May decompose under fire conditions emitting irritant and/or toxic gases.

Special Fire Fighting Procedures: Water may be used to cool and protect exposed containers.

HEALTH HAZARD DATA

Primary Route(s) of Exposure: Inhalation
Skin Contact

Effects of Overexposure:

Inhalation: Irritation of respiratory tract. Prolonged inhalation may lead to fatigue, drowsiness, dizziness and/or lightheadedness, headache, uncoordination, nausea, vomiting, central nervous system depression, anesthetic effect or narcosis.

Skin Contact: Irritation of skin. Prolonged or repeated contact can cause dermatitis, defatting.

Eye Contact: Irritation of eyes. Prolonged or repeated contact can cause blurred vision, redness of eyes, tearing of eyes, severe eye irritation.

Ingestion: Amounts ingested incidental to consumer and industrial handling are not likely to cause injury; however, ingestion of larger amounts may cause lung inflammation and damage due to aspiration of material into lungs.

Notice: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.

Emergency and First Aid Procedures:

Inhalation: Remove to fresh air. Restore and support continued breathing. Get emergency medical attention. Have trained person give oxygen if necessary. Get medical help for any breathing difficulty.

Skin Contact: Wash off quickly with plenty of water, then soap and water; remove contaminated clothing. Wash contaminated clothing before reuse.

Eye Contact: Flush immediately with large amounts of water, especially under lids, for at least 15 minutes. Obtain emergency medical treatment.

Ingestion: If swallowed, obtain medical treatment immediately.

Medical Conditions Aggravated By Exposure: This product is not expected to aggravate existing medical conditions; however, ingredients contained in this product have been reported to aggravate preexisting eye, skin, respiratory disorders, lung disorders, asthma-like conditions.

Supplemental Health Information: This product contains crystalline silica, which is considered a hazard by inhalation. The International Agency for Research on Cancer (IARC) has determined that there is sufficient evidence for the carcinogenicity of crystalline silica to experimental animals, and limited evidence for the carcinogenicity of crystalline silica to humans. Crystalline silica is also a known cause of silicosis, a noncancerous lung disease.

Exposure to materials in this product have been associated with possible blood abnormalities, liver damage, kidney damage. Excessive inhalation of solvent vapors under uncontrolled conditions may lead to unconsciousness, respiratory failure, asphyxiation, and even death.

Attention: Products in this series contain ethylene glycol when tinted with Dramatone. Ethylene glycol can cause severe kidney damage when ingested and has been shown to cause birth defects in laboratory animals.

REACTIVITY DATA

Stability: Stable

Incompatibility: Oxidizers
Acids
Bases
Amines

Conditions to Avoid: Elevated temperatures
Contact with oxidizing agent

Hazardous Decomposition Products: Carbon Monoxide
Carbon Dioxide

Hazardous Polymerization: Will not occur

SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled: Comply with all applicable health and environmental regulations.

Eliminate all sources of ignition.

Ventilate area.

Spills may be collected with non-combustible absorbent materials.

Waste Disposal: Dispose in accordance with all applicable regulations. Avoid discharge to natural waters.

SPECIAL PROTECTION INFORMATION

Respiratory Protection: Control environmental concentrations below applicable standards. Where respiratory protection is required, use only NIOSH/MSHA approved respirators in accordance with OSHA Standard 29 CFR 1910.134.

Ventilation: Provide dilution ventilation or local exhaust to prevent build-up of vapors.

Personal Protective Equipment: Eye Wash
Safety Shower
Safety Glasses or Goggles
Impervious Gloves

SPECIAL PRECAUTIONS

Handling and Storage: Store below 100°F. Keep away from heat, sparks, and open flame.

Other Precautions: Use only with adequate ventilation. Do not take internally. Keep out of reach of children. Avoid contact with skin and eyes, and breathing of vapors. Wash hands thoroughly after handling, especially before eating or smoking. Keep containers tightly closed and upright when not in use. Avoid conditions which result in formation of inhalable particles such as spraying or abrading (sanding) painted surfaces. If such conditions cannot be avoided, use appropriate respiratory protection as directed under Special Protection Information. Empty containers may contain hazardous residues. Ground equipment when transferring to prevent accumulation of static charge.

WARNING

The products on this material safety data sheet contain detectable levels of chemicals that are not listed. Some of these unlisted chemicals are known to the state of California to cause cancer, birth defects or other reproductive harm.

5-INTERIOR/EXTERIOR ALKYD

4501 SERIES & 5539, 5540



00012

MOBIL OIL CORPORATION MATERIAL SAFETY DATA BULLETIN

REVISED: 01/12/89

***** I. PRODUCT IDENTIFICATION *****

MOBILARMA 245 ←

SUPPLIER:	MOBIL OIL CORP.	HEALTH EMERGENCY TELEPHONE:	(212) 883-4411
CHEMICAL NAMES AND SYNONYMS:	PET. HYDROCARBONS AND ADDITIVES	TRANSPORT EMERGENCY TELEPHONE:	(800) 424-9300 (CHEMTREC)
USE OR DESCRIPTION:	RUST PREVENTIVE OIL	PRODUCT TECHNICAL INFORMATION:	(800) 662-4525

***** II. TYPICAL CHEMICAL AND PHYSICAL PROPERTIES *****

APPEARANCE: DARK GREEN LIQUID ODOR: MILD PH: NA
 VISCOSITY AT 100 F, SUS: 35.0 AT 40 C, CS: 2.6
 VISCOSITY AT 210 F, SUS: NE AT 100 C, CS: NE
 FLASH POINT F(C): > 100(38) (ASTM D-56)
 MELTING POINT F(C): NA POUR POINT F(C): NE
 BOILING POINT F(C): > 300(149)
 RELATIVE DENSITY, 15/4 C: 0.839 SOLUBILITY IN WATER: NEGLIGIBLE
 VAPOR PRESSURE-MM HG 20C: < 5.0

NA=NOT APPLICABLE NE=NOT ESTABLISHED D=DECOMPOSES
FOR FURTHER INFORMATION, CONTACT YOUR LOCAL MARKETING OFFICE.

***** III. INGREDIENTS *****

	WT PCT (APPROX)	EXPOSURE LIMITS MG/M3	SOURCES PPM	SOURCES (AND NOTES)
POTENTIALLY HAZARDOUS INGREDIENTS:				
MEDIUM ALIPHATIC PETROLEUM SOLVENT (64742-88-7)	70	525	100	A

OTHER INGREDIENTS:
 REFINED MINERAL OILS <25
 ADDITIVES AND/OR OTHER INGREDIENTS <10

SEE SECTION XII FOR COMPONENT REGULATORY INFORMATION.

SOURCES: A=ACGIH-TLV, A*=SUGGESTED-TLV, M=MOBIL, O=OSHA, S=SUPPLIER
NOTE: LIMITS SHOWN FOR GUIDANCE ONLY. FOLLOW APPLICABLE REGULATIONS.

***** IV. HEALTH HAZARD DATA *****

--- INCLUDES AGGRAVATED MEDICAL CONDITIONS, IF ESTABLISHED ---
 THRESHOLD LIMIT VALUE: 5.00 MG/M3 (SOURCES: A,M,O) FOR OIL MIST
 EFFECTS OF OVEREXPOSURE: SLIGHT SKIN IRRITATION. RESPIRATORY IRRITATION, DIZZINESS, NAUSEA, LOSS OF CONSCIOUSNESS. PROLONGED REPEATED SKIN CONTACT WITH LOW VISCOSITY MATERIALS MAY DEPAT THE SKIN RESULTING IN POSSIBLE IRRITATION AND DERMATITIS.

X-3468

1658

MATERIAL SAFETY DATA SHEET
For Coatings, Resins and Related Materials

12/09/91

Prepared: 09/05/91

SECTION I - PRODUCT IDENTIFICATION

Manufacturer: DAMPNEY CO INC
85 PARIS ST
EVERETT MA 02149

Information Phone: 617 389 2805
Emergency Phone: 617 389 2805
CHEMTREC Phone: 1 800 424 9300

Product Class: SEE MSDS FOR PART B
Trade Name : EPODUR 750 HIGH SOLIDS
Product Code : 750A VOC
C.A.S. Number: N/A
Prepared By : ROBERT WARREN
Title : CHEMIST

Hazard Ratings: Health - 4
Fire - 3
Reactivity - 1
! none -> extreme
! 0 ----> 4

SECTION II - HAZARDOUS INGREDIENTS

Ingredients	CAS #	Weight %	Exposure Limits		VP mm HG
			ACGIH/TLV	OSHA/PEL	
BISPHENOL-A EPOXY	25069-38-6	21.	ppm		ppm 0
*ZINC CHROMATE PIGMENT	11103-86-9	9.6	.05 mg/M3	.05	mg/M30
*ZINC CHROMATE IS LISTED AS HUMAN CARCINOGENIC (LUNGS AND RESPIRATORY) BECAUSE OF CHROME CONTENT LD50=0.6					
4-METHYL-2-PENTANONE	108-10-1	4.0	50 ppm	100	ppm 15
ALSO CALLED METHYL ISOBUTYL KETONE					
ACGIH- Short term exposure limit (STEL) for MIBK is 75 ppm. NIOSH recommends a limit of 50 ppm, 8-hour TWA.					
*XYLENE	1330-20-7	11.	100 ppm	100	ppm 6.6
TECHNICAL GRADE XYLENE CONTAINS 18-20% ETHYL BENZENE CAS # IS 100-41-4 AND IS SUBJECT TO REPORTING REQUIREMENTS OF SECTION 313 OF SARA TITLE III.					
1-METHOXY 2PROPANOL ACETATE	108-65-6	5.6	0 ppm	0	ppm 1.9

* REPORTABLE QUANTITY SARA III

SECTION III - PHYSICAL DATA

Boiling Range: 242 - 392 Deg. F
Vapor Density: Heavier than Air.
Evap. Rate: 0.92 x n-Butyl Acetate
Liquid Density: Heavier than Water.
Volatiles volume: 39.1 %
Wgt per gallon: 14.07 Pounds.
Spec. Gravity: 1.69
Appearance:
V.O.C.: 2.87

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flammability Class: 1C
Flash Point: 60 F
LEL: 1. %

1310

X-03006

MANUFACTURER'S NAME:

EMERGENCY TELEPHONE NO.:

PRECISION PAINTS & COATINGS CORP.
1000 W. 14TH ST.
MILWAUKEE, WI 53233

PHONE NO.:

INFORMATION TELEPHONE NO.:

DATE OF PREPARATION: 09-09-1991

FAX NO.:

SECTION I - PRODUCT IDENTIFICATION

PRODUCT NUMBER: 200K31
PRODUCT NAME: 200K31 SAFETY BLUE H.S. EN.
PRODUCT CLASS: GLOSS AIR DRY ENAMEL

PROPOSITION 65 STATEMENT
All Precision products contain detectable amounts of materials on the list published by CA as known to cause cancer or reproductive harm.

SECTION II - HAZARDOUS INGREDIENTS

* Substances on SARA Title III, Section 313 List.
Emissions or releases must be reported annually.

INGREDIENT	CAS NUMBER	WEIGHT PERCENT	OCCUPATIONAL EXPOSURE LIMITS	ACGIH TLV	OSHA PEL
TOLUENE	108-93-3	10	100PPM TLV TWA ACGIH	50.0	200
ETHYLENE	1330-20-7	5	100PPM TLV TWA ACGIH	50.0	200
STYRENE MONOMER, (4)	100-42-5	0.58	50PPM TLV TWA ACGIH	4.5	200
MINERAL SPIRITS 75	8052-41-3	10	200PPM TLV TWA ACGIH	2.0	200
1-METHYLNAPHTHA	8050-30-6	0.04	30PPM TLV TWA ACGIH	0.3	200
METHYL ETHYL KETONE	78-93-3	10	200PPM TLV TWA ACGIH	70.0	200

SECTION III - PHYSICAL DATA

BOILING RANGE: 35-150 °C VAPOR DENSITY: 0.86 (AIR = 1)
EVAPORATION RATE: SLOWER THAN WATER % VOLATILE VOLUME: 40.00 WT/GAL: 1.00

Conforms to BAAQMD Reg 8 Rule 19, Para 302.2
Air Dry Coating V.O.C. 340 gms/l (2.8#/gal)

MSDS - 200
1002

X - 435

MATERIAL SAFETY DATA SHEET
For Coatings, Resins and Related Materials

06/15/88

SECTION I - PRODUCT IDENTIFICATION

Manufacturer: DAMPNEY CO INC 85 PARIS ST EVERETT MA 02149	Information Phone: 617 389 2805 Emergency Phone: 617 389 2805
Product Class: INDUSTRIAL COATING	Hazard Ratings: Health - 1
Trade Name : <u>ACTIVATOR</u> ←	none -> extreme Fire - 0
Product Code : <u>772/782B</u>	0 ---> 4 Reactivity - 1
C.A.S. Number: N/A	

SECTION II - HAZARDOUS INGREDIENTS

Ingredients	CAS #	Weight %	Exposure Limits	VP
			ACGIH/TLV	OSHA/P
			ppm	mm HG
EPOXY LIQUID	25068-38-6	100.	0	0

SECTION III - PHYSICAL DATA

Boiling Range: 392 - 392 Deg. F	Vapor Density: Heavier than Air.
Ev Rate: n-Butyl Acetate	Liquid Density: Heavier than Water.
Volatiles volume: 0.0 %	Wgt per gallon: 9.7 Pounds.
Appearance: CLEAR LIQUID	

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flammability Class: Flash Point: LEL :

-EXTINGUISHING MEDIA:
FOAM,ALCOHOL FOAM,CO2,DRY CHEMICAL.WATER FOG MAY BE INEFFECTIVE BUT SHOULD BE USED TO COOL FIRE-EXPOSED CONTAINERS TO PREVENT PRESSURE BUILD UP AND POSSIBLE AUTO-IGNITION OR EXPLOSION WHEN EXPOSED TO EXTREME HEAT.

-SPECIAL FIREFIGHTING PROCEDURES:
USE FULL PROTECTION EQUIPMENT INCLUDING SELF CONTAINED BREATHING APPARATUS FOR RESPIRATORY PROTECTION IN FIGHTING FIRES IN INCLOSED OR CONFINED SPACES, OR AS OTHERWISE NEEDED. MINIMIZE BREATHING GASES,VAPORS,FUMES OR DECOMPOSITION PRODUCTS.

-UNUSUAL FIRE & EXPLOSION HAZARDS:
DURING EMERGENCY CONDITIONS, OVEREXPOSURE TO DECOMPOSITION PRODUCTS MAY CAUSE A HEALTH HAZARD. SYMPTOMS MAY NOT BE IMMEDIATELY APPARENT. OBTAIN MEDICAL ATTENTION.

SECTION V - HEALTH HAZARD DATA

-PERMISSIBLE EXPOSURE LEVEL:

TLV NOT ESTABLISHED

-EFFECTS OF OVEREXPOSURE:

PRIMARY ROUTE(S) OF ENTRY:

(X) DERMAL () INHALATION () INGESTION

MATERIAL SAFETY DATA SHEET
FOR COATINGS, RESINS AND RELATED MATERIALS

X-7509

Ameron Protective Coatings
201 North Berry Street
Brea, CA 92622-1020

Information: (714) 529-1951 (H. Kline)
Emergency: (800) 424-9300 (CHEMTEC)
Preparation Date: 04-23-92
Supersedes: 03-26-92

SECTION 1 -- PRODUCT IDENTIFICATION

TRADE NAME: AMERCOAT
PRODUCT CLASS: ALIPHATIC POLYURETHANE
PRODUCT NO: 450HS RESN

FOR INDUSTRIAL USE ONLY
HEALTH: WARNING

SECTION 2 -- HAZARDOUS INGREDIENTS

INGREDIENTS	CAS NO.	% BY WT	EXPOSURE LIMITS				UP ppm F	TOXICITY	
			OSHA PEL ppm	OSHA PEL mg/m3	ACGIH TLV (TWA) ppm	ACGIH TLV (TWA) mg/m3		LD50 g/kg	LCSO ppm
+ TITANIUM DIOXIDE	13463-67-7	(35	dna	5	dna	5	na	24	6820
+ IRON OXIDE	1309-37-1	(20	dna	5	dna	5	na	dna	dna
CALCIUM SILICATE	13983-17-0	(15	dna	10	dna	10	na	dna	dna
SILICA (QUARTZ)**	14808-60-7	(15	dna	0.1	dna	0.1	na	dna	dna
(Trace contaminants ppm: Ba 15; Pb**1) Cd**0.5; As**, Sb, Ag(0.2); Se, Hg(0.1)									
* Cancer or Suspected Cancer Agent: FEDOSHA: NO			NTP: NO		ACGIH: NO		IARC: YES,2A		
BUTYL ACETATE (CERCLA)	123-86-4	11.11	150	710	150	710	10	14	2000
METHYL N-AMYL KETONE	110-43-0	9.02	100	465	50	235	4	1.6	4000
OXOHXYL ACETATE	88230-35-7	7.41	dna	dna	dna	dna	0.7	10	dna
(Hfs TLV 50ppm)									
+ CARBON BLACK	1333-86-4	(5	dna	3.5	dna	3.5	na	dna	dna
(PMA'S (0.1X)									
+ MONAZO ORGANIC YELLOW	dna	(5	dna	5	dna	5	na	dna	dna
CYCLOALIPHATIC HYDROCARBON SOLVENT	119-64-2	(5	dna	dna	dna	dna	dna	2.8	dna
+ PHTHALO BLUE (SARA)	147-14-8	(5	dna	dna	dna	0.2	na	6.4	dna
(AS COPPER FUME) COPPER (11X)									
XYLENE (SARA)	1330-20-7	1.04	100	435	100	435	6.6	4.3	6700
(STEL 150ppm, Benzene** 0-900ppm)									
LEAD SILICO CHROMATE* (SARA;CERCLA)	11113-70-5	(5	dna	dna	dna	0.05	na	dna	dna
(AS PB** AND CR**)									
* Cancer or Suspected Cancer Agent: FEDOSHA: NO			NTP: YES		ACGIH: YES,A2		IARC: YES,1		
BENZENE* (SARA;CERCLA)	71-43-2	0.11	10	809	10	30	75	3.4	10000
* Cancer or Suspected Cancer Agent: FEDOSHA: YES			NTP: YES		ACGIH: YES,A1		IARC: YES,1		

Material Safety Data Sheet

Grove MSDS 274

Lo Hi #2 Low Temp Grease

Manufacturer's Name	G-C LUBRICANTS COMPANY	Emergency Telephone No.	800/424-9300
Address	977 Bransten Road San Carlos, CA 94070	Other Information Calls	415/592-1050
Signature of Person Responsible for Preparation		Date Prepared	September 10, 1986

SECTION 1 - IDENTITY

Common Name: (used on label) (Trade Name & Synonyms)	LO HI #2	Cas No.	61790-48-5
Chemical Name	Mixture	Chemical Family	Hydrocarbon
Formula	Mixture		

SECTION 2 - HAZARDOUS INGREDIENTS

Principal Hazardous Component(s) (chemical & common name(s))	%	Threshold Limit Value (ppm)
Barium Petroleum Sulfonate	CAS 61790-48-5	

SECTION 3 - PHYSICAL & CHEMICAL CHARACTERISTICS (Fire & Explosion Data)

Boiling Point	> 400°F	Specific Gravity (H ₂ O=1)	0.942	Vapor Pressure (mm Hg)	< 1mm
Percent Volatile by Volume (%)	Unknown	Vapor Density (Air = 1)	> 1	Evaporation Rate (Butyl acetate = 1)	< 1
Solubility in Water	Negligible	Reactivity in Water	Nonreactive		
Appearance and Odor	Amber grease.				

Flash Point	315°F	Flammable Limits in Air % by Volume	Lower Unk	Upper Unk	Extinguisher Media	Carbon Dioxide Dry chemical	Auto-Ignition Temperature	Unknown
Special Fire Fighting Procedures	Use NIOSH/MSA approved self-contained breathing apparatus							

when this material is involved in a fire.

Unusual Fire and Explosion Hazards Combustible liquid. This material should be treated as an oil when exposed to fire. Overpressurization will occur if the container is exposed to fire. Use water to cool fire-exposed containers.

