

odyssey nail systems MATERIAL SAFETY DATA SHEET

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

CHEMICAL NAME: Methacrylate Polymer

PRODUCT NAME: Type 381, Cosmetic Polymer, Clear, with added BPO

TRADE NAME/PRODUCT CODE: **Competition Crystal**

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: C. J. Bruner, HEALTH & SAFETY DEPARTMENT
PHONE: 1-610-497-9000 During Business Hours
 1-610-497-9000, Then Press 6 At All Other Times

PREPARATION/UPDATE DATE: 11/05/01
PRINT DATE: 3/3/11

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

FOR POLYMER:

ITEM	CHEMICAL NAME	CAS NUMBER:	WT/WT %
01	Particulates Not Otherwise Classified	NE	60.0-100.0
02	Residual Monomers	NA	0.5-5.0
03	Polymer	9003-42-3	60.0-100.0
04	Benzoyl Peroxide	94-36-0	1.0-5.0

ITEM	ACGIH		OSHA		Company Recommendation	SKIN
	TLV-TWA	TLV-STEL	PEL TWA	PEL CEILING		
01	10 mg/m ³	NE	15 mg/m ³	NE	NE	NE
02	NA	NA	NA	NA	NA	NA
03	NE	NE	NE	NE	NE	NE
04	5 m/m ³	NE	5 m/m ³	NE	NE	NE

FOR DECOMPOSITION PRODUCTS:

ITEM	CHEMICAL NAME	CAS NUMBER:	WT/WT %
05	Ethyl Methacrylate Monomer	97-63-2	60.0-100.0

ITEM	ACGIH		OSHA		Company Recommendation	SKIN
	TLV-TWA	TLV-STEL	PEL TWA	PEL CEILING		
05	100 ppm	NE	100 ppm	NE	100 ppm	NE

See Section 16 for Abbreviations.

SECTION 3 - HAZARDS IDENTIFICATION**EMERGENCY OVERVIEW:**

WARNING:	For Polymer:	May irritate eyes, skin and respiratory tract.
For Polymer:		OSHA classifies this material as Particulates, Not Otherwise Classified.
	Eyes:	May be irritated by gross overexposure, no matter how generated. Keep dust out of eyes.
	Skin	May be irritated by gross overexposure, no matter how generated. May cause dryness.
	Respiratory Tract	May be irritated by gross overexposure, no matter how generated.
For Benzoyl Peroxide:	Eyes:	May cause irritation or damage.
	Skin:	Prolonged and/or repeated skin contact may cause irritation, defatting, dermatitis and sensitization.
	Inhalation:	May cause irritation of nose, throat and lungs.
	Ingestion:	May produce muscular weakness.
For Decomposition Products:		
Ethyl Methacrylate:		
Acute Hazards:	Eyes:	Eye contact may cause irritation with discomfort, tearing, or blurring of vision.
	Respiratory Tract:	Inhalation may cause irritation of the respiratory tract with coughing, of nonspecific discomfort, such as nausea, headache and or weakness.
	Skin:	Effects in humans include skin irritation with discomfort or allergic skin rashes.
	Digestive Tract:	Ingestion may cause anesthetic effects such as dizziness, headache, confusion, incoordination, and loss of consciousness
	Symptoms:	May include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea and vomiting.
Chronic Hazards:	Skin:	May cause allergic skin rashes.
	Animal Studies:	Administered lethal oral doses include weakness, labored and irregular respiration, drop in arterial blood pressure and coma.

SECTION 3 - HAZARDS IDENTIFICATION CONTINUED**CARCINOGENICITY:**

IARC lists Benzoyl Peroxide as not classifiable as to carcinogenicity to humans. 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 medical help if discomfort persists.
INGESTION:	Rinse mouth out with water. Call doctor if amount was large.
INHALATION:	Remove to fresh air. Get medical help if discomfort persists.
SKIN:	Wash with soap and water. Get medical help if discomfort persists.
CLOTHING:	Remove contaminated clothing. Wash thoroughly before reuse.
TREATMENT:	Treat symptoms conventionally, after thorough decontamination.

