odyssey nail systems MATERIAL SAFETY DATA SHEET

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

CHEMICAL NAME: UV Nail Lacquer

PRODUCT NAME: **Acrylic Sealer**

TRADE NAME/PRODUCT CODE: Y 401 0035

CCS PART NUMBER: A10035

PRODUCT USE: Organic Process Chemical

MANUFACTURER: Odyssey Nail Systems
ADDRESS: 6498 Wilcrest Dr
Houston, TX 77072

24 HR. EMERGENCY TELEPHONE: CHEMTREC: 1-800-424-9300

PREPARED BY: Trang Nguyen, HEALTH & SAFETY DEPARTMENT
PHONE: 1-407-522-5700 During Business Hours
1-407-455-0496, Then Press 6 At All Other Times

PREPARATION/UPDATE DATE: 09/10/01
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SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

FOR MIXTURE:

ITEM	CHEMICAL NAME	CAS NUMBER:	WT/WT %
01	Acrylic Polymer in Toluene	NE	60.0-100.0
02	Toluene as a component	108-88-3	30.0-60.0
03	Butyl Acetate	123-86-4	15.0-40.0
04	Anthraquinone	4430-18-6	0.5-1.5 ppm

	ACGIH		OSHA		Company	
ITEM	TLV-TWA	TLV-STEL	PEL TWA	PEL CEILING	Recommendation	SKIN
01	50 ppm Skin	75 ppm Skin	100 ppm	150 ppm	50 ppm Skin	50 ppm
02	50 ppm Skin	75 ppm Skin	100 ppm	150 ppm	50 ppm Skin	50 ppm
03	150 ppm	200 ppm	150 ppm	200 ppm	150 ppm	NE
04	NE	NE	NE	NE	1 mg/m^3	NE
05	NE	NE	NE	NE	10 mg/m^3	NE
06	NE	NE	NE	NE	NE	NE

See Section 16 for Abbreviations.

SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

WARNING:	For Mixture:	May irritate eyes, skin and respiratory tract.
	For Acrylic Polymer in Toluene:	This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.
	For Butyl Acetate:	Flammable Liquid and Vapor.

For Acrylic Polymer in Toluene:

Acute Hazards:	Eyes:	Can cause severe irritation and corneal clouding.
	Ingestion:	Can cause gastrointestinal irritation, nausea, vomiting, diarrhea.
	Inhalation:	Can cause irritation of the nose, throat and lungs; headache; dizziness; drowsiness; fatigue; loss of coordination; unconsciousness.
	Skin:	Moderate Irritant. Can cause defatting and drying of the skin which can lead to irritation and dermatitis. Solvent may be absorbed through the skin.
Chronic Hazards:	Inhalation:	High solvent vapor or mist concentrations can cause respiratory tract irritation, liver, kidneys and cardiovascular system. May also cause coma and/or death.
Aggravated Pre-existing Conditions:		Chronic respiratory problems such as, asthma, emphysema or bronchitis. May aggravate existing skin conditions.

For Toluene:

Acute Hazards:	Eyes:	Causes severe irritation with redness and pain.
	Ingestion:	May cause abdominal spasms and other symptoms that parallel over-exposure from inhalation. Aspiration into lungs can cause chemical pneumonitis, which may be fatal.
	Inhalation:	May cause irritation of upper respiratory tract. Symptoms of over-exposure may include fatigue, confusion, headache, dizziness and drowsiness. Peculiar skin sensations (e.g. pins and needles) or numbness may be produced. Very high concentrations may cause unconsciousness and death.
	Skin:	Causes irritation. May be absorbed through skin.
Chronic Hazards:	Chronic Poisoning:	Anemia, decreased blood cell count and bone marrow hypoplasia. Liver and kidney damage may occur. Exposure may effect the developing fetus.
	Skin:	Repeated or prolonged contact has a defatting action, causing drying, redness and dermatitis.
Aggravation of Pre-existing Conditions:		Persons with pre-existing skin disorders or impaired liver or kidney function may be more susceptible to the effects. Alcoholic beverage consumption can enhance the toxic effects.
Note to Physician:		Acute massive exposure to toluene can cause transient hematuria and albuminuria. Cardiac arrhythmias can occur after massive inhalation.