Material Safety Data Sheet

May be used to Comply with
OSHA's Hazard Communication Standard 29 CFR 1910.
Standard must be consulted for specific requirements

U.S. Department of Labor

Occupational Safety and Health Administration
(Non-Mandatory Form) Form Approved OMB No. 1218-0072

X-4093

Identity (As Used On Label and List)

206	HEAVY DUTY MULTY-PURPOSE CLEANER	NOTE: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.
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Section I—Manufacturer's Name (Address, Street, City, State, & Zip Code)		HAZARD RATING			
AMERICAN RESEARCH INC 5950 Washington St Hollywood FL 33023	Emergency Telephone Number	HEALTH	1	0 • Minimal 1 • Slight 2 • Moderate 3 • Serious 4 • Extreme	
	INFOTRAC 1-800-535-6063	FLAMMABILITY	0		
	Telephone Number for Information	REACTIVITY	2		1
	(305) 961-3456				
Date Prepared	Protective Equipment:				
Revised: 2/18/91	Goggles, Gloves				

Section II—Hazardous Ingredients / Identity Information		OSHA PEL	ACGIH TLV	Other Limits Recommended	% (optional)
Hazardous Components (Specify Chemical Identity, Common Names)					
Sodium Metasilicate CAS #6834-92-0		15 mg/M3	10 mg/M3	N/A	
2-Butoxyethanol CAS#111-76-2 (Butyl Cellosolve)		50 ppm (skin)	25 ppm (skin)	N/A	3.7
Methanol CAS #67-5-61		200 ppm	200 ppm	N/A	1.7
subject to reporting requirement sec. 313 of SARA title III of 40 CFR 372.					

Section III—Physical Chemical Characteristics

Boiling Point	212°F	Specific Gravity (WATER =1)	1.030
Vapor Pressure	ND	Melting Point	N/A
Vapor Density	ND	Evaporation Rate	ND
Solubility in Water	Complete		
Appearance and Odor	Violet liquid, characteristic odor		

Section IV—Fire and Explosion Hazard Data

Flash Point	Flammable Limits	LEL	UEL
>200°F TCC	None		

Extinguishing Media
carbon dioxide, dry chemical, foam

Special Fire Fighting Procedures

Use self-contained breathing apparatus.

Unusual Fire and Explosion Hazards

None



300 Hanley Industrial Ct. • St. Louis, MO 63144-1400
 an **EMT** company • 314-844-1000

CARBOLINE CO. MATERIAL SAFETY DATA SHEET

SECTION I - PRODUCT: THINNER 2000 (0582S1NL)
Date: 06/03/92 Replaces 08/16/90 - VLP

CHEMTREC TRANSPORTATION EMERGENCY PHONE NO.: 800-424-9300
PITTSBURGH POISON CONTROL CENTER HEALTH EMERGENCY NO.: 412-681-6669

SECTION II - HAZARDOUS INGREDIENTS EXPOSURE LIMITS

CHEMICAL NAME	(A)	(B)	(C)	(D)	(E)
XYLENE	1330-20-7	100%	100 PPM	150 PPM	NE

CHEMICAL NAME	HAZARDOUS INGREDIENTS (F)	ADDITIONAL DATA (G)
XYLENE	4300MG/KG RAT, ORAL 15000 PPM/4HRS RAT, INHALATION	NO/YES/1,2,3

TABLE (A) CAS NUMBER (B) LESS THAN WT (C) TLV-TWA (D) STEL (E) CEILING (F) TOXICITY DATA (LD50/Route, LC50/Route) (G) SARA 302/SARA 313/ SARA 311-312 CATEGORIES/CERCLA. NE = not established, NR = not required, NO = no. Color Pigment Mixture may contain Iron Oxides, Titanium Dioxide, Carbon Black, and other particulates not otherwise regulated in varying amounts depending on color of product.

HMIS CLASSIFICATION: B2 -- D2B
HMIS/NFPA CLASSIFICATION: HEALTH 2, FLAMMABILITY 3, REACTIVITY 0,
PERSONAL PROTECTION CODE G, NFPA FIRE FIGHTING PHASE 4

SECTION III - PHYSICAL DATA:

BOILING RANGE: 279F(137C)-284F(140C). VAPOR DENSITY: Heavier than air.
EVAPORATION RATE: Slower than ether. VOLATILE BY WEIGHT 100 %. VOLATILE BY VOLUME: 100 %. PRODUCT WT/GAL: 7.2 LBS/U.S.GAL. 0.87 sp gr.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA:

FLAMMABILITY CLASSIFICATION: FLASH POINT: 81 F(27C) (Setaflash) LEL 1.0 % UEL 7.0 %.
OSHA-FLAMMABLE LIQUID CLASS IC, DOT-PAINT RELATED MATERIAL FLAMMABLE UN1263, CANADIAN TDGA: PAINT RELATED MATERIAL FLAMMABLE CLASS 3 DIVISION 3
EXTINGUISHING MEDIA: Dry Chemical, Foam, Carbon Dioxide, Water Fog.
UNUSUAL FIRE AND EXPLOSION HAZARDS: Vapors are heavier than air and will accumulate. Vapors will form explosive concentrations with air. Vapors travel long distances and will flashback. Use mechanical ventilation when necessary to keep percent vapor below the "Lower Explosion Level" (LEL).
SPECIAL FIRE FIGHTING PROCEDURES: Evacuate hazard area of unprotected personnel. Use a NIOSH approved self-contained breathing unit and complete body protection. Cool surrounding containers with water in case of fire exposure.

SECTION V - HEALTH HAZARD DATA:

INHALATION: Harmful if inhaled, may affect the brain or nervous system,

Carboline

390 Hardy Industrial Ct. • St. Louis, MO 63144-1409
an **PPG** company • 314-844-1000

X 00577 *

CARBOLINE CO. MATERIAL SAFETY DATA SHEET

PAGE 1 of 3

SECTION I - PRODUCT: THINNER 2000 (0502B1NL)
Date: 06/03/92 Replaces 09/16/90 - VLF

CHEMTRAC TRANSPORTATION EMERGENCY PHONE NO.: 800-424-9300
PITTSBURGH POISON CONTROL CENTER HEALTH EMERGENCY NO.: 412-681-6669

SECTION II - HAZARDOUS INGREDIENTS EXPOSURE LIMITS

CHEMICAL NAME	(A)	(B)	(C)	(D)	(E)
XYLENE	1330-20-7	100%	100 PPM	150 PPM	NR

CHEMICAL NAME	HAZARDOUS INGREDIENTS (F)	ADDITIONAL DATA (G)
XYLENE	4300MG/KG RAT, ORAL 15000 PPM/4HRS RAT, INHALATION	NO/YES/1,2,3

TABLE (A) CAS NUMBER (B) LESS THAN WT (C) TLV-TWA (D) STEL (E) CEILING (F) TOXICITY DATA (LD50/Route, LC50/Route) (G) SARA 302/SARA 313/ SARA 311-312 CATEGORIES/CHERCLA. NR = not established, NR = not required, NO = no. Color Pigment Mixture may contain Iron Oxides, Titanium Dioxide, Carbon Black, and other particulates not otherwise regulated in varying amounts depending on color of product.

WHMIS CLASSIFICATION: B2 -- D2B
HMIS/NFPA CLASSIFICATION: HEALTH 2, FLAMMABILITY 3, REACTIVITY 0,
PERSONAL PROTECTION CODE G, NFPA FIRE FIGHTING PHASE 4

SECTION III - PHYSICAL DATA:

BOILING RANGE: 279F(137C)-284F(140C). VAPOR DENSITY: Heavier than air.
EVAPORATION RATE: Slower than ether. VOLATILE BY WEIGHT 100 %. VOLATILE BY VOLUME: 100 %. **PRODUCT WT/GAL: 7.2 LBS/U.S.GAL. 0.87 sp gr.**

SECTION IV - FIRE AND EXPLOSION HAZARD DATA:

FLAMMABILITY CLASSIFICATION: FLASH POINT: 81 F(27C) (Setaflash) LEL 1.0 % UEL 7.0 %.

OSHA-FLAMMABLE LIQUID CLASS IC, DOT-PAINT RELATED MATERIAL FLAMMABLE UN1263, CANADIAN TDGA: PAINT RELATED MATERIAL FLAMMABLE CLASS 3 DIVISION 3

EXTINGUISHING MEDIA: Dry Chemical, Foam, Carbon Dioxide, Water Fog.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Vapors are heavier than air and will accumulate. Vapors will form explosive concentrations with air. Vapors travel long distances and will flashback. Use mechanical ventilation when necessary to keep percent vapor below the "Lower Explosion Level" (LEL).

SPECIAL FIRE FIGHTING PROCEDURES: Evacuate hazard area of unprotected personnel. Use a NIOSH approved self-contained breathing unit and complete body protection. Cool surrounding containers with water in case of fire exposure.

SECTION V - HEALTH HAZARD DATA:

INHALATION: Harmful if inhaled, may affect the brain or nervous system,

1. MATERIAL AND MANUFACTURER IDENTIFICATION

Product name	TRIM® CLEAR
Material type	Water-miscible cutting and grinding fluid concentrate
Classification/Synonym(s)	Chemical fluid/Synthetic fluid
Product use	Coolant and lubricant in metal removal processes
Manufacturer address	MASTER CHEMICAL CORPORATION 501 West Boundary PO Box 220 Perrysburg, OH 43551
Emergency telephone number	(419) 874-7902
Telex number	510-600-1600 Answerback: MASTER CHEM UD
Easylink number	62897774

2. REGULATORY INFORMATION

Department of Transportation	DOT Hazard Class: None TRIM® CLEAR is not classified as a hazardous material by DOT.
Resource Conservation and Recovery Act	EPA Hazardous Waste Number(s): None TRIM® CLEAR is not classified as a hazardous waste by EPA.
Toxic Substances Control Act	All TRIM® CLEAR ingredients are listed on the TSCA Inventory of Chemical Substances.

3. INGREDIENT INFORMATION

The exact chemical identities and percentages of the raw materials used in TRIM® CLEAR are trade secrets. This information is being withheld as provided for in the Occupational Safety and Health Administration's Hazard Communication Rule (29 CFR 1910.1200).

Boiling point (at 760 mm Hg)219°F
Vapor pressure (psi)<1
Vapor density (Air=1)not determined
Solubility in water100%
AppearanceClear, colorless liquid
 with mild, pleasant odor.

Specific gravity (H₂O=1)1.10
Percent volatiles
by volume60.03%
Evaporation rate1
(butyl acetate =1)
pH of concentrate10.2
pH of 2% solution9.5

5. FIRE AND EXPLOSION HAZARD DATA

Flash point (test method) None (COC & TCC)
Flammable limits Not determined
Extinguishing media As appropriate for the surrounding fire
Special fire fighting procedures None
Unusual fire and explosion hazards None

6. HEALTH HAZARD DATA

Threshold limit value None established by ACGIH or OSHA
Acute effects of overexposure

Eye contact	Transient irritation
Skin contact	Possible defatting, nonirritant, nonsensitizer
Inhalation	Nontoxic
Ingestion	Nontoxic
Skin absorption	Nontoxic

Chronic effects of overexposure None currently known

The National Toxicology Program Annual Report on Carcinogens does not list TRIM® CLEAR or any of its ingredients.
 The International Agency for Research on Cancer Monographs have not found TRIM® CLEAR or any of its ingredients to be potential carcinogens.
 The Occupational Safety and Health Administration does not regulate TRIM® CLEAR or any of its ingredients as potential carcinogens.

Signs and symptoms of exposure None
Medical conditions generally aggravated by exposure None known
Emergency and first aid procedures

Eyes	Flush immediately with cool, clean water for at least 15 minutes.
Skin	Wash with mild soap and warm water.
Inhalation	Remove to fresh air.
Ingestion	If large quantities are ingested, pump stomach.



1343 ?

MATERIAL SAFETY DATA SHEET

97367 (4-85)

MSDS NUMBER 52,130-3

PAGE 1

24 HOUR EMERGENCY ASSISTANCE			GENERAL MSDS ASSISTANCE		
SHELL: 713-473-9461 CHEMTREC: 800-424-9300			SHELL: 713-241-4819		
ACUTE HEALTH + 2	FIRE 2	REACTIVITY 0	HAZARD RATING	LEAST - 0 HIGH - 3	SLIGHT - 1 EXTREME - 4
*For acute and chronic health effects refer to the discussion in Section III					



SECTION I		NAME
PRODUCT	SHELL	
CHEMICAL NAME	KEROSENE	
CHEMICAL FAMILY	PETROLEUM HYDROCARBON	
SHELL CODE	23500	

SECTION II-A			
NO.	PRODUCT/INGREDIENT	CAS NUMBER	PERCENT
P	SHELL JET A	8008-20-6	100

SECTION II-B			
ACUTE TOXICITY DATA			
NO.	ACUTE ORAL LD50	ACUTE DERMAL LD50	ACUTE INHALATION LC50
P	NOT AVAILABLE		

SECTION III - HEALTH INFORMATION

THE HEALTH EFFECTS NOTED BELOW ARE CONSISTENT WITH REQUIREMENTS UNDER THE OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200).

EYE CONTACT
BASED ON ESSENTIALLY SIMILAR PRODUCT TESTING LIQUID IS PRESUMED TO BE MINIMALLY IRRITATING TO THE EYES. PROLONGED AND REPEATED CONTACT MAY BE MORE IRRITATING.

SKIN CONTACT
BASED ON ESSENTIALLY SIMILAR PRODUCT TESTING LIQUID IS PRESUMED TO BE MODERATELY IRRITATING TO THE SKIN. PROLONGED AND REPEATED CONTACT CAN CAUSE DEFATTING AND DRYING OF THE SKIN WHICH MAY RESULT IN SEVERE SKIN IRRITATION AND DERMATITIS.

INHALATION
INHALATION OF MISTS MAY BE IRRITATING TO THE UPPER RESPIRATORY TRACT. HIGH CONCENTRATIONS MAY RESULT IN CNS DEPRESSION AND/OR CHEMICAL PNEUMONITIS.

INGESTION
INGESTION OF PRODUCT MAY RESULT IN VOMITING; ASPIRATION (BREATHING) OF VOMITUS INTO THE LUNGS MUST BE AVOIDED AS EVEN SMALL QUANTITIES MAY RESULT IN ASPIRATION PNEUMONITIS.

SIGNS AND SYMPTOMS
IRRITATION AS NOTED ABOVE. EARLY TO MODERATE CNS (CENTRAL NERVOUS SYSTEM) DEPRESSION MAY BE EVIDENCED BY GIDDINESS, HEADACHE, DIZZINESS AND NAUSEA; IN EXTREME CASES, UNCONCIOUSNESS AND DEATH MAY OCCUR. ASPIRATION PNEUMONITIS MAY BE EVIDENCED BY COUGHING, LABORED BREATHING AND CYANOSIS

52130-3

8

9

630 WEST WASHINGTON BLVD.
 CHICAGO, ILLINOIS 60606
 (312) 454-1000 (TELEX 25-3556)

MATERIAL SAFETY DATA SHEET

I PRODUCT IDENTIFICATION

Manufacturer's Name	Van Straaten Chemical Company	Telephone No. (312) 454-1000
Address	630 West Washington Blvd., Chicago, Illinois 60606	
TRADE NAME	Vantrol 810	

SYNONYMS

II HAZARDOUS INGREDIENTS

Material or Component	%	CAS No.	Hazard Data
Petroleum Oil	10-30	64742-52-5	TLV=5mg/M ³
Triethanolamine	1-5	102-71-6	
Lard Oil	10-30	8016-28-2	
Hexahydro ,3,5-tris(2-hydroxyethyl)-s-triazine	1-5	4719-04-4	Oral LD ₅₀ (rat) = 580mg/kg-
Contains no other ingredients now known to be hazardous as defined in .			
Illinois Public Act 83.240, OSHA 29 CFR 1910.1000 (subpart z), OSHA 29 1910.1200,			
and the National Fire Protection Association List of Hazardous Substances.			

III PHYSICAL DATA

Boiling Point	NA	Melting Point	NA
Specific Gravity(H ₂ O=1)	1.005 - 1.022	Vapor Pressure	Negligible
Vapor Density (Air=1)	Unknown	Solubility in H ₂ O,% By Wt.	100%
% Volatiles by Vol.	Negligible	Evaporation Rate(Butyl Acetate=1)	<1
Appearance and Odor	Dark brown, transparent oil; perfumed odor	pH 20/1:	9.2 - 9.5; 40/1: 9.0 - 9.3

NUDEX INC. MATERIAL SAFETY DATA SHEET

American Company

PAGE 1
EFFECTIVE DATE 05/15/86
RUN DATE 05/21/86

ETPI4901
PLA 160109 LUBRICANTS

NUDEX INC.
OILS

TURNER PLACE, P.O. BOX 369, PISCATAWAY, N.J. 08854

EMERGENCY TELEPHONE NO (201)763-7173

SECTION 01 IDENTIFICATION OF PRODUCT

TRADE NAME & SYNONYMS: SANDEROL** 500 OIL
CHEMICAL NAME & SYNONYMS: MIXTURE
CHEMICAL FAMILY: ESTERS
MOLECULAR FORMULA: NOT APPLICABLE
** REGISTERED US. TRADEMARK OF NUDEX INC.

MSDS/PRODUCT NUMBER: 7953813

MOLECULAR WEIGHT: N/A

SECTION 02 HAZARDOUS COMPONENTS OF MIXTURES

NONE

SECTION 03 PHYSICAL DATA

APPEARANCE AND ODOR: LIGHT AMBER OIL, SLIGHT MILD ODOOR.

BOILING POINT: >660F
VAPOR PRESSURE: <0.02 MM HG @ 300F
VAPOR DENSITY: NOT VOLATILE
SOLUBILITY IN WATER: NEGLIGIBLE

MELTING POINT: NOT APPLICABLE
SPECIFIC GRAVITY: LESS THAN 1
PERCENT VOLATILE: NOT VOLATILE
EVAPORATION RATE: NOT VOLATILE

SECTION 04 FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: >450F COC
FIRE EXTINGUISHING MEDIA: WATER SPRAY, FOAM, CARBON DIOXIDE OR DRY CHEMICAL.
SPECIAL FIRE FIGHTING PROCEDURE: BURNING WILL PRODUCE TOXIC FUMES. WEAR SELF-CONTAINED BREATHING APPARATUS AND FULL TURN-OUT GEAR TO FIGHT FIRE. AVOID SPREADING LIQUID AND FIRE BY WATER FLOODING.

UNUSUAL FIRE AND EXPLOSION HAZARDS: EXPOSURE TO HEAT BUILDS UP PRESSURE IN CLOSED CONTAINERS. COOL WITH WATER SPRAY.

SECTION 05 HEALTH HAZARD DATA

ACGIH TLV (OSHA PEL): MIXTURE--SEE SECTION 2.
EFFECTS OF OVER EXPOSURE: LOW ORAL AND DERMAL TOXICITY. MISTS OR FUMES FROM EXCESSIVE HEATING MAY CAUSE IRRITATION, NAUSEA, VOMITING.

EMERGENCY 1ST AID PROCEDURE: CONTACT - WASH SKIN WITH SOAP AND WATER; FLUSH EYES WITH WATER FOR 15 MINUTES. CALL A PHYSICIAN IF IRRITATION DEVELOPS. INHALATION - REMOVE TO FRESH AIR, GIVE ARTIFICIAL RESPIRATION OR OXYGEN IF NECESSARY. INGESTION - INDUCE VOMITING IF VICTIM IS CONSCIOUS. CALL A PHYSICIAN. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

THIS INFORMATION IS FURNISHED WITHOUT WARRANTY, REPRESENTATION, INDUCEMENT OR LICENSE OF ANY KIND, EXCEPT THAT IT IS ACCURATE TO THE BEST OF NUDEX INC.'S KNOWLEDGE OR OBTAINED FROM SOURCES BELIEVED BY NUDEX INC. TO BE ACCURATE, AND NUDEX INC. DOES NOT ASSUME ANY LEGAL RESPONSIBILITY FOR USE OR RELIANCE UPON SAME. CUSTOMERS ARE ENCOURAGED TO CONDUCT THEIR OWN TESTS. BEFORE USING ANY PRODUCT READ ITS LABEL.



