MATERIAL SAFETY DATA SHEET

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

CHEMICAL NAME: Promoted Methacrylate Liquid

PRODUCT NAME: Odorless Acrylic Nail Liquid

Manufacturer's Name : EZ Flow Nail Systems
Address : 13720 Rosecrans Ave
City, State, Zip : Santa Fe Springs, CA 90670
Business Telephone : 562-229-0337
Emergency Telephone : 800-535-5053

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

FOR MIXTURE:

ITEM	CHEMICAL NAME	CAS NUMBER:	WT/WT %
01	2-Hydroxyethyl Methacrylate	868-77-9	60.0-100.0
02	Triethylene Glycol Dimethacrylate	109-16-0	10.0-30.0
03	N,N-Dimethyl-p-Toluidine	99-97-8	0.1-1.5
04	Polymeric Benzotriazole	NE	0.1-1.5
05	2,2-(2,5-Thiophenediyl)bis[5-tert-butylbenzoxazole]	7128-64-5	0.1-1.5
06	p-Hydroxyanisole	150-76-5	30-60 ppm

	ACGIH		OSHA		Company	
ITEM	TLV-TWA	TLV-STEL	PEL TWA	PEL CEILING	Recommendation	SKIN
01	NE	NE	NE	NE	NE	NE
02	NE	NE	NE	NE	NE	NE
03	NE	NE	NE	NE	NE	NE
04	NE	NE	NE	NE	1 mg/m^3	NE
05	NE	NE	NE	NE	10 mg/m^3	NE
06	5 mg/m^3	NE	5 mg/m^3	NE	5 mg/m^3	NE

See Section 16 for Abbreviations.

SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

WARNING:	For Mixture:	May irritate eyes, skin and respiratory tract.

For 2-Hydroxyethyl Methacrylate:

Acute Hazards:	Eyes:	Liquid or high vapor concentration may cause irritation and possibly permanent injury.
	Ingestion:	May be toxic. Swallowing significant amounts could cause irritation of mouth, throat and digestive tract, central nervous system depression.
	Respiratory Tract:	Liquid or high vapor concentration may cause irritation of the nose, throat and respiratory tract; nausea; dizziness; fatigue and headaches.
	Skin:	Liquid or high vapor concentration may cause irritation, including redness and swelling. May also cause sensitization and allergic reaction in some individuals resulting in contact dermatitis, severe irritation, dryness and cracking.
Chronic Hazards:	Symptoms:	Prolonged exposure may lead to headaches, nausea, drowsiness and unconsciousness.

For Triethylene Glycol Dimethacrylate:

Acute Hazards:	Eyes:	Suspected irritant.
	Ingestion:	Slight hazard.
	Inhalation:	Slight hazard.
	Skin:	Moderate irritant/allergic sensitizer.
Chronic Hazards:	Eyes:	Irritation may include excessive tearing, blinking and redness.
	Ingestion:	May be a slight hazard is swallowed in large quantities.
	Inhalation:	Aerosols or vapors which are generated at elevated temperatures may cause irritation. Symptoms may include coughing, mucous production and shortness of breath.
	Skin:	May cause a severe reaction on repeated application. May cause delayed irritation or blistering. Expected to be a slight absorption hazard.

For N,N-Dimethyl-p-Toluidine:

Acute Hazards:	Eyes:	May cause irritation.
	Ingestion:	May cause methemoglobinemia.
	Inhalation:	Causes elevated methemoglobin in the blood. Symptoms may include headaches, weakness and dizziness, and can be recognized by the blue color of the lips, fingernails, nose and earlobes. Vapor or mist is irritating to mucous membranes and upper respiratory tract.
	Skin Absorption:	Liquid is rapidly absorbed through skin. Absorption of this product into the body causes the formation of methemoglobin, which in sufficient concentration causes cyanosis, symptoms include headache, dizziness, nausea and abdominal pain.