SECTION 3 - HAZARDS IDENTIFICATION CONTINUED

EMERGENCY OVERVIEW CONTINUED:

For Butyl Acetate:

Acute Hazards:	Eyes:	Vapor and liquid causes irritation.
	Inhalation:	May cause drowsiness and irritation of eyes or respiratory tract.
	Skin:	Prolonged or repeated contact may cause drying, cracking, or irritation.
Chronic Hazards:		Overexposure may cause anemia with leukotosis (transient increase in the white blood cell count) and damage to the liver and kidneys.
	Inhalation:	High concentrations may cause lung damage. Exposure to high concentrations have a narcotic effect and may cause a stupor and headaches. May cause liver and kidney damage.
	Skin:	Repeated or prolonged contact has a defatting effect and may cause dryness, cracking and possibly dermatitis.

For Trade Secret[1]:

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 Trade Secret[2]:

	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.

For Anthraquinone: None Listed.

CARCINOGENICITY: Toluene, the solvent for the Acrylic Polymer, is considered to be Not Classifiable as to Human Carcinogenicity by IARC and EPA . 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:	If easy to do remove contact lenses. Flush with water for 15 minutes, including under eyelids. Seek medical attention. In case of irritation from airborne exposure, move to fresh air.
INGESTION:	If conscious and alert, give 2-3 glasses of water. Do not induce vomiting. Material may enter lungs and cause sever damage. Seek immediate medical attention.
INHALATION:	Remove to fresh air, assure victim is breathing. Seek immediate medical attention. If not breathing administer CPR, if breathing difficult give oxygen.
SKIN:	Immediately wash with lots of soap and water. Seek immediate medical attention.
CLOTHING:	Remove contaminated clothing and shoes. Heavily contaminate clothing should be discarded. Wash/clean thoroughly before reuse.
TREATMENT:	Treat symptoms conventionally after thorough decontamination. Consideration should be given to possibility that overexposure to the solvent has occurred.

SECTION 5 - FIRE FIGHTING MEASURES

FLASH POINT:	7 °C , 45 °F
FLAMMABLE LIMIT, AIR VOL% LOWER:	1.2 for Toluene
UPPER:	7.1 for Toluene
AUTOIGNITION TEMPERATURE:	407 °C, 765 °F for Butyl Acetate
EXTINGUISHER METHOD:	Carbon Dioxide, Dry Chemical, Alcohol Foam or Water Spray. Water spray may be ineffective on the fire, but should be used to cool fire-exposed containers and structures.
FIRE AND EXPLOSION HAZARDS:	Eliminate sources of ignition. Above the flash point, vapor-air mixtures are explosive within the flammable limits. Sealed containers may rupture when heated. Vapors can flow along surfaces to distant ignition sources and flash back. Material creates a special hazard because it floats on water.
SPECIAL FIRE FIGHTING PROCEDURES:	Wear self contained breathing apparatus, and full protective gear. Remove all sources of ignition if it can be done safely. Move containers from fire area if you can do so without risk. Cool containers exposed to fire with water spray.
EXPLOSION HAZARD:	Fight fire from protected location.
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 areas. 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. Use good personal hygiene and housekeeping.

PRECAUTIONS FOR STORING: Recommended Minimum Storage Temperature: -18 °C, 0 °F. Recommended Maximum Storage Temperature: 49 °C, 120 °F. Store in a well ventilated area, away from heat, sparks, flame, direct sunlight or other sources of ignition. Keep away for incompatible materials.

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 colorless liquid.
ODOR:	Characteristic Sweet or Sour odor.
pH:	ND
ODOR THRESHOLD:	ND
BOILING POINT:	111 °C, 232 °F for Toluene
MELTING POINT:	-74 °C, -101 °F for Butyl Acetate
VISCOSITY:	2300 – 4300 cps
SPECIFIC GRAVITY (H_2O=1):	ND
VAPOR PRESSURE:	22 mm Hg @ 20 °C, 68 °F for Toluene
PERCENT VOLATILE W/W%:	~60 %
VAPOR DENSITY (AIR=1):	Both solvents 3 to 4 times heavier than air
EVAPORATION RATE (BuAc =1):	1.9 Toluene
SOLUBILITY IN WATER:	Practically insoluble to slightly soluble.