MATERIAL SAFETY DATA SHEET

97367 (4-85)

MSDS NUMBER

67,520-4

PAGE 1

24 HOUR EMERGENCY ASSISTANCE			GENERAL MSDS ASSISTANCE			
SHELL: 713-473-9461 CHEMTREC: 800-424-9300			SHELL: 713-241-4819			
ACUTE HEALTH +	FIRE	REACTIVITY	HAZARD RATING	LEAST - 0	SLIGHT - 1	MODERATE - 2
+	1	0		HIGH - 3	EXTREME - 4	
*For acute and chronic health effects refer to the discussion in Section III						<p>BE SAFE READ OUR PRODUCT SAFETY INFORMATION ... AND PASS IT ON <small>(PRODUCT LIABILITY LAW REQUIRES IT)</small></p>

SECTION I	NAME
PRODUCT	SHELL OMALA OIL 460 OMALA (R) OIL 460
CHEMICAL NAME	MIXTURE (SEE SEC. II-A)
CHEMICAL FAMILY	PETROLEUM HYDROCARBON; INDUSTRIAL OIL
SHELL CODE	65108

SECTION II-A		PRODUCT/INGREDIENT	
NO.	COMPOSITION	CAS NUMBER	PERCENT
P	SHELL OMALA OIL 460	MIXTURE	100
1	SOLVENT REFINED, HYDROTREATED, HEAVY PARAFFINIC DISTILLATE	64742-54-7	5-10
2	SOLVENT REFINED, HYDROTREATED RESIDUAL OIL	64742-57-0	90-95
3	MINOR ADDITIVES	MIXTURE	<3

SECTION II-B		ACUTE TOXICITY DATA	
NO.	ACUTE ORAL LD50	ACUTE DERMAL LD50	ACUTE INHALATION LC50
P	NOT AVAILABLE		

BASED UPON DATA AVAILABLE TO SHELL, COMPONENT 3 IN THIS PRODUCT IS NOT HAZARDOUS UNDER OSHA HAZARD COMMUNICATION (29 CFR 1910.1200).

SECTION III HEALTH INFORMATION

THE HEALTH EFFECTS NOTED BELOW ARE CONSISTENT WITH REQUIREMENTS UNDER THE OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200).

EYE CONTACT

BASED ON COMPONENT INFORMATION PRODUCT IS NO MORE THAN MINIMALLY IRRITATING TO THE EYES.

SKIN CONTACT

BASED ON COMPONENT INFORMATION PRODUCT IS NO MORE THAN MILDLY IRRITATING TO THE SKIN. PROLONGED AND REPEATED CONTACT CAN RESULT IN VARIOUS SKIN DISORDERS SUCH AS DERMATITIS, FOLLICULITIS OR OIL ACNE.

INHALATION

INHALATION OF VAPORS (GENERATED AT HIGH TEMPERATURES ONLY) OR OIL MIST FROM THIS PRODUCT MAY CAUSE MILD IRRITATION OF THE UPPER RESPIRATORY TRACT.

INGESTION

BASED ON COMPONENT INFORMATION THIS PRODUCT IS NO MORE THAN SLIGHTLY TOXIC IF SWALLOWED.

TEXACO INC.
INDUSTRIAL HYGIENE, TOXICOLOGY, AND MATERIALS
SAFETY DATA SHEET

Grove MSDS # 8524

Motor Oil, 10W-40, Texaco Havoline Supreme

NOTE: NO REPRESENTATION IS MADE AS TO THE ACCURACY OF THE DATA HEREIN. SEE PAGE 7 FOR CONDITIONS UNDER WHICH DATA ARE FORWARDED.

Trade Name and Synonyms
01814 HAVOLINE SUPREME SAE 10W-40

Manufacturer's Name
Texaco Inc.

Emergency Telephone No.
(914) 831-3400 ext. 204

Address
P.O. Box 509 Beacon, NY 12508

Chemical Name and/or Family or Description
Havoline Motor Oils

THIS PRODUCT IS CLASSIFIED AS: X NOT HAZARDOUS;
 HAZARDOUS BY DEFINITION NO.(S) ON ATTACHED EXPLANATION SHEETS

WARNING STATEMENT:
WARNING! AVOID SKIN CONTACT WITH USED MOTOR OILS

OCCUPATIONAL CONTROL PROCEDURES

Protective Equipment (Type)

Eyes: Chemical type goggles or face shield optional.

Skin: Exposed employes should exercise reasonable personal cleanliness; this includes cleansing exposed skin areas several times daily with soap and water, and laundering or dry cleaning soiled work clothing at least weekly.

Inhalation: None required if exposures are within permissible concentrations; see below.

Ventilation: Normal

Permissible Concentrations:

Air: 5 mg/cubic meter of air for mineral oil mist averaged over an 8 hour daily exposure (ACGIH, 1984-85).

EMERGENCY AND FIRST AID PROCEDURES

First Aid

Eyes: As with most foreign materials, should eye contact occur, flush eyes with plenty of water.

Skin: None considered necessary.

Ingestion: None considered necessary.

Inhalation: None considered necessary.

Other Instructions: None.

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



UNION CARBIDE CORPORATION
Specialty Chemicals Division
MATERIAL SAFETY DATA SHEET



0450

EFFECTIVE DATE: 07/15/88

Union Carbide urges each customer or recipient of this MSDS to study it carefully to become aware of and understand the hazards associated with the product. The reader should consider consulting reference works or individuals who are experts in ventilation, toxicology, and fire prevention, as necessary or appropriate to use and understand the data contained in this MSDS.

To promote safe handling, each customer or recipient should: (1) notify its employees, agents, contractors and others whom it knows or believes will use this material of the information in this MSDS and any other information regarding hazards or safety; (2) furnish this same information to each of its customers for the product; and (3) request its customers to notify their employees, customers, and other users of the product of this information.

I. IDENTIFICATION

PRODUCT NAME: UCON Heat Transfer Fluid 500

CHEMICAL NAME: Mixture

CHEMICAL FAMILY: Polyalkylene Glycol

FORMULA: Trade Secret

MOLECULAR WEIGHT: Mixture

SYNONYMS: None

CAS # and TRADE SECRET

CAS NAME: Polyalkylene glycol and an amine

II. PHYSICAL DATA (Determined on typical material)

BOILING POINT, 760 mm Hg: Decomposes at 267 C (513 F) FREEZING POINT: POUR POINT: -54 C (-65 F)

SPECIFIC GRAVITY (H₂O = 1):
1.039 at 20/20 C

VAPOR PRESSURE AT 20°C:
< 0.01 mm Hg

VAPOR DENSITY (air = 1): > 1

SOLUBILITY IN WATER by wt: 100

EVAPORATION RATE
(Butyl Acetate = 1): Nil

APPEARANCE AND ODOR
Clear, amber liquid; slightly sweet odor

III. INGREDIENTS

<u>MATERIAL</u>	<u>%</u>	<u>TLV (Units)</u>	<u>HAZARD</u>
Polyalkylene Glycol plus a Trade Secret Additive	100	None established	See Section V

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UCON and UNION CARBIDE are trademarks of Union Carbide Corporation, USA
EMERGENCY PHONE NUMBER: 1-800-UCC-HELP (Number available at all times)

UNION CARBIDE CORPORATION
Specialty Chemicals Division
39 Old Ridgebury Road, Danbury, CT. 06817-0001

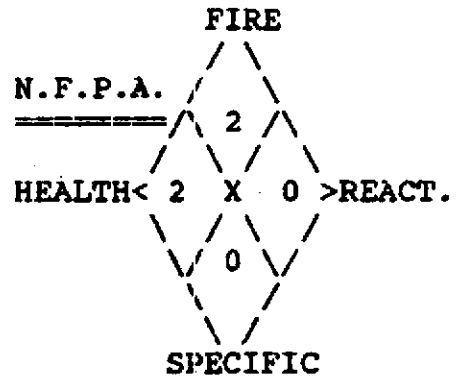
TENNANT

MSDS-1009

MATERIAL SAFETY DATA SHEET

Issue Date: 11/21/88

TENNANT COMPANY
701 NORTH LILAC DRIVE
MINNEAPOLIS, MN 55440



EMERGENCY PHONE NUMBER:

Emergency: 800-424-9300 (24 hrs.)
 District of Columbia: 483-7616 (24 hrs.)
 Tennant Company: 612-540-1381 (days)
 612-544-5163 (nights)
 612-738-9734 (nights)
 OSHA: CANUTEC 613-996-6666 (24hrs.)

I. IDENTIFICATION

PRODUCT NAME/NUMBER: **[REDACTED]** 520 SOLVENT

PRODUCT NUMBER: 08529

USUAL USE: Clean Up Solvent

PRODUCT FAMILY: Solvent

MODE OF TRANSPORTATION

UN #: NA1993

HAZARD CLASSIFICATION: Combustible Liquid

SHIPPING NAME: Combustible Liquid N.O.S.

II. PHYSICAL DATA

BOILING POINT: 295F. /146C.

FREEZE POINT: N.A. /N.A.

DENSITY: 0.88g/ml

% VOLATILE: 100% by wt

SOLUBILITY IN WATER: Not Soluble

VAPOR PRESSURE: 2.9 mm Hg @ 20 Deg.C.

TOXICITY THRESHOLD: N/A

pH: N.A.

PHYSICAL FORM: Liquid

VAPOR DENSITY: Heavier, THAN AIR

APPEARANCE AND ODOR: Clear/Ester-like

WATER/OIL DISTRIBUTION COEFFICIENT: N.A.

EVAPORATION RATE: Slower, THAN n-BUTYL ACETATE

ENVIRONMENTAL IMPACT: N.A.

ST

N/A - N.A. or N/A denotes Not Available

Post-It™ brand fax transmittal memo 7671 # of pages > 5

To: Paula Gahir	From:
Co.:	Co. Tennant
Dept.:	Phone #
Fax # 370-420-2151	Fax #

1527-PAN-0A

TENNANT
=====

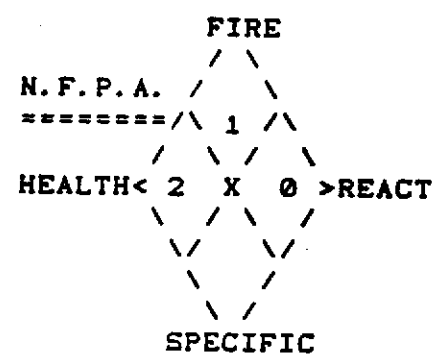
MATERIAL SAFETY DATA SHEET
=====

Issue Date: 07/24/87

TENNANT COMPANY
701 NORTH LILAC DRIVE
MINNEAPOLIS, MN 55440

EMERGENCY PHONE NUMBER:

612-540-1381
612-934-3435
612-544-5163



I. IDENTIFICATION

PRODUCT NAME/NUMBER: 7200 Thick Coat Resurfacer Part A
CHEMICAL FAMILY: Epoxy Resin
DEPARTMENT OF TRANSPORTATION HAZARD CLASSIFICATION: Not regulated
SHIPPING NAME: N.A.

PART NUMBER: 08657

U.N. #: N.A.

II. INGREDIENTS

ITEM	CAS#	WT. %	OSHA	TLVs	
			PEL	TWA	STEL
Bisphenol A-Epichlorohydrin Resin	25068-38-6	80-90	N.A.	N.A.	N.A.
Aliphatic Polyglycidal Ether	26142-30-3	10-20	N.A.	N.A.	N.A.
Titanium Dioxide	13463-67-1	1-10	15 mg/m3	N.A.	N.A.
Yellow Iron Oxide	1310-14-1	<1	N.A.	N.A.	N.A.
Carbon Black	1333-86-4	<1	3.5 mg/m3	N.A.	N.A.

III. PHYSICAL DATA

BOILING POINT: N.A. Deg. F VAPOR DENSITY: Heavier, THAN AIR DENSITY: 1.10g/ml
% VOLATILE: <1% by wt EVAPORATION RATE: N.A. , THAN n-BUTYL ACETATE
SOLUBILITY IN WATER: Not Soluble VAPOR PRESSURE: N.Amm Hg @ 20 DEG. C
APPEARANCE AND ODOR: Gray/Mild musty pH: N.A.
PHYSICAL FORM: Liquid

IV. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: >200 DEG. F (SETA FLASH) FLAMMABLE LIMITS: L.E.L. N.A. % U.E.L. N.A.

EXTINGUISHING MEDIA:

Use National Fire Protection Association (NFPA) Class B



x0068*

1325

MOBIL OIL CORPORATION MATERIAL SAFETY DATA BULLETIN

REVISED: 12/08/89

***** I. PRODUCT IDENTIFICATION *****
MOBILMET OMICRON

SUPPLIER:	MOBIL OIL CORP.	HEALTH EMERGENCY TELEPHONE:	(609) 737-4411
CHEMICAL NAMES AND SYNONYMS:	PET. HYDROCARBONS AND ADDITIVES	TRANSPORT EMERGENCY TELEPHONE:	(800) 424-9300 (CHEMTREC)
USE OR DESCRIPTION:	CUTTING FLUID	PRODUCT TECHNICAL INFORMATION:	(800) 662-4525

***** II. TYPICAL CHEMICAL AND PHYSICAL PROPERTIES *****

APPEARANCE:	ASTM 5.5 LIQUID	ODOR:	MILD	PH:	NA
VISCOSITY AT 100 F, SUS:	138.0	AT 40 C, CS:	26.6		
VISCOSITY AT 210 F, SUS:	42.0	AT 100 C, CS:	4.9		
FLASH POINT F(C):	> 365(185)	(ASTM D-92)			
MELTING POINT F(C):	NA	FOUR POINT F(C):	30(-1)		
BOILING POINT F(C):	> 600(316)				
RELATIVE DENSITY, 15/4 C:	0.865	SOLUBILITY IN WATER:	NEGLECTIBLE		
VAPOR PRESSURE-MM HG 20C:	< .1				

NA=NOT APPLICABLE NE=NOT ESTABLISHED D=DECOMPOSES
FOR FURTHER INFORMATION, CONTACT YOUR LOCAL MARKETING OFFICE.

***** III. INGREDIENTS *****

	WT PCT	EXPOSURE LIMITS	SOURCES
	(APPROX)	MG/M3	PPM (AND NOTES)
POTENTIALLY HAZARDOUS INGREDIENTS:			
NONE			

OTHER INGREDIENTS:

REFINED MINERAL OILS	>95
ADDITIVES AND/OR OTHER INGREDIENTS.	< 5

SEE SECTION XII FOR COMPONENT REGULATORY INFORMATION.

SOURCES: A=ACGIH-TLV, A*=SUGGESTED-TLV, M=MOBIL, O=OSHA, S=SUPPLIER
NOTE: LIMITS SHOWN FOR GUIDANCE ONLY. FOLLOW APPLICABLE REGULATIONS.

***** IV. HEALTH HAZARD DATA *****

--- INCLUDES AGGRAVATED MEDICAL CONDITIONS, IF ESTABLISHED ---
THRESHOLD LIMIT VALUE: 5.00 MG/M3 (SOURCES: A,M,O) FOR OIL MIST
EFFECTS OF OVEREXPOSURE: SLIGHT SKIN IRRITATION.

***** V. EMERGENCY AND FIRST AID PROCEDURES *****

--- FOR PRIMARY ROUTES OF ENTRY ---

EYE CONTACT: FLUSH WITH WATER.
 SKIN CONTACT: WASH CONTACT AREAS WITH SOAP AND WATER.
 INHALATION: NOT EXPECTED TO BE A PROBLEM.
 INGESTION: NOT EXPECTED TO BE A PROBLEM. HOWEVER, IF GREATER THAN 1/2 LITER (PINT) INGESTED, IMMEDIATELY GIVE 1 TO 2 GLASSES OF WATER AND CALL A PHYSICIAN, HOSPITAL EMERGENCY ROOM OR POISON CONTROL CENTER FOR ASSISTANCE. DO NOT INDUCE VOMITING OR GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON.

X-1300

0026

(037237-0438M -F0321509-0019) DATE OF ISSUE 09/01/89 SUPERSEDES 12/02/88

SECTION I - GENERAL INFORMATION

CHEMICAL NAME & SYNONYMS N/A TRADE NAME & SYNONYMS SS-25
 CHEMICAL FAMILY ALIPHATIC/CHLORINATED SOLVENT FORMULA X--MIXTURE
 MANUFACTURERS NAME: NATIONAL CHEMSEARCH DIV. OF NCH CORP.
 ADDRESS (NUMBER, STREET, CITY, STATE & ZIP CODE) BOX 152170 IRVING, TEXAS 75015
 PREPARED BY: KARLA BOELTE \ T.S. CHEMIST PRODUCT CODE NUMBER 0019 EMERGENCY TELEPHONE NUMBER 214-438-1381

SECTION II - HAZARDOUS INGREDIENTS

THE HAZARDS PRESENTED BELOW ARE THOSE OF THE INDIVIDUAL COMPONENTS AS THE PRODUCT MIXTURE HAS NOT BEEN TESTED AS A WHOLE.

CHEMICAL NAME (INGREDIENTS)	HAZARD	TLV*	PEL*	CAS#
ALIPHATIC PETROLEUM DISTILLATE	COMB.	300PPM	300PPM	8032-32-4
PERCHLORODETHYLENE	SUSP CARC.	50PPM	25PPM	127-18-4
METHYLENE CHLORIDE	SUSP CARC.	50PPM	500PPM	75-09-2

SECTION III - PHYSICAL DATA

BOILING PT. (FAHRENHEIT) 113 SPEC GRAVITY (M20=1) 1.030

SS-25

(CONTINUED) SECTION III - PHYSICAL DATA PAGE : 02

VAPOR PRESSURE (MM HG).	60	COLOR	WATER WHITE
VAPOR DENSITY (AIR=1)	1	ODOR	CHLORINATED SOLVENT
PH @ 100X	N/A	CLARITY	TRANSPARENT
PERCENT VOLATILE BY VOLUME (%)	100	EVAPORATION RATE (BU AC = 1)	0.10
SOLUBILITY IN WATER	NEGLECTIBLE		
VISCOSITY	NON-VISCOUS		

SECTION IV - FIRE AND EXPLOSION HAZARD

FLASH POINT (METHOD USED) 180 F. C.C.C. FLAMMABLE LIMITS N/A LEL N/A UEL
 EXTINGUISHING MEDIA "ALCOHOL" X--FOAM X--CO2 X--CHEMICAL WATER SPRAY <--OTHER
 SPECIAL FIRE FIGHTING PROCEDURES AS WITH ALL FIRES INVOLVING SOLVENTS. PROTECTIVE EQUIPMENT SHOULD BE WORN INCLUDING SELF-CONTAINED BREATHING APPARATUS TO PROTECT FROM ACRID SMOKE AND HAZARDOUS DECOMPOSITION PRODUCTS.

UNUSUAL FIRE & EXPLOSION HAZARDS

UNDER CERTAIN CONDITIONS PHOSGENE CAN BE FORMED. (TEMPERATURES IN EXCESS OF 1000 F.)

NFPA HAZARD RATING (0=INSIGNIFICANT; 1=SLIGHT; 2=MODERATE; 3=HIGH; 4=EXTREME):
 3 <--HEALTH 2 <--FLAMMABILITY 0 <--REACTIVITY <--SPECIAL

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE :

NOT ESTABLISHED FOR MIXTURE. SEE SECTION II.

EFFECTS OF OVEREXPOSURE

- ACUTE - (SHORT TERM EXPOSURE)
 CAN LEAD TO CENTRAL NERVOUS SYSTEM DEPRESSION, HEADACHE, DIZZINESS, NAUSEA AND LOSS OF CONSCIOUSNESS. WILL DEFAT SKIN AND CAUSE IRRITATION CAUSING TEARING AND REDNESS.
 CHRONIC EFFECTS OF OVEREXPOSURE: CENTRAL NERVOUS DEPRESSION OF SYSTEM.

Handwritten signature or initials.