SECTION 3 - HAZARDS IDENTIFICATION CONTINUED

EMERGENCY OVERVIEW CONTINUED:

For N,N-Dimethyl-p-Toluidine Continued:

Chronic Hazards:		In case of blue discoloration (cyanosis) of skin, lips or fingernails give oxygen to breathe. No alcohol or physical exertion. Contact a physician.
Medical Conditions Aggravated by Exposure:		Existing cardiovascular or respiratory conditions, blood disorders and dermatitis.
Note to Physicians:		Absorption of this product leads to formation of methemoglobin, which in sufficient concentration causes cyanosis. Reversion of methemoglobin to hemoglobin occurs spontaneously after termination of exposure, moderate degree of cyanosis need to be treated only by supportive measures such as bed rest and oxygen inhalation. Thorough cleansing of the entire contaminated area is of utmost importance. If cyanosis is severe, intravenous injection of methylene blue, 1-2 mg/kg body weight over a 5 minute period as a 1 % solution may be of value. If elevated methemoglobin persists after an hour, the treatment may be repeated, but the total dose should not exceed 7 mg/kg body weight. Cyanocobalmin (Vitamin B-12), 1 mg intramuscularly is reported to speed recovery. Intravenous fluids and blood transfusions may be indicated in very severe exposures.

For Polymeric Benzotriazole:

Acute Hazards:	Eyes:	Not expected to cause irritation.
	Ingestion:	If swallowed in small amounts, not expected to cause injury. Avoid swallowing.
	Inhalation:	May cause irritation.
	Skin:	Not expected to cause irritation, but may cause allergic skin reactions such as redness and itching. Avoid skin contact:
Chronic Hazards:	Ingestion:	Repeated or prolonged exposure may cause liver or kidney changes, which may be seen as liver enlargement and altered enzyme/protein levels.
Aggravated Pre-existing Conditions:		Pre-existing allergies, skin conditions, liver disease or jaundice, kidney disease can be aggravated by exposure. Women of child-bearing age should avoid exposure.

For 2,2-(2,5-Thiophenediyl)bis[5-tertbutylbenzoxazole]:

	Eyes:	Not expected to cause irritation.
	Ingestion:	If swallowed in small amounts, not expected to cause injury. Avoid swallowing.
	Inhalation:	Considered to present little risk if inhaled.
	Skin:	Not expected to cause irritation or allergic reactions. Due strong fluorescing power, small amounts will fluoresce under UV light. This does not represent a hazard. Continued washing with soap and water will eventually remove it from the skin.

SECTION 3 - HAZARDS IDENTIFICATION CONTINUED

EMERGENCY OVERVIEW CONTINUED:

For p-Hydroxyanisole:

Acute Hazards:	Eyes:	Risk of serious damage.
	Ingestion:	Harmful if swallowed.
	Inhalation:	Harmful if inhaled, irritating to mucous membranes and upper respiratory tract.
	Skin:	Harmful if absorbed through skin.
	Duration:	Depending on the intensity and duration of exposure, effects may vary from mild irritation to severe destruction of tissue.
Chronic Hazards:	Eyes:	Prolong contact may cause eye damage.
	Skin:	May cause severe burns or irritation.

CARCINOGENICITY: 2-Hydroxyethyl Methacrylate contains trace amounts of Ethylene Oxide, a substances known to the state of California to cause cancer and/or reproductive toxicity. Triethylene Glycol Trimethacrylate may contain trace quantities of substances known to the state of California to cause cancer and/or reproductive toxicity. None of the other components of this material are listed by IARC, NTP, OSHA, or ACGIH as carcinogens.

PRIMARY ROUTES OF ENTRY: Inhalation, Skin or Eyes.

SECTION 4 - FIRST AID MEASURES

EMERGENCY AND FIRST AID PROCEDURES:

EYES:	Flush with water for 15 minutes, including under eyelids. Get immediate medical attention.
INGESTION:	Rinse mouth out with water. Never administer anything by mouth to an unconscious or convulsing person. Do not induce vomiting. Get immediate medical attention.
INHALATION:	Remove to fresh air. Keep patient calm and resting. If difficulty breathing give oxygen. If breathing stops give artificial respiration. Get immediate medical attention.
SKIN:	Wash thoroughly with soap and water. Get medical help if blistering occurs or redness persists.
CLOTHING:	Remove contaminated clothing and shoes immediately. Wash/clean thoroughly before reuse.
TREATMENT:	Maintain airway. Provide oxygen and/or ventilation assistance, if needed. Treat burns or allergic reactions conventionally after thorough decontamination.

