C	)·P·I	M	ATERIAL S	AFET	Y DATA S	HEET		Page 1 of 7 <b>MSDS-034</b>
Prer	pared to OSHA	ACC ANSL NOHSC \	WHMIS & 2001/58 EC Sta	ndards M	ASDS Revision: 2.0	MSDS	Revision Date	·· 04/28/2010
110				indiands i		Mobo	to vision Date	
			1. PRODUC		IFICATION			
1.1	Product Name:							
1.2	Chemical Name:							
1.2	METHACRYLAI							
1.3	Synonyms:							
	NA							
1.4	Trade Names: LP xxx							
1.5	Product Use:							
		L OR SUNDRY USE ON	LY					
1.6	Manufacturer's Na							
1.7	OPI PRODUCTS Manufacturer's Ac							
,			VOOD, CA 91605 USA					
1.8	Emergency Phone							
	CHEMTREC:	+1 (703) 527-388	87 / <mark>+1 (800) 424-</mark> 93	00				
1.9	Business Phone:							
	+1 (818) 759-2	400 / +1 (800)-341-99	799					
	1		2. HAZAR	d identi	FICATION			
2.1	Hazard Identificati							
			AZARDOUS SUBSTANC		DANGEROUS GOODS	according	the classific	ation criteria of
2.2	Routes of Entry:		Inhalation:	YES	Absorption:	YES	Ingestion:	YES
2.3	Effects of Exposure	:						
	INGESTION:		ed, may cause nausea	-	-			
	SKIN & EYES:	May be irritating to	y to the eyes. Sympton skin, especially after p stitis) upon prolonged on	prolonged o	ontact. The product			
	INHALATION:	Symptoms of overea	uct may be moderatel xposure can include co rs can cause central ner	ughing, whe	ezing, nasal congest	ion, and diff	iculty breathi	ng. Inhalation of
2.4	Symptoms of Over				(*)	· · · · · ·		
		ng and watering. Th	nay include redness, ito ne product can cause					
2.5	Acute Health Effect							
	Moderate irrito headaches ar	•	n near affected areas. A	Additionally,	high concentrations of	of vapors co	n cause drov	vsiness, dizziness,
2.6	Chronic Health Effe							
	None known							
2.7	Target Organs:							
	Eyes, skin & re	spiratory system.						

NA = Not Available; ND = Not Determined; NE = Not Established; NF = Not Found; C = Ceiling Limit; See Section 16 for Additional Definitions of Terms Used NOTE: all WHMIS required information is included. It is located in appropriate sections based on the ANSI Z400.1-2004 format.

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# **MATERIAL SAFETY DATA SHEET**