MSDS # 0674

MATERIAL SAFETY DATA SHEET

MANUFACTURER: INLAND VACUUM INDUSTRIES
35 HOWARD AVE
CHURCHVILLE NY 14428

EMERGENCY TELEPHONE:
DAYS: 716-293-3330
EVENINGS: 803-548-2346

PREPARED BY: MARC C. TARPLEE

DATE: 01-24-89

SECTION ONE: GENERAL INFORMATION

PRODUCT CODE: 005XX

NFPA DIAMOND:

FLAMMABILITY: 1

PRODUCT NAME: INVOIL-20

HEALTH HAZARD: 0

REACTIVITY: 0

SPECIAL HAZARD:

CAS NUMBER: 64742-54-7

CHEMICAL FORMULA: (CH₂)_n 20 < n < 40

GENERIC NAME: SOLVENT REFINED NEUTRAL PARAFFINIC OIL

TRADE NAMES AND SYMPTOMS: ALCATEL-200, EDWARDS 20, HE-200, STOKES V-LUBE L,
VARIAN OS, VWR-20.

SECTION TWO: REGULATED INGREDIENTS
(29 CFR 1910.1200)

REGULATED MATERIALS AT CONCENTRATION OF 1% (WT) OR GREATER

NO HAZARDOUS INGREDIENTS. MATERIAL IS 100% NEUTRAL PARAFFINIC OIL. MATERIAL HAS BEEN SUBJECT TO SEVERE SOLVENT REFINING

SECTION THREE: HEALTH HAZARDS

POSSIBLE ENTRY ROUTES: INGESTION, INHALATION OF OIL MISTS

TARGET ORGANS:

EFFECTS OF OVEREXPOSURE

ACUTE EFFECTS: EXPOSURE TO OILS MISTS MAY CAUSE NAUSEA AND EYE IRRITATION. DETAILED STUDIES HAVE NOT BEEN MADE, BUT MATERIAL IS NOT EXPECTED TO BE A DERMATITIC OR SENSITIZER.

CHRONIC EFFECTS: UNKNOWN.

FIRST AID PROCEDURES: SKIN- WASH WITH SOAP AND WATER. EYES- FLUSH WITH WATER. CONTACT A PHYSICIAN! INGESTION- GIVE LIQUIDS AND INDUCE VOMITING IF VICTIM IS CONSCIOUS. CONTACT A PHYSICIAN! SMALL AMOUNTS IN MOUTH MAY BE WASHED OUT.

REFERENCES:

005%
SAPCO

UNOCAL 76

Product Name: ~~ATF DEXRON (R)-II~~
Product Code No: 03130

Page 1 of 1
Issue Date: 11/28/81

MANUFACTURER: UNOCAL REFINING & MARKETING DIVISION UNION OIL COMPANY OF CALIFORNIA 1201 W. 5TH STREET LOS ANGELES, CALIFORNIA 90017 CONTACT FOR FURTHER INFORMATION: MSDS COORDINATOR (213) 977-7589	Transportation Emergencies: Call CHEMTREC (800) 424-9300 Cont. U. (202) 483-7616 (Collect from Alaska & Hawaii Health Emergencies: CALL LOS ANGELES POISON INFORMATION CENTER (24 hrs (213) 664-2121
---	--

PRODUCT IDENTIFICATION

PRODUCT NAME: ATF DEXRON (R)-II
GENERIC NAME: TRANSMISSION OILS

CHEMICAL FAMILY: PETROLEUM HYDROCARBON

DOT PROPER SHIPPING NAME: NOT APPLICABLE
ID NUMBER: NONE

SECTION I - INGREDIENTS	TLV	UNITS	AGENCY	TYPE
OIL MIST, IF GENERATED	5.00	MG/M3	OSHA	FULL TERM TW
THE IDENTITIES OF INGREDIENTS THAT ARE TRADE SECRETS ARE EXCLUDED FROM THIS LIST.				

SECTION II - EMERGENCY AND FIRST AID PROCEDURES *****EMERGENCY*****
 Have physician call LOS ANGELES POISON
 INFORMATION CENTER (24 hrs.) (213) 664-2121

EYE CONTACT:
 FOR DIRECT CONTACT, FLUSH THE AFFECTED EYE(S) WITH CLEAN WATER. IF IRRITATION OR REDNESS DEVELOPS, SEEK MEDICAL ATTENTION.

SKIN CONTACT:
 DO NOT USE GASOLINES, THINNERS OR SOLVENTS TO REMOVE PRODUCT FROM SKIN. WIPE MATERIAL FROM SKIN AND REMOVE CONTAMINATED CLOTHING. CLEANSE AFFECTED AREA(S) THOROUGHLY BY WASHING WITH SOAP AND WATER AND, IF NECESSARY, A WATERLESS SKIN CLEANSER. IF IRRITATION OR REDNESS DEVELOPS AND PERSISTS, SEEK MEDICAL ATTENTION.

INHALATION (BREATHING):
 IF IRRITATION OF NOSE OR THROAT DEVELOPS, MOVE AWAY FROM SOURCE OF EXPOSURE AND INTO FRESH AIR. IF IRRITATION PERSISTS, SEEK MEDICAL ATTENTION. IF VICTIM IS NOT BREATHING OR IF BREATHING DIFFICULTIES DEVELOP, ARTIFICIAL RESPIRATION OR OXYGEN SHOULD BE ADMINISTERED BY QUALIFIED PERSONNEL. SEEK IMMEDIATE MEDICAL ATTENTION.



MATERIAL SAFETY DATA SHEET

370

MSDS NUMBER 864,040-1 PAGE 1

97367 (4-85)

24 HOUR EMERGENCY ASSISTANCE			GENERAL MSDS ASSISTANCE		
SHELL: 713-473-9461 CHEMTREC: 800-424-9300			SHELL: 713-241-4819		
ACUTE HEALTH + 1	FIRE 1	REACTIVITY 0	HAZARD RATING LEAST - 0 SLIGHT - 1 MODERATE - 2 HIGH - 3 EXTREME - 4		
*For acute and chronic health effects refer to the discussion in Section III					



SECTION I	NAME
PRODUCT	SHELL SPIRAX(R) HEAVY DUTY 85W/140
CHEMICAL NAME	MIXTURE (SEE SEC. IIA)
CHEMICAL FAMILY	PETROLEUM HYDROCARBON; GEAR OIL
SHELL CODE	59212

SECTION II-A		PRODUCT/INGREDIENT	
NO.	COMPOSITION	CAS NUMBER	PERCENT
P	SHELL SPIRAX HEAVY DUTY 85W/140	MIXTURE	100
1	SOLVENT REFINED, HYDROTREATED RESIDUAL OIL	- 64742-57-0	40-90
2	SOL. REF., HYDROTREATED, DEWAXED HEAVY PARAFFINIC DIST.	- 64742-65-0	5-30
3	SEVERELY HYDROTREATED HEAVY NAPHTHENIC DIST.	- 64742-52-5	10-40
4	ADDITIVE PACKAGE	- MIXTURE	<10

SECTION II-B				ACUTE TOXICITY DATA		
NO.	ACUTE ORAL LD50	ACUTE DERMAL LD50	ACUTE INHALATION LC50			
P	NOT AVAILABLE					

BASED UPON DATA AVAILABLE TO SHELL, COMPONENT 4 IN THIS PRODUCT IS NOT HAZARDOUS UNDER OSHA HAZARD COMMUNICATION (29 CFR 1910.1200).

SECTION III HEALTH INFORMATION

THE HEALTH EFFECTS NOTED BELOW ARE CONSISTENT WITH REQUIREMENTS UNDER THE OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200).

EYE CONTACT
BASED ON COMPONENT INFORMATION PRODUCT IS NO MORE THAN MINIMALLY IRRITATING TO THE EYES.

SKIN CONTACT
BASED ON COMPONENT INFORMATION PRODUCT IS NO MORE THAN MILDLY IRRITATING TO THE SKIN. PROLONGED AND REPEATED CONTACT CAN RESULT IN VARIOUS SKIN DISORDERS SUCH AS DERMATITIS, FOLLICULITIS OR OIL ACNE.

INHALATION
INHALATION OF VAPORS (GENERATED AT HIGH TEMPERATURES ONLY) OR DIL MIST FROM THIS PRODUCT MAY CAUSE MINOR IRRITATION OF THE MUCOUS MEMBRANES OF THE UPPER RESPIRATORY TRACT.



Grove M 8414

Tellus syd oil #32, bulk

MATERIAL SAFETY DATA SHEET

419

97367 (4-85)

MSDS NUMBER 60,050-4

PAGE

24 HOUR EMERGENCY ASSISTANCE			GENERAL MSDS ASSISTANCE		
SHELL: 713-473-9461 CHEMTREC: 800-424-9300			SHELL: 713-241-4819		
ACUTE HEALTH +	FIRE 🔥	REACTIVITY ☠️	HAZARD RATING		
1	1	0	LEAST - 0 SLIGHT - 1 MODERATE - 2 HIGH - 3 EXTREME - 4		
*For acute and chronic health effects refer to the discussion in Section III					



SECTION I	NAME
PRODUCT	SHELL TELLUS(R) OIL 32
CHEMICAL NAME	MIXTURE (SEE SEC. IIA)
CHEMICAL FAMILY	PETROLEUM HYDROCARBON; HYDRAULIC OIL
SHELL CODE	65208

SECTION II-A		PRODUCT/INGREDIENT	
NO.	COMPOSITION	CAS NUMBER	PERCENT
P	SHELL TELLUS OIL 32	MIXTURE	100
1	SOLVENT REFINED, HYDROTREATED HEAVY, PARAFFINIC DISTILLATE	64742-54-7	97-98
2	MINOR ADDITIVES	MIXTURE	<3

SECTION II-B			ACUTE TOXICITY DATA		
NO.	ACUTE ORAL LD50	ACUTE DERMAL LD50	ACUTE INHALATION LC50		
P	NOT AVAILABLE				

BASED UPON DATA AVAILABLE TO SHELL, COMPONENT 2 IN THIS PRODUCT IS NOT HAZARDOUS UNDER OSHA HAZARD COMMUNICATION (29 CFR 1910.1200).

SECTION III HEALTH INFORMATION

THE HEALTH EFFECTS NOTED BELOW ARE CONSISTENT WITH REQUIREMENTS UNDER THE OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200).

EYE CONTACT
BASED ON COMPONENT INFORMATION, PRODUCT IS PRESUMED TO BE PRACTICALLY NON-IRRITATING TO THE EYES.

SKIN CONTACT
BASED ON COMPONENT INFORMATION, PRODUCT IS PRESUMED TO BE PRACTICALLY NON-IRRITATING TO THE SKIN. PROLONGED AND REPEATED CONTACT MAY RESULT IN SKIN DISORDERS SUCH AS DERMATITIS, OIL ACNE OR FOLLICULITIS. ACCIDENTAL RELEASE UNDER HIGH PRESSURE APPLICATIONS MAY RESULT IN INJECTION OF OIL INTO THE SKIN CAUSING LOCAL NECROSIS.

INHALATION
THE INHALATION OF VAPORS (GENERATED AT HIGH TEMPERATURES ONLY) OR OIL MIST MAY CAUSE A MILD IRRITATION OF THE MUCOUS MEMBRANES OF THE UPPER RESPIRATORY TRACT.

INGESTION
BASED ON COMPONENT INFORMATION, PRODUCT IS NO MORE THAN SLIGHTLY TOXIC IF SWALLOWED.

2787

MATERIAL SAFETY DATA SHEET

 LUBRIPLATE Air Compressor Oil No. 0, No. 1 **SECTION I**
 No. 2, No. 2A, No. 3, No. 4, No. 5.

MANUFACTURER'S NAME Fiske Brothers Refining Company		EMERGENCY TELEPHONE NO. 419-691-2491
ADDRESS (Number, Street, City, State, and ZIP Code) 1500 Oakdale Avenue, P.O. Box 8038 - Station "A", Toledo, Ohio 43605		
CHEMICAL NAME AND SYNONYMS Lubricating Oil		TRADE NAME AND SYNONYMS: LUBRIPLATE "AC" Series
CHEMICAL FAMILY Primarily Petroleum Hydrocarbons	FORMULA Mineral Oil and Additives	

SECTION II HAZARDOUS INGREDIENTS

	S	TLV (UnHs)
Non-hazardous		

SECTION III PHYSICAL DATA

BOILING POINT (°F.)	> 550°F	SPECIFIC GRAVITY (M ₂ O=1)	0.87-0.89
VAPOR PRESSURE (mm Hg.)	< 0.01mm	PERCENT VOLATILE BY VOLUME (%)	Nil
VAPOR DENSITY (AIR=1)	> 5	EVAPORATION RATE (n-Butyl Acetate =1)	< 0.01
SOLUBILITY IN WATER	Insoluble		
APPEARANCE AND ODOR	Transparent amber liquid with mineral oil odor		

SECTION IV FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used) COC - 415-480°F	FLAMMABLE LIMITS	LeL 7%	UeL 7%
EXTINGUISHING MEDIA Foam, Dry Chemical, Carbon Dioxide, or Water Spray	SPECIAL FIRE FIGHTING PROCEDURES Cool exposed containers with water. Use air-supplied rescue equipment for enclosed areas		
UNUSUAL FIRE AND EXPLOSION HAZARDS	Do not store or mix with strong oxidants.		
EMPTY CONTAINERS retain residue. Do not cut, drill, grind, or weld, as they may explode.			

SECTION V REACTIVITY DATA

STABILITY	UNSTABLE	CONDITIONS TO AVOID	
	STABLE	X	
INCOMPATIBILITY (Materials to avoid) Avoid contact with strong oxidants like liquid chlorine, concentrated oxygen.			
HAZARDOUS DECOMPOSITION PRODUCTS May form SO ₂ if incomplete combustion, carbon monoxide.			
HAZARDOUS POLYMERIZATION	MAY OCCUR	CONDITIONS TO AVOID	
	WILL NOT OCCUR	X	



MATERIAL SAFETY DATA SHEET

IDENTITY: KLEENKUT 101
(As Used on Label and List)

HMIS HAZARD RATING

HEALTH: 1 (SLIGHT)
FLAMMABILITY: 1 (SLIGHT)
REACTIVITY: 0 (MINIMAL)

SECTION I

MANUFACTURER'S NAME: STUART-IRONSIDES, INC.
ADDRESS 7575 PLAZA COURT, WILLOWBROOK, ILLINOIS 60521
(Street, City, State, Zip)

EMERGENCY TELEPHONE NUMBER: (708) 655-4595
TELEPHONE NUMBER FOR INFORMATION: (708) 655-4595
DATE PREPARED: NOVEMBER 29, 1989

SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

HAZARDOUS COMPONENTS	OSHA PEL	ACGIH TLV	OTHER LIMITS	
PETROLEUM OIL, SEVERELY SOLVENT REFINED (OIL MIST) CAS# 64741-96-4	5mg/m ³	5mg/m ³	10mg/m ³ STEL	& <85
HEXYLENE GLYCOL CAS# 107-41-5	125mg/m ³ (CEILING)	121mg/m ³ (CEILING)		< 2

CONTAINS COMPONENTS LISTED WITH TSCA.

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING POINT	ND	SPECIFIC GRAVITY (H2O=1)	0.9
VAPOR PRESSURE (mm Hg)	ND	MELTING POINT	NA
VAPOR DENSITY (Air=1)	ND	EVAPORATION RATE (BUTYL ACETATE=1)	<1
SOLUBILITY IN WATER	EMULSIFIES		
APPEARANCE AND ODOR	FLUID WITH MINERAL OIL ODOR		
	pH		ND/A



MATERIAL SAFETY DATA SHEET

MSDS NUMBER 80,070-8

PAGE 1

57367 14-851

24 HOUR EMERGENCY ASSISTANCE			GENERAL MSDS ASSISTANCE		
SHELL: 713-473-9461 CHEMTREC: 800-424-9300			SHELL: 713-241-4819		
ACUTE HEALTH +	FIRE 🔥	REACTIVITY ☠️	HAZARD RATING		
3	1	0	LEAST - 0 SLIGHT - 1 MODERATE - 2 HIGH - 3 EXTREME - 4		
*For acute and chronic health effects refer to the discussion in Section III					



SECTION I	NAME
PRODUCT	SHELLZONE(R) ANTIFREEZE
CHEMICAL NAME	ETHYLENE GLYCOL
CHEMICAL FAMILY	GLYCOL
SHELL CODE	32350 94010 94012

SECTION II-A		PRODUCT/INGREDIENT	
NO.	COMPOSITION	CAS NUMBER	PERCENT
P	SHELLZONE ANTIFREEZE	MIXTURE	100
1	ETHYLENE GLYCOL	107-21-1	84-84
2	DIETHYLENE GLYCOL	111-46-6	0-10
3	WATER	7732-18-5	2-4
4	INORGANIC/ORGANIC SALTS		2-4

SECTION II-B				ACUTE TOXICITY DATA		
NO.	ACUTE ORAL LD50	ACUTE DERMAL LD50	ACUTE INHALATION LC50			
1	4.0 G/KG - RAT	19.5 G/KG - RABBIT	NONE			
1	5.0 G/KG - RABBIT	11.9 G/KG - RABBIT	NONE			
2	14.8 G/KG - RAT					

BASED UPON DATA AVAILABLE TO SHELL, COMPONENTS 3 AND 4 IN THIS PRODUCT ARE NOT HAZARDOUS UNDER OSHA HAZARD COMMUNICATION (29 CFR 1910.1200).

SECTION III HEALTH INFORMATION

THE HEALTH EFFECTS NOTED BELOW ARE CONSISTENT WITH REQUIREMENTS UNDER THE OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200).

EYE CONTACT

BASED ON PRESENCE OF COMPONENT 1, PRODUCT IS MODERATELY TO SEVERELY IRRITATING TO THE EYES. VAPORS CAN ALSO CAUSE SEVERE EYE IRRITATION.

SKIN CONTACT

BASED ON PRESENCE OF COMPONENTS 1 AND 2, PRODUCT IS MILDLY IRRITATING TO THE SKIN AND SLIGHTLY TOXIC ON PROLONGED OR REPEATED CONTACT.

INHALATION

VAPORS ARE MILDLY TO MARKEDLY IRRITATING TO THE LUNGS DEPENDING ON THE EXPOSURE LEVEL.



Shell

Grove OS # 0326

Omala 68 gear oil

SAFETY DATA SHEET

97367 (4-85)

MSDS NUMBER

67,470-3

PAGE 1

24 HOUR EMERGENCY ASSISTANCE			GENERAL MSDS ASSISTANCE		
SHELL: 713-473-9461 CHEMTREC: 800-424-9300			SHELL: 713-241-4819		
ACUTE HEALTH - 1	FIRE 1	REACTIVITY 0	HAZARD RATING LEAST - 0 SLIGHT - 1 MODERATE - 2 HIGH - 3 EXTREME - 4		
*For acute and chronic health effects refer to the discussion in Section III					



SECTION I	NAME
PRODUCT	SHELL OMALA(R) OIL 68
CHEMICAL NAME	MIXTURE (SEE SEC. II-A)
CHEMICAL FAMILY	PETROLEUM HYDROCARBON; INDUSTRIAL OIL
SHELL CODE	65101

SECTION II-A		PRODUCT/INGREDIENT	
NO.	COMPOSITION	CAS NUMBER	PERCENT
P	SHELL OMALA OIL 68	MIXTURE	100
1	SOLVENT REFINED, HYDROTREATED, HEAVY PARAFFINIC DISTILLATE	64742-54-7	50-55
2	SOLVENT REFINED, HYDROTREATED RESIDUAL OIL	64742-57-0	42-47
3	MINOR ADDITIVES	MIXTURE	<3

SECTION II-B				ACUTE TOXICITY DATA		
NO.	ACUTE ORAL LD50	ACUTE DERMAL LD50	ACUTE INHALATION LC50			
P	NOT AVAILABLE					

BASED UPON DATA AVAILABLE TO SHELL, COMPONENT 3 IN THIS PRODUCT IS NOT HAZARDOUS UNDER OSHA HAZARD COMMUNICATION (29 CFR 1910.1200).

SECTION III HEALTH INFORMATION

THE HEALTH EFFECTS NOTED BELOW ARE CONSISTENT WITH REQUIREMENTS UNDER THE OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200).

EYE CONTACT
BASED ON COMPONENT INFORMATION PRODUCT IS NO MORE THAN MINIMALLY IRRITATING TO THE EYES.

SKIN CONTACT
BASED ON COMPONENT INFORMATION PRODUCT IS NO MORE THAN MILDLY IRRITATING TO THE SKIN. PROLONGED AND REPEATED CONTACT CAN RESULT IN VARIOUS SKIN DISORDERS SUCH AS DERMATITIS, FOLLICULITIS OR OIL ACNE.