COEFFICIENT OF WATER/OIL DISTRIBUTION: < 3.0 for Toluene

SECTION 10 - STABILITY AND REACTIVITY

CONDITIONS TO AVOID:	Heat, open flames, sparks, static electricity, sunlight, or other sources of ignition.		
INCOMPATIBILITY (MATERIALS TO AVOID):	Strong oxidizing agents.		
HAZARDOUS DECOMPOSITION PRODUCTS:	Mainly Oxides of Carbon when burned.		
HAZARDOUS POLYMERIZATION:	MAY OCCUR:	WILL NOT OCCUR:	X
STABILITY:	UNSTABLE:	STABLE:	X

SECTION 11- TOXICOLOGICAL PROPERTIES

TARGET ORGANS:

For Mixture:	None Listed.
For Acrylic Polymer in Toluene:	None Listed.
For Toluene:	Brain, Liver, Kidneys and Bladder.
For Butyl Acetate:	None Listed.
For Trade Secret[1]:	Liver.
For Trade Secret[2]:	None Listed.
For Anthraquinone:	None Listed.

SECTION 11- TOXICOLOGICAL PROPERTIES CONTINUED

SENSITIVITY DATA:

For Acrylic Polymer in Toluene:	None listed.
For Toluene:	
Eye Human:	300 ppm.
Eye Rabbit:	870 µg. Mild.
Eye Rabbit:	2 mg/24H. Severe.
Eye Rabbit:	100 mg/ 30S rinse. Mild.
Skin Rabbit:	435 mg. Mild
Skin Rabbit:	500 mg. Moderate.
For Butyl Acetate:	
Eye Human:	300 ppm.
Eye Rabbit:	20 mg open. Severe.
Eye Rabbit:	Moderate.
Skin Guinea Pig:	Slight.
Skin Rabbit:	500 mg/24H. Moderate.
For Trade Secret[1]:	
Eye Rabbit:	Not an irritant.
Sensitization Guinea Pig:	Strong sensitizing potential.
Skin Rabbit:	Not an irritant.
For Trade Secret[2]:	
Eye Rabbit:	Not an irritant.
Sensitization Human:	No evidence of irritation or sensitization.
Skin Rabbit:	Not an irritant.

MUTAGENICITY DATA:

For Mixture:	None Listed.	
For Acrylic Polymer in Toluene:	None listed.	
For Toluene:		
Inhalation Rat	Cytogenetic Analysis:	5400 µg/m^3/16W.
Subcutaneous Rat	Cytogenetic Analysis:	12 gm/kg/12D.
S. Cerevisiae	Cytogenetic Analysis:	2400 µmol/tube.
Liver Rat	DNA Damage:	30 µmol/L.
E. Coli	Unscheduled DNA Synthesis:	1 pph.
Microorganisms	Unscheduled DNA Synthesis:	1 pph/15M.
Intraperitoneal Mouse	Micronucleus Test:	422 µg/kg/24H.
Oral Mouse	Micronucleus Test:	200 mg/kg.
Inhalation Grasshopper	Test Systems (Other):	562 mg/L.
For Trade Secret[1]:		
Ames:	Non-mutagenic	
Hamster	Nucleus Anomaly:	Non-mutagenic
Hamster	Micronucleus:	Non-mutagenic
Unscheduled DNA Synthesis:	Non-mutagenic	

SECTION 11- TOXICOLOGICAL PROPERTIES CONTINUED

MUTAGENICITY DATA CONTINUED:

For Trade Secret[2]:

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 Acrylic Polymer in Toluene: None listed.

For Toluene: Has been demonstrated to be embryofetotoxic and teratogenic in laboratory animals.