SECTION 5 - FIRE FIGHTING MEASURES

FLASH POINT:	96 °C , 205 °F (Closed Cup) 109 °C , 228 °F (Open Cup)
FLAMMABLE LIMIT, AIR VOL% LOWER:	NA
UPPER:	NA
AUTOIGNITION TEMPERATURE:	NE
EXTINGUISHER METHOD:	Alcohol-resistant foam, carbon dioxide, dry chemical. Water may be ineffective. Do not use water jet.
FIRE HAZARDS:	Vapors may travel to source of ignition and flash back. Heat can cause polymerization with rapid release of energy which may rupture container explosively. (Spontaneous polymerization may occur on prolonged storage.)
EXPLOSION HAZARD:	Fight fire from protected location.
SPECIAL FIRE FIGHTING PROCEDURES:	Wear self contained breathing apparatus, and full protective gear. Use water spray to cool containers and minimize vapors. Avoid spreading burning liquid with water used for cooling. Move containers from fire area if it can be done with out risk.

SENSITIVE TO MECHANICAL IMPACT: No.

SENSITIVE TO STATIC DISCHARGE: Yes.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE: Evacuate the area. Eliminate sources of ignition. Use self-contained breathing apparatus and protective clothing. Dike and absorb with inert material. Transfer to proper containers for disposal, use non-sparking tools. Contaminated monomer may be unstable, add inhibitor to prevent polymerization. Keep spills and cleaning runoffs out of sewers and open bodies of water. Spills on porous surfaces can contaminate the groundwater. Flush area with water to remove residue.

SECTION 7- HANDLING AND STORAGE

PRECAUTIONS FOR HANDLING: Use in well ventilated area. Avoid breathing vapors. Avoid contact with skin, eyes and clothing. Observe precautions found on the label. Close container after each use. Ground all metal containers when transferring. Use explosion-proof equipment.

PRECAUTIONS FOR STORING: Store in cool dry place away from heat, sparks, flame and direct sunlight. Check inhibitor levels every three months and maintain at original level. Maintain air space inside storage containers, inhibitor requires air contact to function. Avoid conditions which remove all oxygen from the stored liquid. Do not store in aluminum and its alloys, copper and its alloys, rusty steel, mild steel or tin.

SECTION 8 - EXPOSURE CONTROL/PERSONAL PROTECTION

VENTILATION:	Use good, local explosion-proof ventilation with a minimum capture velocity of 100 ft/min (30 m/min) at point of monomer release. Refer to Industrial Ventilation: A Manual of Recommended Practice published by the American Conference of Governmental Industrial Hygienists. Local exhaust ventilation is preferred since it prevents contamination dispersion into the work area by controlling it at its source.
RESPIRATORY PROTECTION:	Use self-contained breathing apparatus when needed.
EYE PROTECTION:	Safety glasses or chemical splash goggles.
PROTECTIVE GLOVES:	Impervious, nitrile.
OTHER PROTECTIVE EQUIPMENT:	Provide eyewash, safety shower and impervious clothing. Protective creams should not be used for protection, but may be used for ease of clean up.
INDUSTRIAL HYGIENE PRACTICES:	Wash face and hands thoroughly with soap and water after use and before eating, drinking, smoking or applying cosmetics.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Clear, water white liquid.
ODOR:	Mild ester-like odor.
pH:	ND
ODOR THRESHOLD:	ND
BOILING POINT:	95 °C, 203 °F @ 10 mm Hg 87 °C, 187 °F @ 5 mm Hg
FREEZING POINT:	ND
REFRACTIVE INDEX:	1.4537 @ 20 °C, 68 °F
VISCOSITY:	6.79 @ 20 °C, 68 °F
POUR POINT (°C):	Less than -60
SPECIFIC GRAVITY (H_2O=1):	1.072
VAPOR PRESSURE:	0.1 mm Hg @ 20 °C, 68 °F
PERCENT VOLATILE W/W%:	100
VAPOR DENSITY (AIR=1):	>1 @ 15 °C, 59 °F
EVAPORATION RATE (BuAc =1):	>1
SOLUBILITY IN WATER:	Completely.
COEFFICIENT OF WATER/OIL DISTRIBUTION:	0.47