INHALATION
INHALATION OF VAPORS (GENERATED AT HIGH TEMPERATURES ONLY) OR OIL MIST FROM THIS PRODUCT MAY CAUSE MILD IRRITATION OF THE UPPER RESPIRATORY TRACT.

INGESTION
BASED ON COMPONENT INFORMATION THIS PRODUCT IS NO MORE THAN SLIGHTLY TOXIC IF SWALLOWED.



Grove MSDS # 0415

Tellus 68 Hydraulic Oil, Bulk

MSDS SAFETY DATA SHEET

MSDS NUMBER ▶

60,534-1

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97367 (4-85)

24 HOUR EMERGENCY ASSISTANCE			GENERAL MSDS ASSISTANCE		
SHELL: 713-473-9461 CHEMTREC: 800-424-9300			SHELL: 713-241-4819		
ACUTE HEALTH +	FIRE 1	REACTIVITY 0	HAZARD RATING ▶		
1	1	0	LEAST - 0	SLIGHT - 1	MODERATE - 2
			HIGH - 3	EXTREME - 4	
*For acute and chronic health effects refer to the discussion in Section III					



SECTION I		NAME	
PRODUCT ▶	SHELL TELLUS(R) T OIL 68		
CHEMICAL NAME ▶	MIXTURE (SEE SEC. IIA)		
CHEMICAL FAMILY ▶	PETROLEUM HYDROCARBON; HYDRAULIC OIL		
SHELL CODE ▶	65403		

SECTION II-A		PRODUCT/INGREDIENT	
NO.	COMPOSITION	CAS NUMBER	PERCENT
P	SHELL TELLUS T OIL 68	MIXTURE	100
1	SOL. REF., HYDROTREATED HEAVY, PARAFFINIC DISTILLATE	64742-54-7	80-85
2	SOL. REF., HYDROTREATED, MIDDLE DISTILLATE	64742-46-7	10-15
3	ADDITIVE PACKAGE	MIXTURE	<5

SECTION II-B		ACUTE TOXICITY DATA		
NO.	ACUTE ORAL LD50	ACUTE DERMAL LD50	ACUTE INHALATION LC50	
P	NOT AVAILABLE			

BASED UPON DATA AVAILABLE TO SHELL, COMPONENT 3 IN THIS PRODUCT IS NOT HAZARDOUS UNDER OSHA HAZARD COMMUNICATION (29 CFR 1910.1200).

SECTION III HEALTH INFORMATION

THE HEALTH EFFECTS NOTED BELOW ARE CONSISTENT WITH REQUIREMENTS UNDER THE OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200).

EYE CONTACT
BASED ON COMPONENT INFORMATION, PRODUCT IS PRESUMED TO BE PRACTICALLY NON-IRRITATING TO THE EYES.

SKIN CONTACT
BASED ON COMPONENT INFORMATION, PRODUCT IS PRESUMED TO BE PRACTICALLY NON-IRRITATING TO THE SKIN. PROLONGED AND REPEATED CONTACT MAY RESULT IN SKIN DISORDERS SUCH AS DERMATITIS, OIL ACNE OR FOLLICULITIS. ACCIDENTAL RELEASE UNDER HIGH PRESSURE APPLICATIONS MAY RESULT IN INJECTION OF OIL INTO THE SKIN CAUSING LOCAL NECROSIS.

INHALATION
THE INHALATION OF VAPORS (GENERATED AT HIGH TEMPERATURES ONLY) OR OIL MIST MAY CAUSE A MILD IRRITATION OF THE MUCOUS MEMBRANES OF THE UPPER RESPIRATORY TRACT.



Grove MSDS #

Tonna oil 68 medium way

DATA SHEET

MSDS NUMBER

65,002-2

PAGE 1

97367 (A-B)

24 HOUR EMERGENCY ASSISTANCE			GENERAL MSDS ASSISTANCE		
SHELL: 713-473-9461 CHEMTREC: 800-424-9300			SHELL: 713-241-4819		
ACUTE HEALTH 1	FIRE 1	REACTIVITY 0	HAZARD RATING	LEAST - 0 HIGH - 3	SLIGHT - 1 EXTREME - 4
*For acute and chronic health effects refer to the discussion in Section III					



SECTION I	NAME
PRODUCT	SHELL TONNA (R) T OIL 68
CHEMICAL NAME	MIXTURE (SEE SEC. II-A)
CHEMICAL FAMILY	PETROLEUM HYDROCARBON; INDUSTRIAL OIL
SHELL CODE	66535

SECTION II-A		PRODUCT/INGREDIENT	
NO.	COMPOSITION	CAS NUMBER	PERCENT
P	SHELL TONNA T OIL 68	MIXTURE	100
1	SOL. REF., HYDROTREATED HEAVY NAPHTHENIC DISTILLATE	64742-52-5	0-70
2	SEVERELY HYDROTREATED HEAVY NAPHTHENIC DISTILLATE	64742-52-5	0-90
3	SOL. REF., HYDROTREATED MIDDLE DISTILLATE	64742-46-7	0-30
4	SOL. REF., HYDROTREATED RESIDUAL OIL	64742-57-0	0-5
5	MINOR ADDITIVES	MIXTURE	<3

SECTION II-B		ACUTE TOXICITY DATA		
NO.	ACUTE ORAL LD50	ACUTE DERMAL LD50	ACUTE INHALATION LC50	
P	NOT AVAILABLE			

BASED UPON DATA AVAILABLE TO SHELL, COMPONENT 5 IN THIS PRODUCT IS NOT HAZARDOUS UNDER OSHA HAZARD COMMUNICATION (29 CFR 1910.1200).

SECTION III HEALTH INFORMATION

THE HEALTH EFFECTS BELOW ARE CONSISTENT WITH REQUIREMENTS UNDER OSHA HAZARD COMMUNICATIONS (29 CFR 1910.1200).

EYE CONTACT
LUBRICATING OILS ARE GENERALLY CONSIDERED NO MORE THAN MINIMALLY IRRITATING TO THE EYES.

SKIN CONTACT
LUBRICATING OILS ARE GENERALLY CONSIDERED NO MORE THAN MILDLY IRRITATING TO THE SKIN. PROLONGED AND REPEATED CONTACT MAY LEAD TO VARIOUS SKIN DISORDERS SUCH AS DERMATITIS, OIL ACNE, OR FOLLICULITIS.

INHALATION
INHALATION OF VAPORS (GENERATED AT HIGH TEMPERATURES) OR MIST MAY CAUSE MILD IRRITATION OF THE UPPER RESPIRATORY TRACT.

04015



Date Issued: 08/15/91
Supercedes: 07/17/91

TEXACO
MATERIAL SAFETY DATA SHEET

NOTE: Read and understand Material Safety Data Sheet before handling or disposing of product

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MATERIAL IDENTITY

Product Code and Name:
02353 TEXACO ANTI-FREEZE COOLANT

Chemical Name and/or Family or Description:
Antifreeze

Manufacturer's Name and Address:
Texaco Lubricants Company
a Division of Texaco Refining and Marketing Inc.
P.O. Box 4427, Houston, TX 77210-4427

Telephone Numbers:
TRANSPORTATION EMERGENCY Company: (914) 831-3400 CHEMTREC: (800) 424-9300
HEALTH EMERGENCY Company: (914) 831-3400
GENERAL MSDS ASSISTANCE (914) 838-7204
TECHNICAL INFORMATION Fuels: (914) 838-7336; Lubricants/Antifreezes: (914) 838-7509
Chemicals: (512) 459-6543

2. COMPOSITION/INFORMATION ON INGREDIENTS

Product and/or Component(s) Carcinogenic According to: OSHA IARC NTP OTHER NONE
- - - - X

Composition:

Chemical/Common Name	CAS No.	Exposure Limit	Range in %
1,2-ethanediol	107211	50ppm Ceiling-OSHA 50ppm Ceiling-ACGIH	80.00 - 94.99
Water deionized	7732185	None Established	1.00 - 3.99

Product is hazardous according to OSHA (1910.1200).
Component(s) is hazardous according to OSHA or one or more state Right-to-Know laws.

3. HAZARD IDENTIFICATION

EMERGENCY OVERVIEW

Appearance and Odor: Fluorescent green liquid; mild odor

WARNING STATEMENT

HAZARD: HARMFUL OR FATAL IF SWALLOWED
MAY CAUSE KIDNEY AND NERVOUS SYSTEM DAMAGE
MAY CAUSE EYE IRRITATION
KEEP OUT OF REACH OF CHILDREN AND PETS

ATTENTION! POSSIBLE BIRTH DEFECT HAZARD
CONTAINS ETHYLENE GLYCOL WHICH MAY CAUSE BIRTH DEFECTS BASED ON ANIMAL DATA

Health: 2	Reactivity: 0	Health: 2	Reactivity: 0
Flammability: 1	Special: -	Flammability: 1	Special: -

POTENTIAL HEALTH EFFECTS

	EYE	SKIN	INHALATION	INGESTION
Primary Route of Exposure:	-	X	X	X

OBSOLETE MSDS



MICROFILMED

X 2205 * 003
m Hulse

MATERIAL SAFETY DATA SHEET

97367 (4-85)

MSDS NUMBER ▶

66,320-3

PAGE 1

24 HOUR EMERGENCY ASSISTANCE			GENERAL MSDS ASSISTANCE		
SHELL: 713-473-9461 CHEMTREC: 800-424-9300			SHELL: 713-241-4819		
ACUTE HEALTH +	FIRE	REACTIVITY	HAZARD RATING		
1	1	0	▶ LEAST - 0 SLIGHT - 1 MODERATE - 2 HIGH - 3 EXTREME - 4		
*For acute and chronic health effects refer to the discussion in Section III					



SECTION I		NAME
PRODUCT ▶	SHELL VOLUTA(R) OIL B	
CHEMICAL NAME ▶	MIXTURE (SEE SECTION II-A)	
CHEMICAL FAMILY ▶	PETROLEUM HYDROCARBON; METALTREATING OIL	
SHELL CODE ▶	62304	

SECTION II-A		PRODUCT/INGREDIENT	
NO.	COMPOSITION	CAS NUMBER	PERCENT
P	SHELL VOLUTA OIL B	MIXTURE	100
1	SOL. REF., HYDROTREATED, DEWAXEDHEAVY PARAFFINIC DIST.	64742-65-0	75-80
2	SOL. REF., HYDROTREATED MIDDLE DIST.	64742-46-7	10-15
3	SOL. REF., HYDROTREATED RESIDUAL OIL	64742-57-0	5-10
4	ANTIOXIDANT	126-37-0	<0.5
5	MERCAPTOBENZOTHAZOLE	149-30-4	<0.1

SECTION II-B		ACUTE TOXICITY DATA	
NO.	ACUTE ORAL LD50	ACUTE DERMAL LD50	ACUTE INHALATION LC50
P	NOT AVAILABLE		

BASED UPON DATA AVAILABLE TO SHELL, COMPONENT 4 IN THIS PRODUCT IS NOT HAZARDOUS UNDER OSHA HAZARD COMMUNICATION (29 CFR 1910.1200).

SECTION III HEALTH INFORMATION

THE HEALTH EFFECTS NOTED BELOW ARE CONSISTENT WITH REQUIREMENTS UNDER THE OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200).

EYE CONTACT

LUBRICATING OILS ARE GENERALLY CONSIDERED TO BE NO MORE THAN MINIMALLY IRRITATING TO THE EYES.

SKIN CONTACT

LUBRICATING OILS ARE GENERALLY CONSIDERED TO BE NO MORE THAN SLIGHTLY IRRITATING TO THE SKIN. PROLONGED AND REPEATED CONTACT MAY RESULT IN SKIN DISORDERS SUCH AS DERMATITIS, OIL ACNE OR FOLLICULITIS. BASED ON THE PRESENCE OF COMPONENT 5 PRODUCT MAY BE A MILD SKIN SENSITIZER.

INHALATION

THE INHALATION OF VAPORS (GENERATED AT HIGH TEMPERATURES ONLY) OR OIL MIST MAY CAUSE A MILD IRRITATION THE OF UPPER RESPIRATORY TRACT.



Grove MSDS # 0413

Tellus oil 23

X - 02500





MATERIAL SAFETY DATA SHEET

MSDS NUMBER ▶

60,260-4

PAGE 1

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24 HOUR EMERGENCY ASSISTANCE			GENERAL MSDS ASSISTANCE								
SHELL: 713-473-9461 CHEMTREC: 800-424-9300			SHELL: 713-241-4819								
 ACUTE HEALTH - 1	 FIRE 1	 REACTIVITY 0	HAZARD RATING ▶ <table style="display: inline-table; border: none;"> <tr> <td>LEAST - 0</td> <td>SLIGHT - 1</td> <td>MODERATE - 2</td> </tr> <tr> <td>HIGH - 3</td> <td>EXTREME - 4</td> <td></td> </tr> </table>				LEAST - 0	SLIGHT - 1	MODERATE - 2	HIGH - 3	EXTREME - 4
LEAST - 0	SLIGHT - 1	MODERATE - 2									
HIGH - 3	EXTREME - 4										

*For acute and chronic health effects refer to the discussion in Section III

SECTION I	NAME
PRODUCT ▶	SHELL TELLUS(R) OIL 23
CHEMICAL NAME ▶	MIXTURE (SEE SEC. IIA)
CHEMICAL FAMILY ▶	PETROLEUM HYDROCARBON; HYDRAULIC OIL
SHELL CODE ▶	65206

SECTION II-A		PRODUCT/INGREDIENT	
NO.	COMPOSITION	CAS NUMBER	PERCENT
P	SHELL TELLUS OIL 23	MIXTURE	100
1	SOLVENT REFINED, HYDROTREATED HEAVY, PARAFFINIC DISTILLATE	64742-54-7	97-98
2	MINOR ADDITIVES	MIXTURE	<3

SECTION II-B				ACUTE TOXICITY DATA		
NO.	ACUTE ORAL LD50	ACUTE DERMAL LD50	ACUTE INHALATION LC50			
P	NOT AVAILABLE					

BASED UPON DATA AVAILABLE TO SHELL. COMPONENT 2 IN THIS PRODUCT IS NOT HAZARDOUS UNDER OSHA HAZARD COMMUNICATION (29 CFR 1910.1200).

SECTION III HEALTH INFORMATION

THE HEALTH EFFECTS NOTED BELOW ARE CONSISTENT WITH REQUIREMENTS UNDER THE OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200).

EYE CONTACT
 BASED ON COMPONENT INFORMATION, PRODUCT IS PRESUMED TO BE PRACTICALLY NON-IRRITATING TO THE EYES.

SKIN CONTACT
 BASED ON COMPONENT INFORMATION, PRODUCT IS PRESUMED TO BE PRACTICALLY NON-IRRITATING TO THE SKIN. PROLONGED AND REPEATED CONTACT MAY RESULT IN SKIN DISORDERS SUCH AS DERMATITIS, OIL ACNE OR FOLLICULITIS. ACCIDENTAL RELEASE UNDER HIGH PRESSURE APPLICATIONS MAY RESULT IN INJECTION OF OIL INTO THE SKIN CAUSING LOCAL NECROSIS.

INHALATION
 THE INHALATION OF VAPORS (GENERATED AT HIGH TEMPERATURES ONLY) OR OIL MIST MAY CAUSE A MILD IRRITATION OF THE MUCOUS MEMBRANES OF THE UPPER RESPIRATORY TRACT.

INGESTION
 BASED ON COMPONENT INFORMATION, PRODUCT IS NO MORE THAN SLIGHTLY TOXIC IF SWALLOWED.

Material Safety Data Sheet

MSDS # ~~8495~~ Mfg. # GClub

Manufacturer's Name	G-C LUBRICANTS COMPANY	Emergency Telephone No.	800/424-9300
Address	977 Bransten Road San Carlos, CA 94070	Other Information Calls	415/592-1050
Signature of Person Responsible for Preparation		Date Prepared	June 21, 1988

SECTION 1 - IDENTITY

Common Name: (used on label) (Trade Name & Synonyms)	Aqua-Syn 200	Cas No.	N/A
Chemical Name	Mixture	Chemical Family	Hydrocarbon
Formula	Mixture		

SECTION 2 - HAZARDOUS INGREDIENTS

Principal Hazardous Component(s) (chemical & common names)	%	Threshold Limit Value (TLV)
According to 29CFR 1910.1200(c), this material is not hazardous.		

G-C Lubricants has been advised that metal drums or pails used by G-C Lubricants are made from chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.

SECTION 3 - PHYSICAL & CHEMICAL CHARACTERISTICS (Fire & Explosion Data)

Boiling Point	212 °F	Specific Gravity (H ₂ O=1)	1.14	Vapor Pressure (mm Hg)	9.6 mm
Percent Volatile by Volume (%)	0.0%	Vapor Density (Air = 1)	>1	Evaporation Rate (Butyl acetate = 1)	0.14
Solubility in Water	Complete	Reactivity in Water	Nonreactive		
Appearance and Odor	Red liquid.				

Flash Point	Will not burn	Flammable Limits in Air % by Volume	Lower N/A	Upper N/A	Extinguisher Media	Carbon dioxide Dry chemical	Auto-Ignition Temperature	N/A
Special Fire Fighting Procedures	Use NIOSH/MSA approved self-contained breathing apparatus							

when this material is involved in a fire.

Unusual Fire and Explosion Hazards: This material should be treated as an oil when exposed to fire. Overpressurization will occur when container is exposed to fire. Use water to cool fire-exposed containers.

1410
LORD



HAZARD RATING
Health - 2
Flammability - 3
Reactivity - 0

DATE	REV	MSDS NUMBER	COMPILED BY	APPROVED BY
08/19/85	01/09/86 09/15/86 03/01/87 03/20/89	EA 15	KRM	D. H. Green

PRODUCT IDENTIFICATION	PRODUCT CLASS
CHEMLOK 205	Elastomer Adhesive

SECTION I

MANUFACTURER'S NAME: Lord Corporation
 STREET ADDRESS: 2000 West Grandview Blvd
 CITY, STATE AND ZIP CODE: Erie PA 16514-0038

EMERGENCY TELEPHONE NO.: 814-763-2345 (State "EMERGENCY" - Ask for "Safety Engineer")
 INFORMATION TELEPHONE NO.: 814-868-3611 (Ask for "Business Services")

SECTION II - HAZARDOUS INGREDIENTS

Chemical Name	INGREDIENT Common Name	CAS Number	PERCENT (Wt.)	OCCUPATIONAL EXPOSURE LIMITS	LEL (% by Vol)	VAPOR PRESSURE (mm Hg)
**Methyl Isobutyl Ketone	MIK	108-10-1	59	50 ppm 205 mg/m ³ (TWA-ACGIH-OSHA) 75 ppm 300 mg/m ³ (STEL-ACGIH-OSHA)	1.4	15/20°C
**Xylene	Xylol	1330-20-7	13	100 ppm 435mg/m ³ (TWA-ACGIH & OSHA) 150 ppm 655 mg/m ³ (STEL-ACGIH-OSHA)	1.1	9/20°C
**Methyl Ethyl Ketone	MEK 2-Butanone	78-93-3	2	200 ppm 590 mg/m ³ (TWA-ACGIH and OSHA) 300 ppm 885 mg/m ³ (STEL-ACGIH-OSHA)	2.0	70/20°C
Ethyl Alcohol	Ethanol	64-17-5	< 1	1900 mg/m ³ 1000 ppm (TWA-ACGIH & OSHA)	3.3	44/20°C
Carbon Black		1333-86-4	< 1	3.5 mg/m ³ (TWA-ACGIH & OSHA)	Not Applicable	Not Applicable
Titanium Dioxide	TiO ₂	13463-67-7	5	10 mg/m ³ total dust 5 mg/m ³ respirable dust (TWA-ACGIH-OSHA)	Not Applicable	Not Applicable
**Zinc Oxide		1314-13-2	< 1	10 mg/m ³ of total dust 5 mg/m ³ of respirable dust (TWA-ACGIH)	Not Applicable	Not Applicable
**Carbon Tetrachloride ¹		56-23-5	< 1	5 ppm 30 mg/m ³ (TWA-ACGIH) 2 ppm 126 mg/m ³ (TWA-OSHA)	Not Applicable	90.99/20°C
1,-Methoxy-2-Propanol		107-98-2	< 1	Not Established	Not Available	Not Available

¹ See Section V for chronic hazard information.
 ** See Section I - Other Regulatory Information.