SECTION 5 - FIRE FIGHTING MEASURES

FLASH POINT:	304 °C, 580 °F
FLAMMABLE LIMIT, AIR VOL% LOWER:	NA
UPPER:	NA
AUTOIGNITION TEMPERATURE:	NE
EXTINGUISHER METHOD:	Water, carbon dioxide, dry chemical.
FIRE AND EXPLOSION HAZARDS:	Polymer dust is combustible. The explosive limits of the polymer particles suspended in air are approximately those of coal dust.
SPECIAL FIRE FIGHTING PROCEDURES:	Avoid extinguishing methods which may generate dust clouds. Water stream can disperse dust into air, producing a fire hazard and possible explosion hazard if exposed to ignition source. Firefighters should wear self-contained breathing apparatus.
EXPLOSION HAZARD:	
SENSITIVE TO MECHANICAL IMPACT:	For Polymer: No.
SENSITIVE TO STATIC DISCHARGE:	For Polymer: No.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE:	Isolate hazard area and deny entry to unnecessary or unprotected personnel. Sweep up to avoid slipping hazard. Keep airborne particulates at a minimum when cleaning up spills.
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SECTION 7- HANDLING AND STORAGE

PRECAUTIONS FOR HANDLING:	Use in well ventilated areas. Avoid contact with skin, eyes and clothing. Avoid breathing dust. Use good personal hygiene and housekeeping.
PRECAUTIONS FOR STORAGE:	Store in cool dry place away for incompatible materials. Keep container closed to prevent water absorption and contamination.
INDUSTRIAL HYGIENE PRACTICES:	Wash face and hands thoroughly with soap and water after use and before eating, drinking, smoking or applying cosmetics.

SECTION 8 - EXPOSURE CONTROL/PERSONAL PROTECTION

VENTILATION:	Use good, local exhaust at processing equipment, including buffers, sanders, grinders and polishers.
RESPIRATORY PROTECTION:	Use type for Particulates Not Otherwise Classified, if needed.
EYE PROTECTION:	Safety glasses or chemical splash goggles.
PROTECTIVE GLOVES:	Impervious, nitrile, if hot plastic is handled.
OTHER PROTECTIVE EQUIPMENT:	Provide eyewash, safety shower and impervious clothing are recommended. High temperature processing equipment should be well ventilated.
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:	Fine white powder.
ODOR:	Faint odor in bulk.
pH:	ND
ODOR THRESHOLD:	ND
BOILING POINT:	NA
FREEZING POINT:	ND
VISCOSITY:	NA
SPECIFIC GRAVITY (H₂O=1):	1.25
VAPOR PRESSURE:	NA
PERCENT VOLATILE W/W%:	NA
VAPOR DENSITY (AIR=1):	NA
EVAPORATION RATE (BuAc =1):	3.0
SOLUBILITY IN WATER:	Insoluble.
COEFFICIENT OF WATER/OIL DISTRIBUTION:	ND

SECTION 10 - STABILITY AND REACTIVITY

CONDITIONS TO AVOID:	Heating above 240 °C, 464 °F.
INCOMPATIBILITY (MATERIALS TO AVOID):	Strong oxidizing agents.
HAZARDOUS DECOMPOSITION PRODUCTS:	Methacrylate Monomer and Oxides of Carbon when burned.
HAZARDOUS POLYMERIZATION:	MAY OCCUR: WILL NOT OCCUR: X
STABILITY:	UNSTABLE: STABLE: X

SECTION 11- TOXICOLOGICAL PROPERTIES**TARGET ORGANS:**

For Polymer: None Listed.
For Benzoyl Peroxide: Skin and eyes.

For Decomposition Products:
Ethyl Methacrylate: None Listed.

SENSITIVITY DATA:

For Benzoyl Peroxide:
Eyes Rabbit: Severely irritating.
Skin Rabbit: Non-irritating/4H.

For Decomposition Products:
Ethyl Methacrylate:
Eyes Rabbit Draize Non-irritating.
Skin Rabbit Occlusive, FDA Draize Non-irritating/24H.
Guinea Pig FCAT Sensitizing.
Guinea Pig Maximization Test Sensitizing.
Observation Humans Allergic Contact Dermatitis.

MUTAGENICITY DATA:

For Polymer: None Listed.
For Benzoyl Peroxide:
Human Cell Types DNA Damage: 100 μ mol/L.
Mouse Cell Types DNA Damage: 1 μ mol/L.
Human Cell types DNA Inhibition: 56 μ mol/L.
Rat Liver Unscheduled DNA Synthesis: 100 p mol/L.
Human Cell Types Test Systems Other: 56 μ mol/L.

For Decomposition Products:
Ethyl Methacrylate: Positive tests as a mutagen on laboratory animals. Positive as well as negative results in in-vitro mutagenicity/genotoxicity tests.

REPRODUCTIVE TOXICITY DATA:

For Polymer: None Listed.

For Decomposition Products: None Listed.
Ethyl Methacrylate:
Intraperitoneal Rat TD_{Lo} : 735 mg/kg, 5-15D pregnant.
Intraperitoneal Rat TD_{Lo} : 366 mg/kg, 5-15 D pregnant.