SECTION 10 - STABILITY AND REACTIVITY

CONDITIONS TO AVOID: High temperatures, ignition sources, oxidizing/reducing agents, peroxides, acids, alkalis, amines, direct sunlight, aging and contamination.

INCOMPATIBILITY (MATERIALS TO AVOID): Free radical initiators, reducing and oxidizing agents and UV light. Material has strong solvent properties and can soften paint and rubber.

HAZARDOUS DECOMPOSITION PRODUCTS: Mainly Oxides of Carbon when burned.

HAZARDOUS POLYMERIZATION: MAY OCCUR: X WILL NOT OCCUR:

STABILITY: UNSTABLE: X STABLE:

SECTION 11- TOXICOLOGICAL PROPERTIES

TARGET ORGANS:

For Mixture:	None Listed.
For 2-Hydroxyethyl Methacrylate:	None Listed.
For Triethylene Glycol Dimethacrylate:	None Listed.
For N,N-Dimethyl-p-Toluidine:	Liver, Central Nervous System, Blood and Skin.
For Polymeric Benzotriazole:	Liver.
For 2,2-(2,5-Thiophenediyl)bis[5-tert-butylbenzoxazole]:	None Listed.
For p-Hydroxyanisole:	Eyes. However all data in this MSDS refers to MEHQ in the dry powder form rather than in a liquid mixture

SENSITIVITY DATA:

For Mixture:	None Listed.
For 2-Hydroxyethyl Methacrylate:	
Skin Human:	Evidence of irritation
Skin Guinea Pig:	Sensitization has been reported.
Eye Rabbit:	Severe irritation to mucous membranes
Skin Rabbit:	Mild Irritant.
For Polymeric Benzotriazole:	
Eye Rabbit:	Not an irritant.
Sensitization Guinea Pig:	Strong sensitizing potential.
Skin Rabbit:	Not an irritant.
For 2,2-(2,5-Thiophenediyl)bis[5-tertbutylbenzoxazole]:	
Eye Rabbit:	Not an irritant.
Sensitization Human:	No evidence of irritation or sensitization.
Skin Rabbit:	Not an irritant.
For p-Hydroxyanisole:	
Skin Rabbit:	Mild irritation.

SECTION 11- TOXICOLOGICAL PROPERTIES CONTINUED

MUTAGENICITY DATA:

For Mixture:	None Listed.	
For 2-Hydroxyethyl Methacrylate:	No mutagenic activity exhibited.	
For Triethylene Glycol Dimethacrylate:	Mouse lymphoma studies indicate that this material may have a mutagenic potential. However the Ames assay for mutagenicity was negative. Therefore, there is reason to believe that the mouse lymphoma assay was a false positive.	
For Polymeric Benzotriazole:		
Ames:	Non-mutagenic	
Hamster	Nucleus Anomaly:	Non-mutagenic
Hamster	Micronucleus:	Non-mutagenic
Unscheduled DNA Synthesis:	Non-mutagenic	
For 2,2-(2,5-Thiophenediyl)bis[5-tertbutylbenzoxazole]:		
Ames Test:	Non-mutagenic.	
Oral Dog:	0 ppm.	
Oral Dog:	500 ppm.	
Oral Dog:	1,500 ppm.	
Oral Dog:	5,000 ppm.	
Oral Dog:	50,000 ppm.	
Oral Dog	NOEL:	1,570-1,680 mg/kg/D.
Oral Rat:	0 ppm	
Oral Rat:	1,000 ppm	
Oral Rat:	3,000 ppm	
Oral Rat:	10,000 ppm	
Oral Rat	NOEL:	148-178 mg/kg/D.