METHYL ETHYL KETONE

Material Safety Data Sheet

Mallinckrodt Inc. Emergency Telephone Number
 Science Products Division 314-982-5000
 P.O. Box M
 Paris, Kentucky 40361

Effective Date: 11-03-85

PRODUCT IDENTIFICATION:

Synonyms: 2-Butanone; ethyl methyl ketone; MEK

Formula CAS No.: 78-93-3

Molecular Weight: 72.11

Hazardous Ingredients:
None.Chemical Formula: $\text{CH}_3\text{COCH}_2\text{CH}_3$ PRECAUTIONARY MEASURESWARNING! FLAMMABLE! HARMFUL IF SWALLOWED OR INHALED.
CAUSES EYE IRRITATION.

Keep away from heat, sparks and flame.
 Keep container closed.
 Use with adequate ventilation.
 Avoid contact with eyes, skin and clothing.
 Wash thoroughly after handling.

EMERGENCY/FIRST AID

In all cases call a physician immediately.
 If swallowed, induce vomiting immediately by giving two glasses of water, or milk if available and sticking finger down throat. Never give anything by mouth to an unconscious person. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes.

SEE SECTION 5.

DOT Hazard Class: Flammable Liquid

Physical DataSECTION 1

Appearance: Clear, colorless liquid.

Odor: Sharp mint-like odor.

Solubility: 29 g in 100 g of water.

Boiling Point: ca 80°C (176°F)

Vapor Density (Air=1): 2.5

Melting Point: -86°C (-122°F)

Vapor Pressure (mm Hg): 100 at 25°C
(77°F)

Specific Gravity: 0.805

Evaporation Rate: (Ether=1): 2.7

-2-

Fire and Explosion InformationSECTION 2

Fire:

Flammable:
 Flashpoint: -6°C (21°F) (CC).
 Autoignition temperature: 516°C (961°F).
 Flammable limits in air, % by volume:
 lel = 1.8; uel = 11.5.

Explosion:

Above flash point, vapor-air mixtures are explosive within flammable limits noted above.

Fire Extinguishing Media:

Dry chemical, foam or carbon dioxide. Water spray may be used to keep fire exposed containers cool.

Special Information:

In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode. This highly flammable liquid must be kept from sparks, open flames, hot surfaces, and all sources of heat and ignition. Vapors can flow along surfaces to distant ignition source and flash back.

Reactivity DataSECTION 3

Stability:

Stable under ordinary conditions of use and storage.

Hazardous Decomposition Products:

Carbon dioxide and carbon monoxide may form when heated to decomposition.

Hazardous Polymerization:

This substance does not polymerize.

Incompatibilities:

Oxidizing materials, chloroform, chlorosulfonic acid, oleum, potassium-t-butoxide, heat or flame, hydrogen peroxide, nitric acid. Can attack many plastics, resins and rubber.

Leak/Spill Disposal InformationSECTION 4

Ventilate area of leak or spill. Remove all sources of ignition. Clean-up personnel require protective clothing and respiratory protection from vapors. Dike and contain. Recover liquid when possible. Use non-sparking tools and equipment. Collect as hazardous waste and atomize in a suitable RCRA approved combustion chamber, or absorb with vermiculite, dry sand, earth or similar material for disposal as hazardous waste in a RCRA approved facility. Do not flush to sewer!

Reportable Quantity (RQ)(CWA/CERCLA) : 5000 lbs.

Ensure compliance with local, state and federal regulations.

ENTRUSTED TO THE BEST
MATERIAL SAFETY

Grove MSDS 23

X-1408

Naptha



925 EUCLID AVENUE
CLEVELAND, OHIO 44115
EMERGENCY TELEPHONE NO. (216) 826-5566

The information on this data sheet and which the Glidden Company believes to be reliable, however, no warranty is expressed or implied regarding the accuracy of this data. The Glidden Company shall not be responsible for the use of this information, or of any product, method or apparatus mentioned and you must make your own determination of its suitability and completeness for your own use, for the protection of the environment, and the health and safety of your employees and users of this material.

24645

PAGE 1

SECTION I

CODE IDENTIFICATION 24645 DATE PRINTED 06/23/87
PRODUCT IDENTIFICATION ~~VM & P NAPHTHA~~

SECTION II - HAZARDOUS INGREDIENTS

INGREDIENT	WEIGHT PERCENT	ACGIH TLV		VAP PR	
		OSHA	PEL	LEL	MM HG
VM & P NAPHTHA	100		300 PPM 500 PPM	.9	30.00

CARCINOGENICITY LISTED BY: NTP? NO IARC MONOGRAPH? NO OSHA? NO
CAS NO. - 64742-39-8

LEL - THE LOWER EXPLOSIVE LIMIT IS THE LOWEST CONCENTRATION (% OF VOLATILES IN AIR) THAT WILL PRODUCE A FLASH OF FIRE WHEN AN IGNITION SOURCE IS PRESENT.

SECTION III - PHYSICAL DATA

BOILING RANGE	249 - 290 F	WEIGHT PER GALLON	6.15
% VOLATILE BY VOLUME	100.00		
PHYSICAL STATE	LIQUID	COLOR	CLEAR

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (SETA)	40 F	LOWER EXPLOSIVE LIMIT	.9
DOT (PSN)	PETROLEUM NAPHTHA, UN1255		
HAZARD CLASS	FLAMMABLE LIQUID		
EXTINGUISHING MEDIA	DRY CHEMICAL OR FOAM		

UNUSUAL FIRE AND EXPLOSION HAZARDS

CLOSED CONTAINERS MAY EXPLODE WHEN EXPOSED TO EXTREME HEAT OR FIRE.

0043

X - 1399

VALS PAR CORPORATION
MATERIAL SAFETY DATA SHEET

***** SECTION 1: PRODUCT IDENTIFICATION *****

MANUFACTURERS ADDRESS : 1101 THIRD STREET SOUTH, MINNEAPOLIS, MN 55415
MFG TELEPHONE NUMBER : (612) 332-7371
24 HR EMERGENCY PHONE NO : 1-800-228-5635
CHEMICAL NAME OR FAMILY : PAINT PRODUCT
FORMULA : NOT APPLICABLE
TRADE NAME : 37 7T39R THINNER
ISSUE DATE : 02-20-87

***** SECTION 2: HAZARDOUS INGREDIENTS *****

NAME	APPROX WT %		
COMMON(NA):VM&P NAPHTHA	100%	TLV TWA	300.00 PPM
		TLV STEL	NOT ESTAB
CAS:8030-30-6 CHEMICAL: NAPHTHA		OSHA PEL	NOT ESTAB
		CEILING	NOT ESTAB
		RECOMND	NOT ESTAB

***** SECTION 3: PHYSICAL DATA *****

BOILING POINT: 256 DEG F.
VAPOR PRESSURE MM HG AT 80 DEG F: 6.0
VAPOR DENSITY (AIR = 1.0): 4.0
SPECIFIC GRAVITY: 0.77
PERCENT VOLATILE BY VOLUME: 100.00
EVAPORATION RATE (BUTYL ACETATE = 1): .2
SOLUBILITY IN WATER: NO
APPEARANCE AND ODOR: NORMAL FOR A COATINGS PRODUCT.

***** SECTION 4: FIRE AND EXPLOSION HAZARD *****

FLASH POINT TCC/PM DEG F : 77
LOWER EXPLOSIVE LIMIT : 1.00
UPPER EXPLOSIVE LIMIT : 6.00

EXTINGUISHING MEDIA: CARBON DIOXIDE, DRY CHEMICAL, FOAM, AND/OR WATER FOG.

SPECIAL FIRE FIGHTING PROCEDURES:

FIRE FIGHTERS MUST WEAR SELF CONTAINED BREATHING APPARATUS OR AIR MASKS.
CONTAINERS EXPOSED TO FIRE SHOULD BE KEPT COOL WITH WATER SPRAY.

UNUSUAL FIRE AND EXPLOSIVE HAZARDS:

NONE

Steve K...

TOD Mueller

19200 Hawthorne Blvd.
Torrance, California 90503
Telephone: (310) 371-1254
Facsimile: (310) 371-2162

PW 50017

X02491 *
GAS MIX

DATE: JULY 21, 1993

TO: GROVE VALVE & REGULATOR
EXPERIMENTAL LAB
66TH STREET
EMERYVILLE, CA. 94608

ALTAIR
Gases
and
Equipment,
Inc.

TEST REPORT NUMBER : 931402
ORDER NUMBER : 526953-00

DEAR SIR:

THIS IS YOUR CERTIFICATE OF ANALYSIS FOR:

<u>CYLINDER NUMBER</u>	<u>MIXTURE COMPONENTS</u>	<u>REQUESTED COMPOSITION</u>	<u>CERTIFIED COMPOSITION</u>
K235676	ISOPENTANE	1.55 %	1.55 %
	N BUTANE	3.10 %	3.10 %
	PROPANE	7.1 %	7.1 %
	ETHANE	10.8 %	10.8 %
	CARBON DIOXIDE	0.70 %	0.70 %
	NITROGEN	0.35 %	0.35 %
	METHANE	BALANCE	BALANCE

71 CF
COA-6MC

David A. Mendoza
APPROVED BY

IMPORTANT
The information contained herein has been prepared at your request by qualified experts within the Labs Division of Union Carbide Corporation. While we believe that the information is accurate within the limits of the analytical methods employed and is complete to the extent of the specific analysis performed, we make no warranty or representation as to the accuracy or the use of the information for any other purpose. The information is intended for your use only and should not be used for any other purpose.

FORM NO. 7962DATE: July, 1989

(Replaces F-7900, 7901, 7902C, 7903B & 7906)

MATERIAL SAFETY DATA SHEET

(Essentially Similar to U. S. Department of Labor Suggested Form For Hazard Communication Standard Compliance)

I. PRODUCT IDENTIFICATIONProduct Type - Fluxes for Gas WeldingManufacturer - L-TEC Welding & Cutting Systems Telephone No. - 1-216-992-1265Address - 3325 Middle Road, Ashtabula, Ohio 44004 Emergency No. - 1-216-992-5186**PRODUCT TRADE NAMES & COMPOSITIONS**

Ingredients	PRODUCT TRADE NAMES & COMPOSITIONS				Aluminum Flux
	Brazo Flux	Ferro Flux	Cast Iron Flux	Cromaloy Flux	
Borax	<85	<35	<10	<20	---
Boric Acid	<20	---	<35	---	---
CaF ₂	---	---	---	<35	---
Ca Silicate	---	---	---	<50	---
Copper	---	---	30	---	---
Iron Oxide	---	<5	<5	---	---
Kaolin	---	---	---	<15	---
Li F	---	---	---	---	<15
KCl	---	---	---	---	<50
Sodium Carbonate	---	<60	---	---	---
NaCl	---	---	---	---	<50
Sodium Sesquicarbonate	---	<10	---	---	---
Zinc	---	---	30	---	---

L-TEC requests the users of these products to study this Material Safety Data Sheet (MSDS) and become aware of the product hazards and safety information. To promote the safe use of these products a user should (1) notify its employees agents and contractors of the information on this MSDS and any product hazards and safety information, (2) furnish this same information to each of its customers for these products and (3) request such customers to notify their employees and customers, for these products, of the same product hazards and safety information.

II. HAZARDOUS INGREDIENTS

Important! This section covers the materials from which this product is manufactured. The fumes and gases produced during normal use of these products are covered in Section V. The term HAZARDOUS should be interpreted as a term required and defined by Laws, Statutes or Regulations, and does not necessarily imply the existence of any hazard when the products are used as directed by L-TEC.

Material (CAS No.)	SARA	ACGIH TLV (1988-89)		OSHA - PEL (1989)	
		TWA	(mg/m ³)	TWA (mg/m ³)	STEL (mg/m ³)
Borax (1330-43-4)		1		10	----
Boric Acid (10043-35-3)		10 (B ₂ O ₃)		5 (B ₂ O ₃) Respirable	----
Calcium Fluoride (7789-75-5)		2.5 (as F)		2.5 (as F) in ppm	----
Calcium Silicate (10101-39-0)		----		5 (Respirable)	----
Copper (7440-50-8)	*	0.2 (Fume)		0.1 (Fume)	----
Iron Oxide (1309-37-1)		5		10 (Fume)	----
Kaolin (1332-58-7)		10		5 (Respirable Fraction)	----
Lithium Fluoride (7789-24-4)		2.5 (as F)		2.5 (as F) in ppm	----
Potassium Chloride (7447-40-7)		----		----	----
Sodium Carbonate (497-19-8)		----		----	----
Sodium Chloride (7647-14-5)		----		----	----
Sodium Sesquicarbonate (533-96-0)		----		----	----
Zinc (7440-66-6)	*	5 (Oxide Fume)		5 (Oxide Fume)	10

NOTE: In the ingredients table, an asterisk (*) after the CAS number indicates a toxic chemical subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (SARA) and 40 CFR Part 372.

Some of these products may not contain all of the materials listed. For details of composition refer to the COMPOSITION TABLE in Section I.

III. PHYSICAL DATA

As shipped, these products are nonflammable, nonexplosive, nonreactive, and nonhazardous.

Physical State: GAS () LIQUID () SOLID (X)

Odor and Appearance:
 Brazo Flux - White Powder, odorless
 Ferro Flux - Reddish Powder, odorless
 Cast Iron Flux - Reddish Powder, odorless
 Cromaloy Flux - Off-White Powder, odorless
 Aluminum Flux - White Powder, odorless

IV. FIRE & EXPLOSION HAZARD

Flammable/Explosive: No (X) YES ()

Special Fire Fighting Procedures: Aluminum Flux will produce toxic fumes, when heated. Use full protective equipment.Extinguishing Media: This product will not burn. However, welding arcs and sparks can ignite combustible and flammable materials. Use the extinguishing media recommended for the burning materials and fire situation. See ANSI Z49.1 "Safety in Welding and Cutting" and "Safe Practices" Code: SP, published by the American Welding Society, PO Box 351040, Miami, FL 33135, and NFPA 51B "Cutting and Welding Processes", published by the National Fire Protection Association, Batterymarch Park, Quincy, MA 02269 for additional fire prevention and protection information.

V. REACTIVITY DATA

Stability: Stable (X) Unstable () Polymerization will not occur.Incompatible products: Brazo Flux & Ferro Flux - Acetic Anhydride, Elemental Potassium
Cast Iron Flux - Acetic Anhydride, Elemental Potassium, acids
Cromaloy Flux - Acetic Anhydride, Elemental Potassium, Cyanides
Aluminum Flux - Strong Acids, Cyanides and SulfidesHazardous decomposition products: Welding fumes and gases cannot be classified simply. The composition and quantity of both are dependent upon the material being worked, the process, procedures and consumables used. Other conditions which also influence the composition and quantity of the fumes and gases to which workers may be exposed include: coatings on the material being worked (such as paint, plating or galvanizing), the number of welding operations and the volume of the work area, the quality and amount of ventilation, the position of the workers head with respect to the fume plume, as well as the presence of contaminants in the atmosphere (such as chlorinated hydrocarbon vapors from cleaning or painting activities). When the materials are consumed, the fume and gas decomposition products generated are different in percent and form from the ingredients listed in Section II. Decomposition products of normal operation include those originating from the volatilization, reaction or oxidation of the ingredients, plus those from the material being worked and the coatings etc. noted above.Reasonably expected decomposition products from normal use of these products include a complex of the oxides of the materials listed in Section II, as well as carbon monoxide, carbon dioxide, and nitrogen oxides (refer to "Characterization of Arc Welding Fume" available from the American Welding Society). Aluminum Flux will give off HCl and HF in the presence of water and heat. The only way to determine the true identity of the decomposition products is by sampling and analysis. The composition and quantity of the fumes and gases to which a worker may be overexposed can be determined from a sample obtained from inside the welders helmet, if worn, or in the workers breathing zone. See ANSI/AWS F1.1 "Method for Sampling Airborne Particles Generated by Welding and Allied Processes", available from the American Welding Society

VI. PHYSICAL AND HEALTH HAZARD DATA

Dust, fumes and gases can harm your health. Heat rays from the flame or hot metal can injure eyes. Flux can cause eye damage or skin irritation. Swallowing flux can cause injury. An additional detailed description of the Health and Physical hazards and their consequences may be found in L-TEC's free publications F52-529 "Precautions and Safe Practices for Electric Welding and Cutting" and F2035 "Precautions and Safe Practices for Gas Welding, Cutting and Heating". You may obtain copies from your local supplier, or by writing to the address in Section I.

Route of overexposure: The primary route of entry of the decomposition products is by inhalation. Skin contact, eye contact, and ingestion are possible. Absorption by skin contact is unlikely. When these products are used as recommended by L-TEC, and ventilation maintains exposure to the decomposition products below the limits recommended in this section, overexposure is unlikely.Effects of acute (short term) overexposure:Brazo & Ferro Flux:

Acute Effects - Fume may irritate the respiratory system. Sneezing and coughing may result.

Chronic Effects - CNS effects, erythema

Aggravation of Pre-Existing Medical Conditions - skin and respiratory disorders may be worsened by over exposure.

Cast Iron Flux:

Acute Effects - Fumes may irritate the respiratory system. Sneezing and coughing may result. Exposure to copper and zinc oxide fumes may cause metal fume fever, symptoms of which are a metallic taste, coughing, shortness of breath, nausea, fever, and chills.

Chronic Effects - CNS effects, erythema

Aggravation of Pre-Existing Medical Conditions - skin and respiratory disorders may be worsened by overexposure.

Cromalloy Flux:

Acute Effects - Fumes may irritate the respiratory system. Sneezing and coughing may result.

Chronic Effects - Can cause lung damage (silicosis), CNS effects and erythema. Chronic fluoride absorption can result in osseous fluorosis.

Aggravation of Pre-Existing Medical Conditions - skin and respiratory disorders may be worsened by overexposure.

Aluminum Flux:

Acute Effects - Fumes may irritate the respiratory system. Chemical burns upon skin contact are possible.

Chronic Effects - Can cause lung damage. CNS and kidney effects possible. Exposure to Lithium may result in neuromuscular effects, hyperactive reflexes and weight loss. Chronic fluoride absorption can result in osseous fluorosis.

Aggravation of Pre-Existing Medical Conditions - skin and respiratory disorders may be worsened by overexposure.

Exposure limits for the ingredients are listed in Section II. The 1989 OSHA TWA for welding fume is 5 mg/m³. TLV-TWA's should be used as a guide in the control of health hazards and not as fine lines between safe and excessive concentrations. When these products are used as recommended by L-TEC, and the preventive measures taught in this MSDS are followed, overexposure to hazardous substances will not occur.

Emergency First Aid Measures: In case of emergency call for medical aid. Employ first aid technique recommended by the Red Cross. IF BREATHING IS DIFFICULT give oxygen and call for a physician. FOR ELECTRIC SHOCK disconnect and turn off the power. If not breathing begin artificial respiration, preferably mouth-to-mouth. If no detectable pulse begin Cardio Pulmonary Resuscitation (CPR). Immediately call a physician. For skin contact promptly flush with water for at least 15 minutes to remove all residue. If rash develops, call a physician. For eye contact remove contact lenses. Flush with water for at least 15 minutes. Get medical attention.

Carcinogenic Assessment (NTP Annual Report, IARC Monograph, Other): None currently listed.

VII. PRECAUTIONS FOR SAFE HANDLING AND USE

Spill or Leak Procedures - Waste Disposal: Prevent waste from contaminating the surrounding environment. Discard any product, residue, disposable container or liner in an environmentally acceptable manner, in full compliance with federal, state, and local regulations.

Personal Protection: Be sure to read and understand the manufacturer's instructions, recommended practices and all precautionary labels before use of these products. Keep your head out of the fumes. Do not breathe the fumes and gases caused by the flame. Use enough ventilation to reduce exposure to the acceptable levels listed in Section II. Air samples can be used to find out what respiratory protection is needed. Wear correct ear, eye and body protection such as ear plugs for noise, safety glasses and eye shields for radiation and flying particles, and gloves, hats, aprons, safety shoes etc. for protection from sparks, spatter, and radiation. Wear Chemically impervious gloves and eye shields when handling flux. See ANSI Z49.1 for additional guidelines. Use a respirable fume respirator or air supplied respirator when welding or cutting in a confined space or where exhaust or ventilation does not keep exposure below the limits recommended in Section II.