Inhalation Mouse	TC_{Lo}:	500 mg/m^3/24H, 6-13D preg.
Inhalation Mouse	TC_{Lo}:	1000 ppm/6H, 2-17D preg.
Inhalation Mouse	TC_{Lo}:	400 ppm/7H, 7-16D preg.
Inhalation Mouse	TC_{Lo}:	200 ppm/7H, 7-16D preg.
Inhalation Rat	TC_{Lo}:	1500 mg/m^3/24H, 1-8D preg.
Oral Mouse	TC_{Lo}:	9 gm/kg, 6-15D preg.
Oral Mouse	TC_{Lo}:	15 gm/kg, 6-15D preg.
Oral Mouse	TC_{Lo}:	30 gm/kg, 6-15D preg.

For Butyl Acetate:

Inhalation Rat	TCLo:	1500 ppm/7H, 7-16D Preg.

For Trade Secret[1]:

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 Acrylic Polymer in Toluene:	None listed.	
For Toluene:		
Inhalation Guinea Pig	LC_{Lo}:	1600 ppm.
Inhalation Human	TC_{Lo}:	200 ppm.
Inhalation Man	TC_{Lo}:	100 ppm.
Inhalation Mouse	LC_{Lo}:	5320 ppm/8H.
Inhalation Rat	LC_{Lo}:	4000 ppm/4H.
Intraperitoneal Mouse	LD_{50}:	1126 mg/kg.
Intraperitoneal Rat	LD_{Lo}:	800 mg/kg.
Intravenous Rat	LD_{50}:	1960 mg/kg.
Oral Human	LD_{Lo}:	50 mg/kg.
Oral Rat	LD_{50}:	5000 mg/kg.
Subcutaneous Frog	LD_{Lo}:	920 mg/kg.
Skin Rabbit	LD_{50}:	12124 mg/kg.
Unreported Route Mouse	LD_{50}:	2000 mg/kg.
Unreported Route Rat	LD_{50}:	6900 mg/kg.
For Butyl Acetate:		
Inhalation Cat	LC_{Lo}:	68 gm/m^3/72M.
Inhalation Guinea Pig	LC_{Lo}:	67 gm/m^3/4H.
Inhalation Guinea Pig	LC_{Lo}:	7000 ppm/13H.
Inhalation Human	TC_{Lo}:	200 ppm.
Inhalation Mouse	LC_{50}:	6 gm/m^3/2H.
Inhalation Rat	LC_{50}:	2000 ppm/4H.
Inhalation Rat	LC_{50}:	1800 ppm/6H.
Intramuscular Guinea Pig	LD_{Lo}:	2648 mg/kg.
Intraperitoneal Guinea Pig	LD_{Lo}:	1500 mg/kg.
Intraperitoneal Mouse	LD_{50}:	1230 mg/kg.
Oral Guinea Pig	LD_{Lo}:	4700 mg/kg.
Oral Mouse	LD_{50}:	7060 mg/kg.
Oral Mouse	LD_{50}:	7100 mg/kg.
Oral Rat	LD_{50}:	14 gm/kg.
Oral Rat	LD_{50}:	14130 mg/kg.
Oral Rabbit	LD_{50}:	7400 mg/kg.
Skin Guinea Pig	LD_{50}:	8770 mg/kg.
For Trade Secret[1]:		
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 Trade Secret[2]:		
Acute Oral Rat	LD_{50}:	> 10,000 mg/kg.
Acute Inhalation Rat	LC_{50}:	> 1.8 mg/kg/4H.
For Anthraquinone:	None Listed.	

SECTION 12 - ECOLOGICAL INFORMATION

AQUATIC TOXICITY:

For Mixture:	None Listed.	
For Butyl Acetate:		
Bluegill Sunfish	LC_{50}:	100 mg/L/96H.
Tidewater Silverside	LC_{50}:	185 mg/L/96H.
Daphnia	LC_{50}:	44-205 mg/L/96H.
For Trade Secret[1]:		
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 Trade Secret[2]:		
Zebra fish	LC_{50}:	> 100 ppm/96H.
Daphnia magna	EC_{50}:	> 100 ppm/24H.