REPRODUCTIVE TOXICITY DATA:

For Mixture:	None Listed.	
For Polymeric Benzotriazole:		
Oral Rat:	2 mg/kg/before and during mating and conception.	
Oral Rat:	50 mg/kg/before and during mating and conception.	
Oral Rat:	100 mg/kg/before and during mating and conception.	
Oral Rat	NOEL:	2 mg/kg.
Oral Rat:	1 mg/kg/6-15D Preg.	
Oral Rat:	30mg/kg/6-15D Preg.	
Oral Rat:	150 mg/kg/6-15D Preg.	
Oral Rat	NOEL:	30 mg/kg.
Oral Rat:	10 mg/kg/28D.	
Oral Rat:	50 mg/kg/28D.	
Oral Rat:	200 mg/kg/28D.	
Oral Rat:	1000 mg/kg/28D.	
Oral Rat	NOEL:	10 mg/kg/D

SECTION 11- TOXICOLOGICAL PROPERTIES CONTINUED

TOXICITY DATA:

For Mixture:	None Listed.	
For 2-Hydroxyethyl Methacrylate:		
Dermal Rabbit	LD_{50}:	>5000 mg/kg.
Dermal Rabbit	LD_{50}:	>3000 mg/kg.
Intraperitoneal Mouse	LD_{50}:	497 mg/kg.
Intraperitoneal Rat	LD_{50}:	1250 mg/kg.
Oral Guinea Pig	LD_{50} :	4680 mg/kg.
Oral Mouse	LD_{50} :	5888 mg/kg.
Oral Rat	LD_{50}:	22600 mg/kg.
Oral Rat	LD_{50}:	5050 mg/kg.
For Triethylene Glycol Dimethacrylate:		
Oral Mouse	LD_{50}:	10750 mg/kg.
Oral Rat	LD_{50}:	10837 mg/kg.
For N,N-Dimethyl-p-Toluidine:		
Intraperitoneal Mouse	LD_{50}:	212 mg/kg.
For Polymeric Benzotriazole:		
Acute Oral Rat	LD_{50}:	> 5000 mg/kg.
Acute Inhalation	LC_{50}:	> 5.8 mg/kg/4H.
Acute Skin Rat	LD_{50}:	> 2000 mg/kg.
For 2,2-(2,5-Thiophenediyl)bis[5-tertbutylbenzoxazole]:		
Acute Oral Rat	LD_{50}:	> 10,000 mg/kg.
Acute Inhalation Rat	LC_{50}:	> 1.8 mg/kg/4H.
For p-Hydroxyanisole:		
Intraperitoneal Mouse	LD_{50}:	250 mg/kg.
Intraperitoneal Rat	LD_{50}:	725 mg/kg.
Intraperitoneal Rabbit	LD_{50}:	970 mg/kg.
Oral Rat	LD_{50}:	1600 mg/kg.

SECTION 12 - ECOLOGICAL INFORMATION

AQUATIC TOXICITY:

For Mixture:	None Listed.	
For 2-Hydroxyethyl Methacrylate:		
Flathead Minnows	LC_{50}:	227mg/L/96H.
Flathead Minnows	EC_{50}:	227mg/L./96H.
For Triethylene Glycol Dimethacrylate:	None Found.	
For Polymeric Benzotriazole:		
Bluegill	LC_{50}:	3.8 ppm/96H.
Rainbow Trout	LC_{50}:	2.8 ppm/96H.
Daphnia Magna	EC_{50}:	4.0 ppm/48H.
Earthworm	LC_{50}:	> 1000 ppm/14D.
For 2,2-(2,5-Thiophenediyl)bis[5-tertbutylbenzoxazole]:		
Zebra fish	LC_{50}:	> 100 ppm/96H.
Daphnia magna	EC_{50}:	> 100 ppm/24H.

AQUATIC REPRODUCTION:

For Polymer Benzotriazole:		
Daphnia Magna	EC_{50}:	> 1.0 ppm/21D./
Daphnia Magna	NOEL:	.32 ppm.

SECTION 12 - ECOLOGICAL INFORMATION CONTINUED

BIOACCUMULATION:
For 2-Hydroxyethyl Methacrylate: Not expected to bioaccumulate.