Training in proper safe work practices is the most effective protective measure against the hazards of welding and cutting. The users of these products should follow OSHA 29CFR1910.1200 training guidelines. The free L-TEC "Precautions and Safe Practices" offered in Section VI can assist you in your training program.

Ventilation - Specific Engineering Controls: Use enough ventilation, local exhaust, or both, at the flame to keep the fumes and gases below recommended exposure limits.

The opinions expressed in this MSDS are those of qualified experts within L-TEC. We believe that the information contained herein is current as of the date of this MSDS. Since the use of this information and these opinions and the conditions of use of these products are not within the control of L-TEC, it is the user's obligation to determine the conditions of safe use of these products.

X00287#

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MATERIAL SAFETY DATA SHEET

Required under USDL Safety and Health Regulations for Ship Repairing, Shipbuilding, and Shipbreaking (29 CFR 1915, 1916, 1917)

SECTION I

MANUFACTURER'S NAME: Never-Seez Compound Corporation
 ADDRESS (Number, Street, City, State, and ZIP Code): 2910 S. 18th Ave., Broadview, Illinois 60153
 EMERGENCY TELEPHONE NO.: 312-626-4416

CHEMICAL NAME AND SYNONYMS: Anti-seize and lubricating compound
 CHEMICAL FAMILY: Anti-Seize

TRADE NAME AND SYNONYMS: NEVER-SEEZ
 FORMULA: N.A.

Applied Waxes

SECTION II - HAZARDOUS INGREDIENTS

PAINTS, PRESERVATIVES, & SOLVENTS	%	TLV (Units)	ALLOYS AND METALLIC COATINGS	%	TLV (Units)
PIGMENTS			BASE METAL		
CATALYST			ALLOYS		
VEHICLE			METALLIC COATINGS		
SOLVENTS			FILLER METAL PLUS COATING OR CORE FLUX		
ADDITIVES			OTHERS		
OTHERS					

HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES

This material does not fall within the definition of "hazardous material" as given in Sec. 3, Parts 1501, 1502 and 1503 of Public Law 85-742. Aerosol cans must not come in contact with flame or heat. Refer to label on aerosol can. This applies only to aerosol packaging.

SECTION III - PHYSICAL DATA

BOILING POINT (°F)	400°F	SPECIFIC GRAVITY (H ₂ O=1)	1.2607
VAPOR PRESSURE (mm Hg.)	0.1@68°F	PERCENT VOLATILE BY VOLUME (%)	0
VAPOR DENSITY (AIR=1)	10 (60°F-90°F)	EVAPORATION RATE (1)	1
SOLUBILITY IN WATER	None		
APPEARANCE AND ODOR	almost no odor-dark, silvery paste		

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used): 500°F-open cup

EXTINGUISHING MEDIA: Foam, CO₂, Dry Chemical, Class B & C Fire Extinguishers

FLAMMABLE LIMITS: Lel: , Uel:

UNUSUAL FIRE AND EXPLOSION HAZARDS: None; but avoidance of oxygen and acetylene gases are advised. Keep aerosol cans away from flame or heat-see label on can.

Additional notes: B & C Class B & C Fire Extinguishers material is not flammable except from direct flame at high temperature and flame is not persistent. (Water is unsuitable).

PAGE (1)

(Continued on reverse side)

RECEIVED FROM

BEARING PARTS COMPANY

5/11/89 - Telephone number is new
A PRIVATE RESIDENCE

Form OSHA
Rev. May 77

X - 2470

481

L-4630-C
August 1985

MATERIAL SAFETY DATA SHEET



An explanation of the terms used herein may be found in OSHA 29 CFR 1910.1200, available from OSHA regional or area offices.
(Essentially similar to U.S. Department of Labor Form OSHA-20 and generally accepted in Canada for information purposes)
Do Not Duplicate This Form. Request an Original.



PRODUCT	Nitrogen (Cryogenic Liquid)		
CHEMICAL NAME	Nitrogen	SYNONYMS	Not applicable
FORMULA	N ₂	CHEMICAL FAMILY	Not applicable
		MOLECULAR WEIGHT	28.01
TRADE NAME	Liquid Nitrogen		



For mixtures of this product request the respective component Material Safety Data Sheets. See Section IX.

MATERIAL (CAS NO.)	Wt (%)	1984-1985 ACGIH TLV-TWA (OSHA-PEL)
Nitrogen (7727-37-9)	100	Simple asphyxiant (None currently established)



BOILING POINT, 760 mm. Hg	-195.8°C (-320.4°F)	FREEZING POINT	-210°C (-345.8°F)
SPECIFIC GRAVITY (H₂O = 1)	0.808 @ -195.8°C	VAPOR PRESSURE AT 20°C	Gas
VAPOR DENSITY (air = 1)	0.967	SOLUBILITY IN WATER, % by wt.	Negligible
PERCENT VOLATILES BY VOLUME	100	EVAPORATION RATE (Butyl Acetate = 1)	High

APPEARANCE AND ODOR Colorless, odorless liquid.



IN CASE OF EMERGENCIES involving this material, further information is available at all times:
In the USA 1-800-UCC-HELP (1-800-822-4357) In Canada 514 - 640-6400
For routine information contact your local supplier

Union Carbide requests the users of this product to study this Material Safety Data Sheet (MSDS) and become aware of product hazards and safety information. To promote safe use of this product a user should (1) notify its employees, agents and contractors of the information on this MSDS and any product hazards and safety information, (2) furnish this same information to each of its customers for the product, and (3) request such customers to notify their employees and customers for the product of the same product hazards and safety information.

L-4630-C

0475

X - 1585

L-4559-E
April 1987

MATERIAL SAFETY DATA SHEET



An explanation of the terms used herein may be found in OSHA 29 CFR 1910.1200, available from OSHA regional or area offices.
(Similar to U.S. Department of Labor Form OMB No. 1218-0072 and generally accepted in Canada for information purposes)
Do Not Duplicate This Form. Request an Original.



I. PRODUCT IDENTIFICATION

PRODUCT	Acetylene		
CHEMICAL NAME	Acetylene	SYNONYMS	Acetylen, Ethine, Ethyne, Narcylene
FORMULA	C ₂ H ₂	CHEMICAL FAMILY	Alkyne
		MOLECULAR WEIGHT	26.038

TRADE NAME Acetylene (This product is intended for welding and cutting use.)

II. HAZARDOUS INGREDIENTS

This section covers the materials from which this product is manufactured. The fumes and gases produced during welding and cutting with the normal use of this product are covered by Section VI. The term "hazardous" should be interpreted as a term required and defined in OSHA 29 CFR 1910.1200 and does not necessarily imply the existence of any hazard.

MATERIAL (CAS NO.)	Vol (%)	1986-1987 ACGIH TLV-TWA (OSHA-PEL)
Acetylene (74-86-2)	100	Simple asphyxiant (None currently established) Acetylene cylinders are filled with a porous material containing acetone into which the acetylene is dissolved. ACGIH has established a TLV-TWA of 750 ppm for acetone and a STEL of 1000 ppm.

III. PHYSICAL DATA

BOILING POINT, 760 mm. Hg	Not Applicable	SUBLIMATION POINT	-84°C (-119.2°F) @ 760mm Hg
SPECIFIC GRAVITY (H₂O = 1)	Not Applicable	VAPOR PRESSURE AT 21°C.	635 psig
VAPOR DENSITY (air = 1)	0.91	SOLUBILITY IN WATER, % by wt.	Slight
PERCENT VOLATILES BY VOLUME	100	EVAPORATION RATE (Butyl Acetate = 1)	Not Applicable

APPEARANCE AND ODOR Colorless gas at normal temperature and pressure; garlic-like odor.

EMERGENCY PHONE NUMBER

IN CASE OF EMERGENCIES involving this material, further information is available at all times:
In the USA 1-800-UCC-HELP (1-800-922-4357) In Canada 514-645-5311
For routine information contact your local supplier

Union Carbide requests the users of this product to study this Material Safety Data Sheet (MSDS) and become aware of product hazards and safety information. To promote safe use of this product a user should (1) notify its employees, agents and contractors of the information on this MSDS and any product hazards and safety information, (2) furnish this same information to each of its customers for the product, and (3) request such customers to notify their employees and customers for the product of the same product hazards and safety information.

UNION CARBIDE CORPORATION LINDE DIVISION
UNION CARBIDE CANADA LIMITED LINDE DIVISION

L-4559-E



X-2470
544

Material Safety Data Sheet

Page: 1
Rev. Date
08/09/89

OXYGEN, REFRIGERATED LIQUID

Airco, Division of the BOC Group, Inc.
575 Mountain Avenue
Murray Hill, NJ 07974

Telephone: (201)464-8100

Emergency Contact: CHEMTREC
Emergency Phone Number: (800)424-9300

SECTION #1 - IDENTIFICATION

Product: OXYGEN, REFRIGERATED LIQUID

CAS Number: 7782-44-7
Product Code: MSDS CODE G-102
Chemical Family: Oxidizer
Chemical Formula: O₂ Liquified

Synonyms: G-102

PA Hazard Rating - Health: 3 High
- Fire: 0 Negligible
- Reactivity: 0 Negligible
- Special: Oxy

SECTION #2 - CHEMICAL COMPONENTS

Component: OXYGEN

CAS Number: 7782-44-7

Percent of Mixture: 99.6000 to 99.9970

No TLV/PEL Established

SECTION #3 - PHYSICAL DATA

Boiling Point: -297.3°F - 182.9°C
Melting Point: - 361.8°F - 218.8°C
Vapor Pressure: Above critical temp.
Specific Gravity: 1.105
Solubility (H₂O): Slightly soluble

Appearance

A clear pale blue liquid.


AIRCO

X03187*

MAPP GAS

0065

Material Safety Data Sheet**LIQUEFIED PETROLEUM GAS WITH METHYL ACETYLENE-PROPADIENE**

Page: 1
 Rev. Date
 07/24/89

Airco, Division of The BOC Group, Inc.
 575 Mountain Avenue
 Murray Hill, NJ 07974

Telephone: (201)464-8100

Emergency Contact: CHEMTREC
 Emergency Phone Number: (800)424-9300

SECTION #1 - IDENTIFICATION

Product: LIQUEFIED PETROLEUM GAS WITH METHYL ACETYLENE-PROPADIENE

CAS Number: Not Established
 Product Code: MSDS CODE G-118
 Chemical Family: Gas Mixture

Synonyms: G-118
 LPG - MAPP MIXTURE
 MAPP - LPG MIXTURE
 METHYL ACETYLENE-PROPADIENE (MAPP) MIXTURE WITH LPG

Hazard Rating - Health: 1 Slight
 - Fire: 4 Extreme
 - Reactivity: 1 Slight

Special Hazards: Highly flammable gas!

SECTION #2 - CHEMICAL COMPONENTS

Component: LIQUEFIED PETROLEUM GAS
 CAS Number: 68476-85-7 Percent of Mixture: 56.0000
 ACGIH TLV-TWA: 1000 ppm
 OSHA PEL-TWA: 1000 ppm (Final)
 IDLH: 19,000 ppm

Component: METHYL ACETYLENE - PROPADIENE
 CAS Number: 56960-91-9 Percent of Mixture: 44.0000
 ACGIH TLV-TWA: 1000 ppm OSHA PEL-TWA: 1000 ppm (Trans.)
 ACGIH TLV-STEL: 1250 ppm OSHA PEL-TWA: 1000 ppm (Final)
 IDLH: 20,000 ppm OSHA PEL-STEL: 1250 ppm (Final)

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5480

MATERIAL SAFETY DATA SHEET

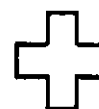
L-4646-B
November 1989



An explanation of the terms used herein may be found in OSHA 29 CFR 1910.1200, available from OSHA regional or area offices.

(Essentially similar to U.S. Department of Labor Form OMB No. 1218-0072 and generally accepted in Canada for information purposes)

Do Not Duplicate This Form. Request an Original.



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I. PRODUCT IDENTIFICATION

PRODUCT	Propane		
CHEMICAL NAME	Propane	SYNONYMS	Dimethylmethane, Propyl Hydride, Propylidhydride
FORMULA	C ₃ H ₈	CHEMICAL FAMILY	Alkane
		MOLECULAR WEIGHT	44.096

TRADE NAME Liquefied Petroleum Gas

II. HAZARDOUS INGREDIENTS

For mixtures of this product request the respective component Material Safety Data Sheets. See Section IX.

MATERIAL (CAS NO.)	Wt. (%)	1989-1990 ACGIH TLV-TWA (OSHA-PEL)	
Propane (74-98-6)	100	Simple asphyxiant	(1000 ppm)

Propane is subject to the Pennsylvania Worker and Community Right-To-Know Act (35 P.S. Sections 7301-7320).

III. PHYSICAL DATA

BOILING POINT, 760 mm. Hg	-42.1°C (-43.7°F)	FREEZING POINT	-187.7°C (-305.8°F)
SPECIFIC GRAVITY (H ₂ O = 1)	0.5077 @ 25°C	VAPOR PRESSURE AT 21°C	109 psig
VAPOR DENSITY (air = 1)	1.55 @ 20°C	SOLUBILITY IN WATER, % by wt.	Negligible
PERCENT VOLATILES BY VOLUME	100	EVAPORATION RATE (Butyl Acetate = 1)	High

APPEARANCE AND ODOR Colorless gas at normal temperature and pressure; faintly disagreeable odor.

EMERGENCY PHONE NUMBER

IN CASE OF EMERGENCIES involving this material, further information is available at all times:
 In the USA 1-800-UCC-HELP (1-800-822-4357) In Canada 514-640-6400
 For routine information contact your local supplier

L-4646-B

Union Carbide Industrial Gases requests the users of this product to study this Material Safety Data Sheet (MSDS) and become aware of product hazards and safety information. To promote safe use of this product a user should (1) notify its employees, agents and contractors of the information on this MSDS and any product hazards and safety information, (2) furnish this same information to each of its customers for the product, and (3) request such customers to notify their employees and customers for the product of the same product hazard and safety information.

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Material Safety Data Sheet

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Rev. Date
08/03/89

OXYGEN

irco, Division of the BOC Group, Inc.
75 Mountain Avenue
urray Hill, NJ 07974

Telephone: (201)464-8100

Emergency Contact: CHEMPREC
Emergency Phone Number: (800)424-9300

SECTION #1 - IDENTIFICATION

Product: OXYGEN

CAS Number: 7782-44-7
Product Code: MSDS CODE G-1
Chemical Family: Oxidizer
Chemical Formula: O2

Synonyms: G-1

Hazard Rating	- Health:	3	High
	- Fire:	0	Negligible
	- Reactivity:	0	Negligible
	- Special:	Oxy	

SECTION #2 - CHEMICAL COMPONENTS

Component: OXYGEN
CAS Number: 7782-44-7
Percent of Mixture: 99.6000 to 100.0000

SECTION #3 - PHYSICAL DATA

Boiling Point: -297.3°F - 182.9°C
Melting Point: -361.8°F - 218.8°C
Vapor Pressure: Above critical temp.
Specific Gravity: 1.11 (gas, air=1.0)
Solubility (H2O): Slightly soluble

Appearance

Colorless gas.

X03005*

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MATERIAL SAFETY DATA SHEET

L-4719-B
March 1988



An explanation of the terms used herein may be found in OSHA 29 CFR 1910.1200, available from OSHA regional or area offices.
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PRODUCT IDENTIFICATION

PRODUCT	2% Oxygen - 98% Argon Mixture		
CHEMICAL NAME	Oxygen and Argon mixture	SYNONYMS	Not Applicable
FORMULA	Mixture of Ar and O ₂	CHEMICAL FAMILY	Not Applicable
		MOLECULAR WEIGHT	Not Applicable

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TRADE NAME M-2, O-2, Sigma-2 (This product is intended for electric welding use.)

HAZARD INFORMATION

This section covers the materials from which this product is manufactured. The fumes and gases produced during cutting with the normal use of this product are covered by Section VI. The term "hazardous" should be interpreted as a term required and defined in OSHA 29 CFR 1910.1200 and does not necessarily imply the existence of any hazard.

MATERIAL (CAS NO.)	Vol (%)	1987-1988 ACGIH TLV-TWA (OSHA-PEL)
Oxygen (7782-44-7)	2	None currently established (None currently established)
Argon (7440-37-1)	98	Simple asphyxiant (None currently established)

PHYSICAL DATA

BOILING POINT, 760 mm. Hg	Not Applicable	FREEZING POINT	Not Applicable
SPECIFIC GRAVITY (H₂O = 1)	Gas	VAPOR PRESSURE AT 20°C.	Gas
VAPOR DENSITY (air = 1)	1.37	SOLUBILITY IN WATER, % by wt.	Negligible
PERCENT VOLATILES BY VOLUME	100	EVAPORATION RATE (Butyl Acetate = 1)	Not Applicable

APPEARANCE AND ODOR Colorless, odorless gas at normal temperature and pressure.

EMERGENCY ACTION NUMBERS

IN CASE OF EMERGENCIES involving this material, further information is available at all times:
In the USA 1-800-UCC-HELP (1-800-822-4357) In Canada 514 — 640-6400
For routine information contact your local supplier

B-6147-1

Union Carbide requests the users of this product to study this Material Safety Data Sheet (MSDS) and become aware of product hazards and safety information. To promote safe use of this product a user should (1) notify its employees, agents and contractors of the information on this MSDS and any product hazards and safety information, (2) furnish this same information to each of its customers for the product, and (3) request such customers to notify their employees and customers for the product of the same product hazards and safety information.

UNION CARBIDE CORPORATION LINDE DIVISION
UNION CARBIDE CANADA LIMITED LINDE DIVISION

EMERGENCY RESPONSE EQUIPMENT

- 56) Equipment Location See Figure 1 ERS = Emergency Response Station
57) Equipment Inspector Plant Services Manager
58) Inspection Frequency Weekly

59) **Personal Protective Equipment**

- Boots
 Chemical resistant suit
 Face shield
 Gloves
 Helmet
 Respiratory protection
 Other _____

60) **Spill Control Equipment**

- Absorbent
 Brooms
 Neutralizers
 Pumps/Vacuums
 Spill cart
 Vapor Scrubber (fork liftable)
 Other _____

61) **Communications Devices**

- Portable Radios
 Telephones
 Pagers
 Other _____

EMERGENCY RESPONSE TRAINING

All Personnel

All employees are trained in the following procedures:

- 62) Internal emergency alarm notification.
- 63) Immediate notification to Alameda County Dept. of Environmental Health, State Office of Emergency Services and other emergency response agencies.
- 64) Review of the emergency response plan.
- 65) Evacuation procedures.
- 66) Procedures for the mitigation of a release or threatened release.

Hazardous Material / Waste Handlers

Hazardous Material/Waste handlers are additionally trained in the following:

- 67) Safe method for handling and storage of hazardous materials.
- 68) Proper use of personal protection equipment.
- 69) Locations and proper use of fire and spill control equipment.
- 70) Specific hazards of each chemical to which they may be exposed, including the pathways of exposure (i.e. skin absorption, inhalation, ingestion).

Emergency Response Team

Emergency response team members are additionally trained in the following procedures and will act as liaison to the Fire Department:

- 71) Personnel rescue procedures.
- 72) Shutdown of operations.
- 73) Use, maintenance, and replacement of emergency response equipment.
- 74) Emergency response drills.
- 75) Refresher training is provided at least annually.

Emergency Response Documents

The following training records are maintained for each employee:

- 76) Verification of date that training was completed.
- 77) Description of introductory and continuing training.
- 78) Employee's training records are retained at least three years.
- 79) Description and documentation of facility emergency response drills.

Other

- 79a) N/A Procedure to be used in event of spill from an underground tank.
No USTs

Your Emergency Response Training Plan and Records MUST be on site and available for review by Alameda County Department of Environmental Health.

EVACUATION INFORMATION

80) Evacuation Notification

- Verbal (i.e. shouting)
- Horns
- Alarms

81) Evacuation Procedures

- Defined evacuation routes and procedures.
- Preplanned assembly areas.
- Evacuation route maps prominently displayed throughout facility.
- Re-entry procedures.