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	3. COMPOSITION & INGREDIENTS														
								EXPOSURE LIMITS IN			NAIR (mg/m³)				
						ACGIH		NOHSC			OSHA				
							pp	om 🗌		ppm			ppm		OTHER
	CHEMICAL NA	MF(S)	CAS No.	RTECS No.	EINECS No.	%	TLV	STEL	ES- TWA	ES- STEL	ES- PEAK	PFI	STEL	IDLH	
ETHYL	METHACRYLATE		97-63-2	OZ4550000	202-597-5	≤ 55.0		NE	NF	NF	NF	(10)	NE	NE	
GLYC	OL HEMA-METH	ACRYLATE	97-90-5	OZ4400000	202-617-2	≤ 30.0	NA	NA	NF	NF	NF	NA	NA	NA	
DIME	THYLTOLYLAMIN	E	99-97-8	XU5803000	202-805-4	≤ 15.0	NA	NA	NF	NF	NF	NA	NA	NA	
DRON	<b>NETRIZOLE</b>		2440-22-4	NA	219-470-5	< 2.0	NA	NA	NF	NF	NF	NA	NA	NA	
	<b>5</b> 1 - 1 - 1 - 1			4. HI	RST AID M	EASU	RES								
4.1	First Aid:	If increased	de net induce	venilinel If				امتنام ام	ا مام ما						lf the
	INGESTION:	patient is vo nearest Pois	omiting, contin son Control Ce	nue to offer we	product has be ater or milk. N emergency nu ice that was sw	lever gi mber. I	ve wa Provide	ter or i	milk to	an unc	onscie	ous pe	erson.	Conto	act the
	EYES:	If product g	gets in the ey	es, flush with (	copious amou F problem per	nts of lu	ukewa					ninute	s. Ope	n and	close
	SKIN:	If irritation o	ccurs & produ	ct is on the ski	n, rinse thorou	ghly wit	h luke	warm	water,	followe	d by a				
					l water. Do n persists, cons						intil af	ter it	has be	een pr	operly
	INHALATION:				persists, cons preathing stop:		-				nce. S	ieek i	mmed	iate m	edical
4.2	Medical Condition		/ Exposure:						HEA	TH					2
	Pre-existing de skin, respirator		er skin condit	ions, and diso	rders of the tar	get org	ans (e	yes,		MMA	BILIT	Y			3
									REA		TY				2
									PRO	TECTI	VE E	QUI	PME	NT	В
								F	EYES		KIN				
				5. FIRE	FIGHTING	MEAS	SURE	S							
5.1	Flashpoint & Metho	od:													
5.2	24°C (75°F) Autoignition Tempe	erature:													
0.2	ND														
5.3	Flammability Limits:			Lower Explos	sive Limit (LEL):		ND		Upper	Explosi	ve Lim	it (UEL	):	Ν	D
5.4	Fire & Explosion Ha														
	This product is a flammable liquid. When involved in a fire, this product may ignite and decompose to form toxic gases (e.g., CO, CO <sub>2</sub> , NO <sub>x</sub> ).														
5.5	Extinguishing Meth														
	HazChem Code: 3YE														
	Hazard Identification Number: 33														
	Water, Foam,		emical									4			
5.6	Firefighting Proced									_			Ľ	7	
	First responders should wear eye protection. Structural fire fighters must wear full protective equipment and MSHA/NIOSH-approved self-contained breathing apparatus. If possible, prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitive areas. If necessary, rinse contaminated equipment with soapy water before returning to service.														
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6.1

Spills:

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### 6. ACCIDENTAL RELEASE MEASURES

Before cleaning any spill or leak, individuals involved in spill cleanup must wear appropriate Personal Protective Equipment. For small spills (e.g., <1 gallon) wear appropriate personal protective equipment (e.g., goggles, gloves). Maximize ventilation (open doors and windows) and secure all sources of ignition. Remove spilled material with absorbent material and place into appropriate closed container(s) for disposal. Dispose of properly in accordance with local, state and federal regulations. Wash all affected areas and outside of container with plenty of warm water and soap. Remove any contaminated clothing and wash thoroughly before reuse For spills  $\geq$  1 gallon, deny entry to all unprotected individuals. Dike and contain spill with inert material (e.g., sand or earth). Use ONLY non-sparking tools for recovery and cleanup. Transfer liquid to containers for recovery or disposal and solid diking material to separate containers for proper disposal. Remove contaminated clothing promptly and wash affected skin areas with soap and water. Keep spills and cleaning runoffs out of municipal sewers and open bodies of water. 7. HANDLING & STORAGE INFORMATION Work & Hygiene Practices: 7.1 Avoid prolonged contact with this material. Avoid breathing the vapors generated by this product. Use in a well-ventilated location (e.g., local exhaust ventilation, fans). Wash exposed skin thoroughly with plenty of soap & water after using this product. If necessary, use a moisturizer after washing. Do not eat, drink, or smoke while handling this product. 7.2 Storage & Handling Use and store in a cool, dry, well-ventilated location (e.g., local exhaust ventilation, fans). Keep away from excessive heat, open flames, sparks, and other possible sources of ignition. Keep away from incompatible materials listed in Section 10. Do not store in damaged or unmarked containers or storage devices. Keep containers securely closed when not in use. Open slowly on a level, stable surface. Empty containers may contain residual amounts of this product; therefore, empty containers should be handled with care. As a precaution against exposure to the eyes, nose, throat and face, this product should not be stored higher than waist level. Keep away from children at all times! Special Precautions: 7.3 NA 8. EXPOSURE CONTROLS & PERSONAL PROTECTION 81 Ventilation & Engineering Controls: Use with adequate ventilation (e.g., open doors and windows, local exhaust ventilation). Ensure appropriate decontamination equipment is available (e.g., sink, safety shower, eye-wash station). Respiratory Protection: 8.2 No special respiratory protection is required under typical circumstances of use or handling. In instances where vapors or sprays of this product are generated, and respiratory protection is needed, use only protection authorized by 29 CFR §1910.134, applicable U.S. State regulations, or the Canadian CAS Standard Z94.4-93 and applicable standards of Canadian Provinces, EC member States, or Australia. 8.3 Eve Protection: Wear protective eyewear (e.g., safety glasses with side-shield) at all times when handling this product. Always use protective eyewear when cleaning spills or leaks. 8.4 Hand Protection None required under normal conditions of use. However, may cause skin irritation in some sensitive individuals. When handling large quantities (e.g.,  $\geq$  1 gallon), wear rubber or impervious plastic gloves. 8.5 Body Protection: No apron required when handling small quantities. When handling large quantities (e.g.,  $\geq$  1 gallon), eye wash stations and deluge showers should be available. Upon completion of work activities involving large quantities of this product, wash any exposed areas thoroughly with soap and water.