BIOCONCENTRATION:
For Polymer Benzotriazole:

Rainbow Trout	Concentration:	0.08 ppm	Bioconcentration Factor: 26
Rainbow Trout	Concentration:	0.5 ppm	Bioconcentration Factor: 34

BIODEGRADATION DATA:
For Polymer Benzotriazole: Modified Strum Test: Not readily biodegradable, with 12-24 % in 28 Days.

For 2,2-(2,5-Thiophenediyl)bis[5-tertbutylbenzoxazole]:
Modified Strum test: Not readily biodegradable, with 0-4% in 28 days.

ECOTOXICITY:
For 2-Hydroxyethyl Methacrylate: Product rated practically non-toxic.

EFFLUENT TREATMENT:
For 2,2-(2,5-Thiophenediyl)bis[5-tertbutylbenzoxazole]:

Sewage Bacteria:	IC_{20}:	> 100 ppm.
Sewage Bacteria:	IC_{50}:	> 100 ppm.
Sewage Bacteria:	IC_{80}:	> 100 ppm.

MOBILITY:
For 2-Hydroxyethyl Methacrylate: Will dissolve rapidly in water.

OXYGEN DEMAND DATA:
For Polymeric Benzotriazole: COD: 1.84 g/G

PERSISTENCE/BIODEGRADABILITY:
For 2-Hydroxyethyl Methacrylate: Readily biodegradable.

PLANT EFFECTS:
For Polymeric Benzotriazole:

Green Algae	EC_{50}:	> 9 ppm.
Turnip Emergence	LC_0:	> 100 ppm.
Wheat & vetch Emergence	LC_0:	> 100 ppm.
Turnip Growth	LC_0:	> 100 ppm.
Wheat & vetch Growth	LC_0:	> 100 ppm.

SECTION 13 - DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Incinerate liquid and diking material after addition of excess inhibitor, in accordance with Federal, State, and Local regulations.

DISPOSAL OF EMPTY CONTAINERS: Reuse of empty drums or containers is not recommended. Employees should be advised of the potential hazards, due to residual flammable material, associated with empty containers. It is our policy to discourage the reuse of empty containers and to dispose of all empty containers properly, in accordance with Federal, State and Local regulations.

SECTION 14 - TRANSPORTATION

DOT/UN SHIPPING NAME: PLASTICS MATERIAL, SOLUTION, NOS (Contains 2-Hydroxy Ethyl Methacrylate and Ethylene Glycol Dimethacrylate)

DOT/UN CLASS:
SUBSIDIARY RISK:
NA/UN NUMBER:
PACKING GROUP:
NAERG: 171P
LABEL:
NMFC ITEM #: 42650
SCHEDULE B: 2916.14.2050
IMDG CLASS:
IMDG PG:
EmS:
CERCLA RQ:

SECTION 15 - REGULATORY INFORMATION

ITEM	TSCA	EINECS	CERCLA	CAA	CWA	RCRA	SARA 313	MAK
01	X	X						
02	X	X						
03	X	X						
04	X	X					X	
05	X	X						
06	X	X	X				X	

ITEM	AUSTRALIA	CANADA	CHINA	JAPAN	KOREA	PHILIPPINE
01		X				
02		X				
04	X	X		X	X	X
05	X	X		X	X	X
06		X				

ITEM	CA65	FL	MA	MI	MN	NJ	PA	WA
01	X		X				X	
02	X		X				X	
04						X	X	
05						X	X	
06	X	X		X	X	X	X	

SECTION 15 - REGULATORY INFORMATION

TSCA: FOR USE IN FDA REGULATED PRODUCTS ONLY

CANADIAN WHMIS: This product has been classified in accordance with the hazardous criteria of the CPR and the MSDS contains all the information required by the CPR. All of the components of this material are listed on the Canadian DSL.