EMERGENCY NOTIFICATIONS: for spills or leaks of Hazardous Materials or Hazardous Waste

82a) Fire/Police/Ambulance 911

or Alameda County Dept. of Environmental Health:

510/271-4320 - weekdays

510/667-7721 - nights, weekends

83) CA State Office of Emergency Services 800/852-7550 or 916/262-1621

84) Other Agencies _____

85) Medical Facility Summit Medical Center

Address 3100 Telegraph Avenue - 2nd Floor

City Oakland

State CA

Zip Code 94609

Phone 465-9565

Certification

I hereby certify, under penalty of perjury, that the information contained in this Hazardous Materials Business Plan is, to the best of my knowledge, true and correct. I understand that I may be required to show proof of compliance during any facility inspection conducted by local, County, State, or Federal authorities.

Print Name:

BILL TAILENT
PLANT SERVICES MGR.

Title:

Authorized Signature:

Bill Tailent

Date:

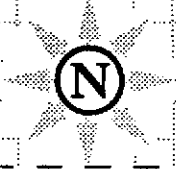
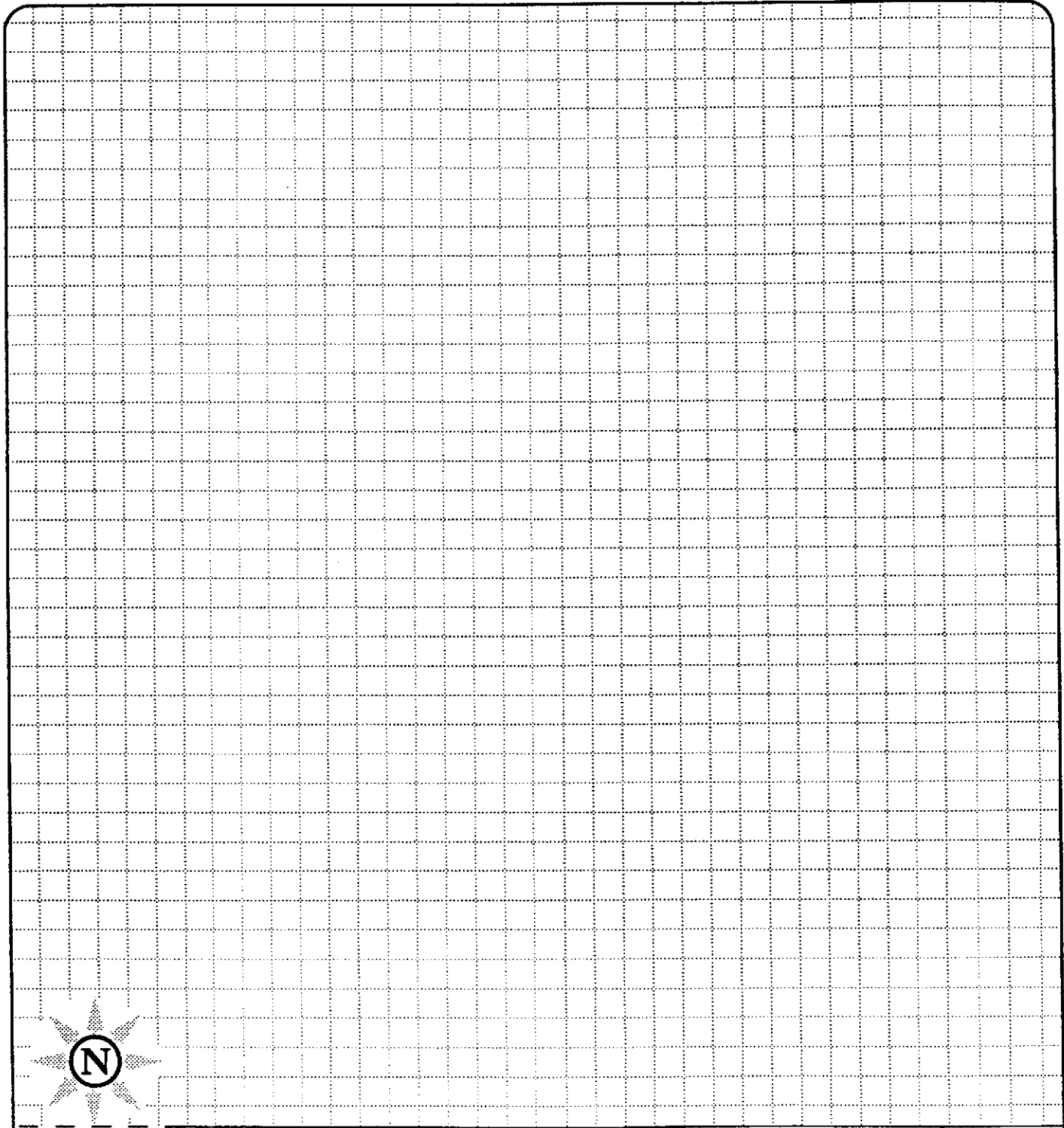
6-20-94

Alameda County Department of Environmental Health
Hazardous Materials Business Plan
FACILITY MAP - STORAGE DETAIL

Facility Name: _____

Facility Address: _____ City: _____ Zip: _____

CONFIDENTIAL

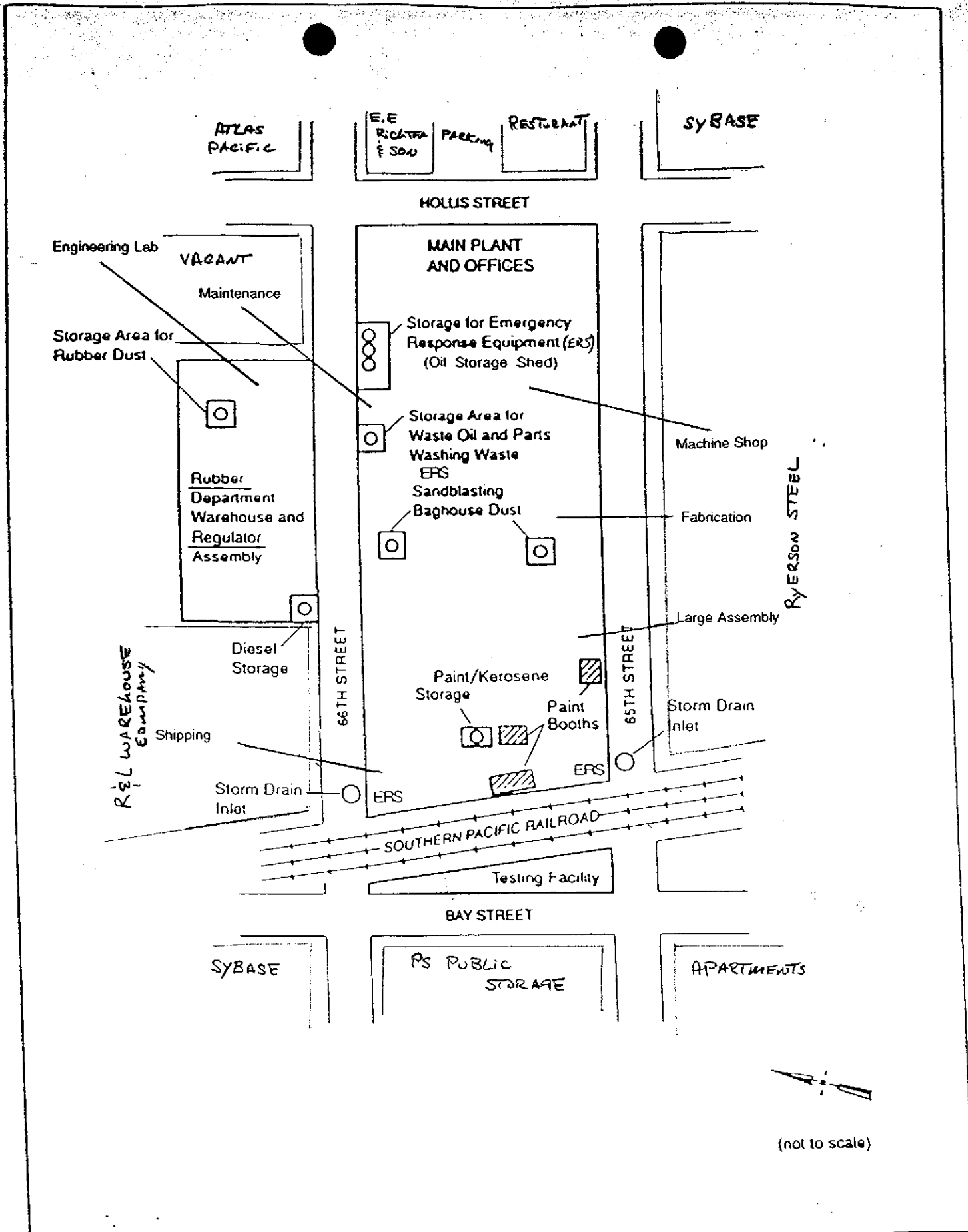


INDICATE
NORTH ARROW

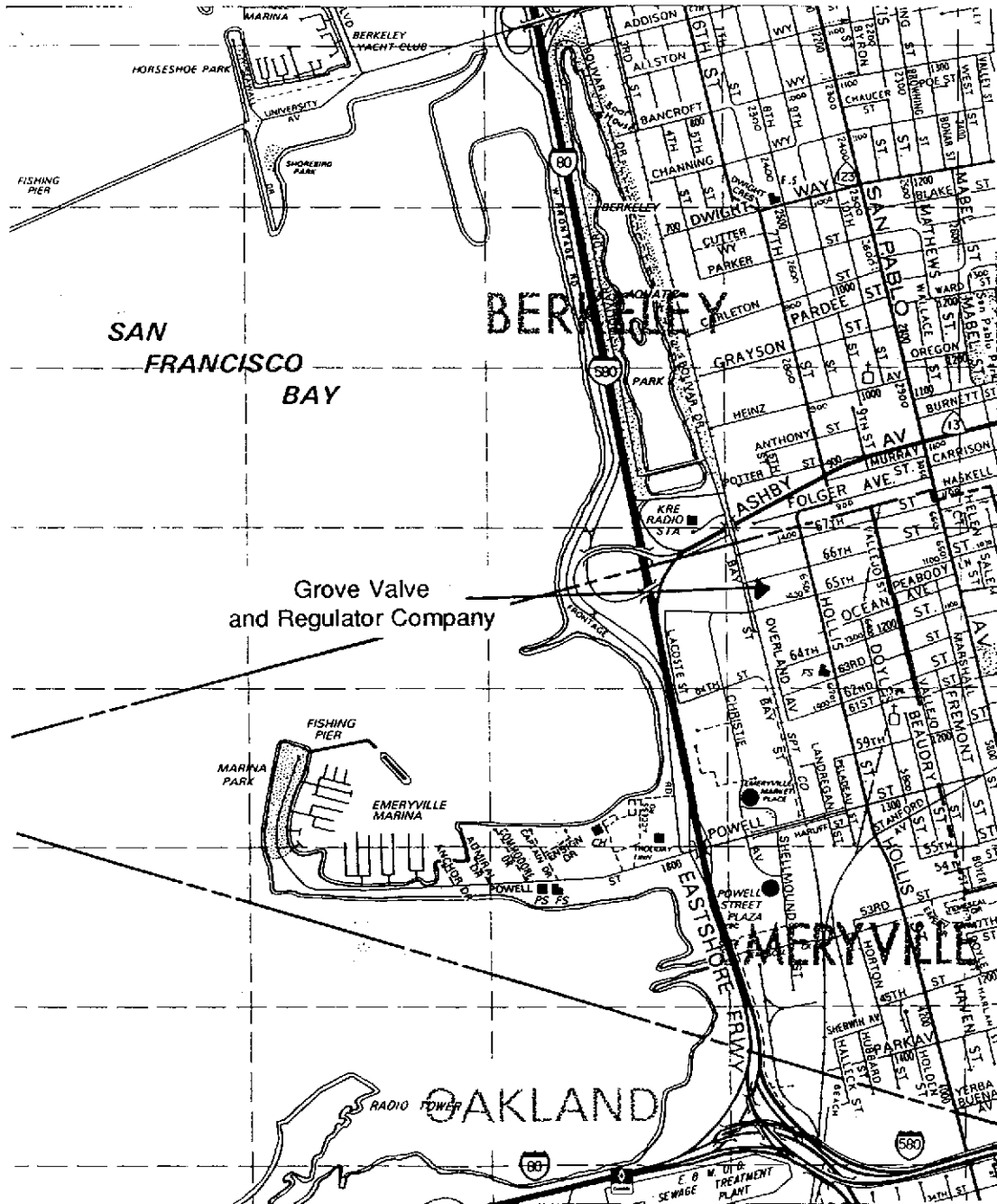
SCALE: 1 inch = 5 squares = _____ feet

MAP # _____ MAP NAME _____

DATE _____



Project No. 91C0667B	Grove Valve and Regulator Company	FACILITY PLOT PLAN	Figure 1
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Scale: 1" = 0.5 mile

Figure 2	
Site Location Map	
Project No.	Grove Valve and Regulator Company
Woodward-Clyde Consultants	

Grove Valve and Regulator Company
6529 Hollis Street, Emeryville, CA 94608
Onsite Hazardous Materials and Wastes

Liquid Item	Total Gallons	Description	Generic Category
<u>Machine Shop</u>			
1	55	55 gallon metal drum; Texaco Inc.; Rust Proof (#00564) Oil	Oil
<u>Regulator</u>			
1	55	55 gallon metal drum; Glycerine USP	Oil
<u>Shipping</u>			
2	250	275 Gallon Fuel tank; Bay Area Petroleum; Diesel Fuel #2	Fuel
<u>Large Assembly</u>			
3	10	5 gallon container; 3M corp; Scotchkote 306 A&B	Coating
4	30	5 gallon container; Master Builders; Flakeline 251 coating	Coating
5	10	5 gallon container; Master Builders; Primer #370	Paint
6	7	1 gallon container; Glidden; Green Enamel Paint	Paint
7	30	5 gallon container; Precision Coatings; Aluminium Primer #380-A-1	Paint
8	45	5 gallon container; Dampney Corp.; Primer #750	Oil Paint
9	25	5 gallon container; Dampney Corp.; Encor Black #772	Paint
10	45	5 gallon container; Precision Coatings; Blue Safety Paint #380-K-31	Paint
11	5	5 gallon container; Ameron; Amercoat 450	Paint
12	10	5 gallon container; Plasite; #30 Thinner	Resin
13	5	5 gallon container; Dampney Corp.; Thinner #124	Resin
14	5	5 gallon container; Carboline Marine Coatings; Thinner #10	Thinner
15	5	5 gallon container; Koppers Bitumastic; Thinner #T-2000	Thinner
16	110	55 gallon drum; Carboline; Thinner 2000	Thinner
17	5	5 gallon container; Am. Research; Cleaner/Degreaser #206	Thinner
18	5	5 gallon container; Porters Int'l; Thinner #T-13	Thinner
19	55	55 gallon drum; Valley Oil; Mobilarama 245	Tar
20	55	55 gallon drum; Shell, Kerosene	Oil

21	110	55 gallon drum; Holt Lloyd; General lubricant #LPS2	Oil
22	55	55 gallon drum; Omni Chem.; Rust Inhibitor #SCS-77	Oil
23	110	55 gallon drum; Calgon; Surround #1660-01	

Maintenance

24	110	55 gallon drum; Shell; Tonna #68	Oil
25	605	55 gallon drum; Shell; Tellus #68	Oil
26	110	55 gallon drum; Shell; Omala #68	Oil
27	500	500 gallon bin; Stuart; KleenKut 101	Oil
28	220	55 gallon drum; Air Compressor Oil AC-3	Oil
29	82.5	55 gallon drum; Texaco; Halvoline 10-40 oil	Oil
30	330	55 gallon drum; Shell; Tellus #32	Oil
31	55	55 gallon drum; Shell; Spirax 85/140	Oil
32	55	55 gallon drum; Shell; Omala #460	Oil
33	275	55 gallon drum; Unocal,Dexron II ATF Transmission Oil	Oil
34	25	5 gallon bucket; Inland Vacuum; Vacuum Pump oil 20	Oil
35	55	55 gallon drum;Mobile, Mobilmet Omicron	Oil
36	55	55 gallon drum; Shell; Voluta 6230X	Oil
37	55	55 gallon drum; Union Carbide; Uncon Heat Transfer Fluid 500	Oil
38	10	5 gallon can; Shell; Tellus #23	Oil
39	275	55 gallon drum; Shell; Anti-Freeze	Oil
40	55	55 gallon drum; Master Chemicals,Trim Clear	Oil
41	55	55 gallon drum; Texaco; Anti-Freeze	Coolant
42	35	35 gallon drum; Chemsearch; SS-25	Thinner
43	25	5 gallon can; Tennant; Solvent 7200	Thinner
44	15	5 gallon can; Tennant; Solvent 520	Thinner
45	220	55 gallon drum; Shell, Kerosene	Oil
46	15	5 gallon can; Anderol 500 Solvent	Thinner

Rubber Department

47	10	5 gallon can; Mallinckrodt; Methyl ethel ketone "MEK"	Thinner
48	2	1 gallon can; Chemlock; 205 Primer	Paint
49	220	55 gallon drum; G. C. Lubricants Company; Aqua Syn-200 (rust inhibitor)	Rust Inhibitor

Engineering Lab

50	1	1 gallon can; Mobil Oil Company; Mobil 7T39 Thinner
51	3	1 gallon can; Solvoil; V M and P Naptha

Thinner
Thinner

Waste Items (Liquid)

1	650	2,000 gal max., 500-800 gal avg., Tramp Oil & Water (26) State Waste Code 221 (26a) EPA Waste Code none (54) 7500 gallons waste generated per year
2	200	200 gal. Waste Oil (26) State Waste Code 221 (26a) EPA Waste Code none (54) 1200 gallons waste generated per year
3	55	55 gallon drum; Waste Liquid Paint

**Grove Valve and Regulator Company
6529 Hollis Street, Emeryville, CA 94608
Onsite Hazardous Materials and Wastes**

Solid Item	Total Pounds	Description	Generic Category
<u>Fabrication</u>			
1	18,000	100# bags; L-TEC Welding Flux	
2	130	130# drum; Bostik Chemical Grout; Never-Seez	
<u>Large Assembly</u>			
3	3,200	400# drum; G-C Lubricants; Low Temp Grease #2	
<u>Waste Items (Solid)</u>			
1	1,400	8 drums max., 4 drums avg. Solid Paint (RCRA Flammable Haz Waste), 350# ea (26) State Waste Code 352 (26a) Federal Waste Code D001 (54) Waste generated per year: 8 drums or 2800#	
2	1,400	8 drums max., 4 drums avg. Baghouse Dust, 350# ea (26) State Waste Code 591 (26a) Federal Waste Code none (54) Waste generated per year: 8 drums or 2800#	
3	175	1 drum max., 0.5 drum avg., Rubber Dust, 350# ea (26) State Waste Code 352 (26a) Federal Waste Code none (54) Waste generated per year	
	21,330	Pounds Total Solid Hazardous Materials	
	2,975	Pounds Total Solid Hazardous Waste	

**Grove Valve and Regulator Company
6529 Hollis Street, Emeryville, CA 94608
Onsite Hazardous Materials and Wastes**

Gaseous Item	Total Cubic Feet	Description
<u>Fabrication</u>		
1	2,241	249 cu.ft. gas cylinder; Linde Gases; Oxygen
2	2,760	345 cu.ft. gas cylinder; Linde Gases; Acetylene
3	670	335 cu.ft. gas cylinder; Linde Gases; 98% Argon, 2% Oxygen
4	4,500	4500 cu.ft. cylinder; Union Carbide Corp.; Liquid Oxygen
5	36,500	36,500 cu. ft. tank; MAPP Products; Mapp gas
<u>Shipping</u>		
6	9,636	292 cu.ft. gas cylinders Allied Propane; propane gas
<u>Engineering Lab</u>		
7	71	71 cu ft bottle; Linde Gases; Gas Mix
8	14,520	7,260 cu. ft, Dewar; Linde Gases/AltAir; Liquid Nitrogen LS 160
	70,898	Cubic Feet Total Hazardous Materials