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Prepared to OSHA, ACC, ANSI, NOHSC, WHMIS & 2001/58 EC Standards MSDS Revision: 2.0 MSDS Revision Date: 04/28/2010 9. PHYSICAL & CHEMICAL PROPERTIES 9.1 Density: 0.918 Boiling Point: 9.2 117 °C (243 °F) 93 Melting Point: NE 9.4 **Evaporation Rate** NA 9.5 Vapor Pressure NΔ 96 Molecular Weight: NE 9.7 Appearance & Color: Clear, colorless liquid with a mild acrylic odor. 9.8 Odor Threshold: NE 9.9 Solubility: Slightly soluble. 9.10 Ηα NA 9.11 Viscosity NE Other Information 9.12 Vapor density (air=1): > 1.0 **10. STABILITY & REACTIVITY** 10.1 Stability Relatively stable under ambient conditions when stored properly. 10.2 Hazardous Decomposition Products: If exposed to extremely high temperatures, products of thermal decomposition may include irritating vapors and toxic gases (e.g., oxides of carbon & nitrogen). 10.3 Hazardous Polymerization: Will not occur. 10.4 Conditions to Avoid: Exposure or contact to extreme temperatures, incompatible chemicals, strong light sources, sparks, flame. 10.5 Incompatible Substances: Strong oxidizers, peroxides, strong alkalis or acids. 11. TOXICOLOGICAL INFORMATION 11.1 Toxicity Data: This product has not been tested on animals to obtain toxicological data. There are toxicology data for the components of this product, which are found in the scientific literature. These data have not been presented in this document. Acute Toxicity: 11.2 See Section 2.5 Chronic Toxicity: 11.3 See Section 2.6 11.4 Suspected Carcinogen: NE 11.5 Reproductive Toxicity: This product is not reported to produce reproductive toxicity in humans. Mutagenicity This product is not reported to produce mutagenic effects in humans. Embryotoxicity This product is not reported to produce embryotoxic effects in humans. Teratogenicity This product is not reported to produce teratogenic effects in humans. Reproductive Toxicity: This product is not reported to produce reproductive effects in humans. Irritancy of Product: 11.6 See Section 2.3 11.7 Biological Exposure Indices: NE 11.8 Physician Recommendations: Treat symptomatically.