TUMOROGENIC DATA:

For Polymer: None Listed.
For Benzoyl Peroxide:
Skin Mouse TD_{Lo} : 24 gm/kg/30W.

SECTION 11- TOXICOLOGICAL PROPERTIES CONTINUED**TOXICITY DATA:**

For Polymer: None Listed.

For Benzoyl Peroxide:

Inhalation Rat	LC ₅₀ :	24.3 mg/L/4hr.
Intraperitoneal Mouse	LD _{Lo} :	250 mg/kg.
Oral Rat	LD ₅₀ :	7710 mg/kg.

For Decomposition Products:

Ethyl Methacrylate:

Dermal Rabbit	LD ₅₀ :	>9100 mg/kg.
Dermal Rabbit	LD ₅₀ :	>5000 mg/kg.
Inhalation Rat	LC ₅₀ :	8300 ppm/4H.
Intraperitoneal Mouse	LD ₅₀ :	1369 mg/kg.
Intraperitoneal Rat	LD ₅₀ :	1223 mg/kg.
Oral Mouse	LD ₅₀ :	7836 mg/kg.
Oral Rat	LD ₅₀ :	14800 mg/kg.
Oral Rat	LD ₅₀ :	13424 mg/kg.
Oral Rat	LD ₅₀ :	> 5000 mg/kg.
Oral Rabbit	LD ₅₀ :	3630 mg/kg.
Subcutaneous Rat	LD _{Lo} :	25 gm/kg.

SECTION 12 - ECOLOGICAL INFORMATION**AQUATIC TOXICITY:**

For Polymer: None Listed.

For Benzoyl Peroxide:

Guppies	LC ₅₀ :	2.0 mg/L/96H.
Daphnia Magna	EC ₅₀ :	2.9 mg/L/48H.
Algae	EC ₅₀ :	0.83 mg/L/72H.
Activated Sludge	EC ₅₀ :	35 mg/L.

For Decomposition Products:

Ethyl Methacrylate:

Fish	LC ₅₀ :	100 mg/L/96H.
Daphnia Magna	EC ₅₀ :	> 66 mg/L/48H.
Algae	EC ₅₀ :	0.64 mg/L/96H.
Bacteria Active Sludge	EC ₅₀ :	> 1000 mg/L/30min.

ECOLOGICAL TOXICITY:

For Polymer: Not Known.

ENVIRONMENT FATE:

For Benzoyl Peroxide:

28 Day Biodegradation Study: Almost 60% in a closed bottle test.

For Decomposition Products:

Ethyl Methacrylate:

Biodegradation: Inherently biodegradable (69%).

SECTION 13 - DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Dispose in a landfill or incinerate according to 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 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: SYNTHETIC GUM RESIN GRANULAR, NOIBN
DOT/UN CLASS:
NA/UN NUMBER:
PACKING GROUP:
NAERG:
LABEL:
NMFC ITEM #: 46030
SCHEDULE B: 3906.90.6000
IMDG CLASS:
IMDG PG:
CERCLA RQ: For Decomposition Products:
 Ethyl Methacrylate Monomer: 1000 lb.

SECTION 15 - REGULATORY INFORMATION

ITEM	TSCA	EINECS	CERCLA	CAA	CWA	RCRA	SARA 313	MAK
03	X	X						
04	X	X	X	X		U 118	X	

ITEM	AUSTRALIA	CANADA	CHINA	JAPAN	KOREA	PHILIPPINE
04		X				

ITEM	CA65	FL	MA	MI	MN	NJ	NY	PA	WA
04	X	X	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.

SECTION 15 - REGULATORY INFORMATION CONTINUED

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

SAFETY STATEMENTS: S3 – Keep in a cool place.
S7/8 – Keep container tightly closed and dry.
S20/S21 – When using do not eat, drink or smoke.
S22 – Do not breathe dust.
S24/25 – Avoid contact with skin and eyes.
S37/S39 – Wear suitable gloves and eye/face protection.

SECTION 16 - OTHER INFORMATION

HAZARDOUS MATERIAL IDENTIFICATION SYSTEM (HMIS) RATING:

HEALTH:	1	
FLAMMABILITY:	1	
REACTIVITY:	0	
PERSONAL PROTECTIVE EQUIPMENT:		Gloves and Safety Glasses or Chemical Splash Goggles.

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) HAZARD IDENTIFICATION RATING:

HEALTH:	1	
FLAMMABILITY:	1	
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	c cent	
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	IC Inhibitory Concentration	
H Hours	M Months	
D Days	Y Years	
W Weeks		

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
 NOAEL No Observed Adverse Effect Level

SECTION 16 - OTHER INFORMATION CONTINUED

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.