RISK STATEMENTS:
R36/37/38 – Irritating to eyes, respiratory system and skin.
R43 – May cause sensitization by skin contact

SAFETY STATEMENTS:
S3 – Keep in a cool place.
S7 – Keep container tightly closed.
S9 – Keep container in a well ventilated place.
S16 – Keep away from sources of ignition – No Smoking.
S20 – When using do not eat or drink.
S26 – In case of contact with eyes, rinse immediately with plenty of water and seek medical advise.
S28 – After contact with skin, wash immediately wash with plenty of water.
S29 – Do not empty into drains.
S37/39 – Wear suitable gloves and eye/face protection.

SECTION 16 - OTHER INFORMATION

HAZARDOUS MATERIAL IDENTIFICATION SYSTEM (HMIS) RATING:

HEALTH:	1
FLAMMABILITY:	2
REACTIVITY:	1
PERSONAL PROTECTIVE EQUIPMENT:	Gloves and Safety Glasses or Chemical Splash Goggles.

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) HAZARD IDENTIFICATION RATING:

HEALTH:	1
FLAMMABILITY:	2
REACTIVITY:	1

ABBREVIATIONS:

NA	Not Applicable	ND	Not Determined
NE	Not Established	CPR	Controlled Products Regulation
ppm	parts per million	G	Gallon
mg	Milligram	L	Liter
gm	Gram	mol	Mole
kg	Kilogram	µ	Micro
mm	Millimeter	p	Pico
Pa	Pascals		

SECTION 16 - OTHER INFORMATION CONTINUED

ABBREVIATIONS CONTINUED:

LC	Lethal Concentration	LD	Lethal Dose
TC	Toxic Concentration	TD	Toxic Dose
BOD	Biological Oxygen Demand	COD	Chemical Oxygen Demand
Lo	Lowest	ThOD	Theoretical Oxygen Demand
TLm	Threshold Limit		
H	Hours	M	Months
D	Days	Y	Years
W	Weeks	min	Minutes

OSHA	Occupational Safety and Health Administration
ACGIH	American Conference of Governmental Industrial Hygienist
IARC	International Agency for Research for Cancer
TLV	Threshold Limit Value
PEL	Permissible Exposure Limit
NOEL	No Observed Effect Level

Prepared By: _____ Health, Safety and Environment

Reviewed By: _____ Technical Review

Reviewed By: _____ Senior Company Officer

Issue Date: _____

THIS MATERIAL SAFETY DATA SHEET IS PREPARED IN COMPLIANCE WITH FEDERAL REGULATIONS (29 CFR 1910.1200), THE COMMONWEALTH OF PENNSYLVANIA REGULATIONS (TITLE 34. CHAPTERS 301-323) AND CANADIAN WHMIS REGULATIONS, ANY APPLICABLE STATE AND LOCAL REGULATIONS SHOULD BE CONSULTED. THE ABOVE INFORMATION MAY BE BASED IN PART ON INFORMATION PROVIDED BY COMPONENT SUPPLIERS AND IS BELIEVED TO BE CORRECT AS OF THE DATE HEREOF. HOWEVER, NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY USE, OR ANY OTHER WARRANTY IS EXPRESSED OR IS TO BE IMPLIED REGARDING THE ACCURACY OF THESE DATA, THE RESULTS TO BE OBTAINED FROM THE USE OF THE MATERIAL, OR THE HAZARDS CONNECTED WITH SUCH USE. SINCE THE INFORMATION CONTAINED HEREIN MAY BE APPLIED UNDER CONDITIONS BEYOND OUR CONTROL AND WITH WHICH WE MAY BE UNFAMILIAR, AND SINCE DATA MADE AVAILABLE SUBSEQUENT TO THE DATE HEREOF MAY SUGGEST MODIFICATION OF THE INFORMATION, WE ASSUME NO RESPONSIBILITY FOR THE RESULT OF ITS USE. THIS INFORMATION AND MATERIAL IS FURNISHED ON THE CONDITION THAT THE PERSON RECEIVING IT SHALL MAKE HIS/HER OWN DETERMINATION AS TO THE SUITABILITY OF THE MATERIAL FOR HIS/HER PARTICULAR PURPOSE AND ON THE CONDITION THAT HE/SHE ASSUME THE RISK OF HIS/HER USE THEREOF.