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Prep	ared to OSHA, AC	C, ANSI, NOHSC, WHMIS & 2001/58 EC Standards MSDS Revision: 2.0 MSDS Revision: 2.0	vision Date: 04/28/2010					
12.1	12. ECOLOGICAL INFORMATION							
12.2	This product will s Effects on Plants & Anir	slowly volatile from soil. Components of this product will slowly decompose into organic c	ompounds.					
	There is no specif	ic data available for this product.						
12.3		fic data available for this product. Releases of large volumes may be harmful or fatal to data for components of this product are available, but are not presented in this MSDS.	o overexposed aquatic life.					
		13. DISPOSAL CONSIDERATIONS						
13.1		ordance with all Federal, state, and local regulations.						
13.2	Special Considerations U.S. EPA Character	eristic Waste: D001 (flammable)						
TI 1	i	14. TRANSPORTATION INFORMATION						
		ID Number, proper shipping name, hazard class & division, packing group) is shown for ea information may be required by 49 CFR, IATA/ICAO, IMDG and the CTDGR.	ich mode of transportation.					
14.1		IMODITY, ORM-D (x ≤ 1.0 L) ETHACRYLATE, STABILIZED, 3, II (x > 1.0 L)	ORM-D					
14.2	IATA (AIR):   CONSUMER COMMODITY, 9, ID8000 (x ≤ 0.5 L)   UN2277, ETHYL METHACRYLATE, STABILIZED, 3, II (x > 0.5 L)							
14.3	$\frac{\text{IMDG (OCN):}}{\text{UN2277, ETHYL METHACRYLATE, STABILIZED, 3, II, LTD QTY (x \le 1.0 L)}{\text{UN2277, ETHYL METHACRYLATE, STABILIZED, 3, II (x > 1.0 L)}$							
14.4								
14.5		ETHACRYLATE, STABILIZED, 3, II, <i>ADR</i> , LTD QTY (x ≤ 1.0 L)						
14.6		LACRILATO, STABILIZADA, 3, II, CANTIDAD LIMITADA (x ≤ 1.0 L)						
14.7	ADGR (Australia): UN2277, ETHYL MI	ETHACRYLATE, STABILIZED, 3, II	FLAMMABLE LIQUID					
15.1	SARA Reporting Require	15. REGULATORY INFORMATION						
10.1	SARA 304 (Ethyl A	Aethacrylate)						
15.2	SARA Threshold Plannin	ng Quantity:						
15.3	TSCA Inventory Status:							
15.4	CERCLA Reportable Q	of this product are listed in the TSCA Inventory or are exempt.						
15 5	Ethyl Methacrylat Other Federal Requirer							
15.5	This product com	plies with the appropriate sections of the Food and Drug Administration's 21 CFR Subchap	ter G, (Cosmetics).					
15.6	the information re	lations been classified according to the hazard criteria of the CPR and the MSDS contains all of equired by the CPR. The components of this product are listed on the DSL/NDSL. None nts of this product are listed on the Priorities Substances List (PSL). Class B2 Flammable						

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Prep	ared to OSHA, AC	C, ANSI, NOHSC, WHMIS	S & 2001/58 EC Standa	rds MSDS Revision: 2.0	MSDS Revision Da	ite: 04/28/2010		
		15. RE	GULATORY INFO	<b>DRMATION</b> - contir	nued			
15.7	.7 State Regulatory Information: Ingredients in this mixture on found on the following state criteria lists:   California OSHA Hazardous Substances List Ethyl Methacrylate							
	Delaware Air Quo Massachusetts Ho New York List of H	ality Management List azardous Substances Lis lazardous Substances zardous Substances List	st	Ethyl Methacrylate Ethyl Methacrylate Ethyl Methacrylate Ethyl Methacrylate Ethyl Methacrylate				
15.8								
			16. OTHER I	NFORMATION				
16.1	6.1 Other Information: Precisely follow directions and MSDS (available through your supplier) for use. <b>Avoid all skin contact.</b> If redness or other signs of adverse reaction occur, discontinue use immediately. Use only in a well ventilated area. A ventilation system that expels vapors to the outdoors is recommended. Poisonous if swallowed! <b>Keep out of reach of children. FLAMMABLE!</b> Keep away from heat or flame. In case of emergency, contact your physician or local Poison Control Center immediately. FOR PROFESSIONAL USE ONLY.							
16.2	Terms & Definitions:							
	Please see last po	age of this MSDS.						
16.3	Disclaimer: This Material Safety Data Sheet is offered pursuant to OSHA's Hazard Communication Standard, 29 CFR §1910.1200. Other government regulations must be reviewed for applicability to this product. To the best of ShipMate's & OPI Products' knowledge, the information contained herein is reliable and accurate as of this date; however, accuracy, suitability or completeness are not guaranteed and no warranties of any type, either expressed or implied, are provided. The information contained herein relates only to the specific product(s). If this product(s) is combined with other materials, all component properties must be considered. Data may be changed from time to time. Be sure to consult the latest edition.							
16.4	Prepared for: OPI Products, Inc. 13034 Saticoy Stra No. Hollywood, C +1 (818) 759-2400 +1 (818) 759-5770 http://www.opi.c	eet :A 91605 USA ) phone ) fax	0·P					
16.5	Prepared by: ShipMate, Inc. P.O. Box 787 Sisters, OR. 97759 +1 (310) 370-3600 +1 (310) 370-5700 http://www.shipm	-0787 ) phone ) fax	Ship Dange Traini	<b>Nate</b> rous Goods ng & Consulting				