AQUATIC REPRODUCTION:

For Trade Secret[1]:		
Daphnia Magna	EC_{50}:	> 1.0 ppm/21D./
Daphnia Magna	NOEL:	.32 ppm.

BIOCONCENTRATION:

For Trade Secret[1]:			
Rainbow Trout	Concentration:	0.08 ppm	Bioconcentration Factor: 26
Rainbow Trout	Concentration:	0.5 ppm	Bioconcentration Factor: 34

BIODEGRADABILITY:

For Trade Secret[1]:	Modified Strum Test:	Not readily biodegradable, with 12-24 % in 28 Days.
For Trade Secret[2]:		
	Modified Strum test:	Not readily biodegradable, with 0-4% in 28 days.

ECOTOXICITY DATA:

For Acrylic Polymer in Toluene:	No Applicable Data.	
For Toluene:		
Fish:	LC_{50}:	10 – 100 mg/L/96H.
For Trade Secret[2]:		
Sewage Bacteria:	IC_{20}:	> 100 ppm.
Sewage Bacteria:	IC_{50}:	> 100 ppm.
Sewage Bacteria:	IC_{80}:	> 100 ppm.

ENVIRONMENTAL FATE:

For Toluene: When released into soil, may evaporate to moderate extent. When released into soil, expected to leach into groundwater. When released into soil, may biodegrade to moderate extent. When released into water, may evaporate to moderate extent. When released into water, may biodegrade to moderate extent. When released into air, may moderately degraded by reaction with photochemically produced hydroxyl radicals. When released to into air, expected to have a half-life of less than 1 day. This material is not expected to significantly bioaccumulate.

SECTION 12 - ECOLOGICAL INFORMATION CONTINUED

OXYGEN DEMAND DATA:

For Butyl Acetate:

BOD-5:	1020 mg/g.
BOD-20:	1450 mg/g.
ThOD:	2207 mg/g.

For Trade Secret[1]:

COD:	1.84 g/G

PLANT EFFECTS:

For Trade Secret[2]:

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: When discarded it is listed as a hazardous waste by the EPA under RCRA as U220. 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: FLAMMABLE LIQUID, NOS (Contains Toluene and Butyl Acetate)
DOT/UN CLASS: 3
NA/UN NUMBER: UN 1993
PACKING GROUP: II
NAERG: 130
LABEL: Flammable Liquid
NMFC ITEM #: 60004, Declared Value must be filled in.
SCHEDULE B: 2902.20.0000
IMDG CLASS: 3.2
EmS: 3-07
CERCLA RQ: For Component:
Toluene: 1000 lbs.
Butyl Acetate: 5000 lbs.

SECTION 15 - REGULATORY INFORMATION

ITEM	TSCA	EINECS		CERCLA		CAA	CWA	RCRA	SARA 313		MAK
01	X	X									
02	X	X		X		X	X	U220	X		50 ppm
03	X	X							X		200 ppm
04	X		X			X	X		X		
05	X	X									
06	X	X									

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

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

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.

WARNING CODE: F – Flammable

RISK STATEMENTS:
R10 – Flammable
R36/38 – Irritating to eyes and skin.
R43 – May cause sensitization by skin contact

SAFETY STATEMENTS:
S3 – Keep in a cool place.
S7/8 – Keep container tightly closed and dry.
S9 – Keep container in a well ventilated place.
S15/16 – Keep away from heat, sources of ignition – No Smoking.
S20 – When using do not eat or drink.
S23 – Do not breath spray.
S24/25 – Avoid contact with skin and eyes.
S 29 – 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:	3
FLAMMABILITY:	3
REACTIVITY:	0
PERSONAL PROTECTIVE EQUIPMENT:	Gloves and Safety Glasses or Chemical Splash Goggles.

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) HAZARD IDENTIFICATION RATING:

HEALTH:	3
FLAMMABILITY:	3
REACTIVITY:	0

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		
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

SECTION 16 - OTHER INFORMATION CONTINUED

Reviewed By:	Barbara Gardocki	Health, Safety and Environment
Reviewed By:	Edward Sobolewski	Technical Review
Reviewed By:	Susan Sheariss	Senior Company Officer
Control Number:	06-052	

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.