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HEALTH

FLAMMABILITY

REACTIVITY

PERSONAL PROTECTION

MSDS Revision Date: 04/28/2010

## **DEFINITION OF TERMS**

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

#### GENERAL INFORMATION:

CAS No. Chemical Abstract Service Number

#### EXPOSURE LIMITS IN AIR:

ACGIH	American Conference on Governmental Industrial Hygienists			
TLV	TLV Threshold Limit Value			
OSHA	U.S. Occupational Safety and Health Administration			
PEL	PEL Permissible Exposure Limit			
IDLH	Immediately Dangerous to Life and Health			

#### FIRST AID MEASURES:

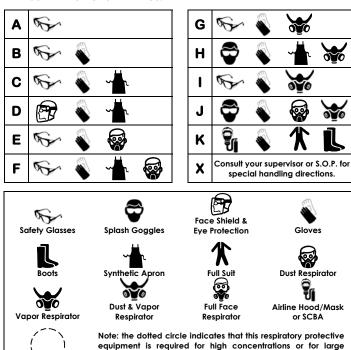
CPR	Cardiopulmonary resuscitation - method in which a person						
	whose heart has stopped receives manual chest						
	compressions and breathing to circulate blood and provide						
	oxygen to the body.						

#### HAZARDOUS MATERIALS IDENTIFICATION SYSTEM: HMIS

#### HEALTH, FLAMMABILITY & REACTIVITY RATINGS:

0	Minimal Hazard			
1	1 Slight Hazard			
2	Moderate Hazard			
3	3 Severe Hazard			
4	Extreme Hazard			

#### PERSONAL PROTECTION RATINGS:



volume spills or releases of product.

### OTHER STANDARD ABBREVIATIONS:

NA	Not Available
NR	No Results
NE	Not Established
ND	Not Determined
ML	Maximum Limit
SCBA	Self-Contained Breathing Apparatus

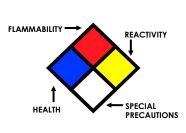
### NATIONAL FIRE PROTECTION ASSOCIATION: NFPA

#### FLAMMABILITY LIMITS IN AIR:

Autoignition	Minimum temperature required to initiate combustion
Temperature	in air with no other source of ignition
LEL	Lower Explosive Limit - lowest percent of vapor in air, by
	volume, that will explode or ignite in the presence of
	an ignition source
UEL	Upper Explosive Limit - highest percent of vapor in air,
	by volume, that will explode or ignite in the presence of
	an ignition source

#### HAZARD RATINGS:

0	Minimal Hazard
1	Slight Hazard
2	Moderate Hazard
3	Severe Hazard
4	Extreme Hazard
ACD	Acidic
ALK	Alkaline
COR	Corrosive
-₩-	Use No Water
OX	Oxidizer



### TOXICOLOGICAL INFORMATION:

LD <sub>50</sub>	Lethal Dose (solids & liquids) which kills 50% of the
	exposed animals s
LC <sub>50</sub>	Lethal concentration (gases) which kills 50% of the
2030	exposed animal
ppm	Concentration expressed in parts of material per
	million parts
TD <sub>lo</sub>	Lowest dose to cause a symptom
TCLo	Lowest concentration to cause a symptom
TDio, LDio, & LDo Or	Lowest dose (or concentration) to cause lethal or
TC, TC <sub>o</sub> , LC <sub>lo</sub> , & LC <sub>o</sub>	toxic effects
IARC	International Agency for Research on Cancer
NTP	National Toxicology Program
RTECS	Registry of Toxic Effects of Chemical Substances
BCF	Bioconcentration Factor
TLm	Median threshold limit
log Kow or log Koc	Coefficient of Oil/Water Distribution

#### **REGULATORY INFORMATION:**

WHMIS	Canadian Workplace Hazardous Material Information System					
DOT	U.S. Department of Transportation					
TC	Transport Canada					
EPA	U.S. Environmental Protection Agency					
DSL	Canadian Domestic Substance List					
NDSL	Canadian Non-Domestic Substance List					
PSL	Canadian Priority Substances List					
TSCA	U.S. Toxic Substance Control Act					
EU	European Union (European Union Directive 67/548/EEC)					

#### EC INFORMATION:

<b>V</b>		1×	*	8	<b>X</b>	×	×
С	E	F	N	0	T+	Xi	Xn
Corrosive	Explosive	Flammable	Harmful	Oxidizing	Toxic	Irritant	Harmful