

## SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**CHEMICAL NAME:** Copolymer

**PRODUCT NAME:** Copolymer, White with added BPO

**TRADE NAME:** **BB Polymer**

**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:** 01/05/2015  
**PRINT DATE:** 07/10/18

## 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	05-5.0
03	Benzoyl Peroxide	94-36-0	0.5-1.5
04	Titanium Dioxide	13463-67-7	0.5-1.5

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

## SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS CONTINUED

**FOR DECOMPOSITION PRODUCTS:**

ITEM	CHEMICAL NAME	CAS NUMBER:	WT/WT %
05	Methyl Methacrylate Monomer	80-62-6	60.0-100.0
06	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
06	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 Titanium Dioxide:

**Eyes:** May cause irritation as an inert foreign body.

**Skin:** May cause drying effect, although non-corrosive, non-irritating and non-sensitizing.

**Inhalation:** May cause temporary drying effect or irritation of mucus membranes.

**Ingestion:** Harmless, physiologically inert.

## SECTION 3 - HAZARDS IDENTIFICATION CONTINUED

## For Decomposition Products:

## Methyl Methacrylate:

Acute Hazards:	Eyes:	May irritate.
	Respiratory Tract:	May irritate.
	Skin:	May cause rashes.
	Symptoms:	Headaches, nausea, staggering gait, confusion, drowsiness and unconsciousness.
Chronic Hazards:	Eyes:	May cause eye corrosion and permanent injury.
	Liver and Kidneys:	May cause changes in liver and kidney function or damage.
	Nervous System:	Repeated and prolonged over exposure may cause permanent damage.
	Skin:	May cause allergic skin rashes.

## 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.

**CARCINOGENICITY:**

IARC and NIOSH lists Titanium Dioxide as not classifiable as to carcinogenicity to humans. 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:**

INHALATION:	Remove to fresh air. Get medical help if discomfort persists.
EYES:	Flush with water for 15 minutes, including under eyelids. Get medical help if discomfort persists.
SKIN:	Wash with soap and water. Get medical help if discomfort persists.
INGESTION:	Rinse mouth out with water. Call doctor if amount was large.
CLOTHING:	Wash thoroughly before reuse.
TREATMENT:	Treat symptoms after thorough decontamination.

**SECTION 5 - FIRE FIGHTING MEASURES**

<b>FLASH POINT:</b>	304 °C, 580 °F
<b>FLAMMABLE LIMIT, AIR VOL% LOWER:</b>	NA
<b>UPPER:</b>	NA
<b>AUTOIGNITION TEMPERATURE:</b>	NE
<b>EXTINGUISHER METHOD:</b>	Water, carbon dioxide, dry chemical.
<b>FIRE AND EXPLOSION HAZARDS:</b>	Polymer dust is combustible. The explosive limits of the polymer particles suspended in air are approximately those of coal dust.
<b>SPECIAL FIRE FIGHTING PROCEDURES:</b>	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.
<b>EXPLOSION HAZARD:</b>	Firefighters should wear self-contained breathing apparatus.
<b>SENSITIVE TO MECHANICAL IMPACT:</b>	For Polymer: No. For Benzoyl Peroxide Component: Yes
<b>SENSITIVE TO STATIC DISCHARGE:</b>	For Polymer: No. For Benzoyl Peroxide Component: Yes

**SECTION 6 - ACCIDENTAL RELEASE MEASURES**

<b>ACCIDENTAL RELEASE:</b>	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**

<b>PRECAUTIONS FOR HANDLING:</b>	Use in well ventilated areas. Wear gloves when handling powder.
<b>PRECAUTIONS FOR STORAGE:</b>	Store in cool dry place. Keep container closed to prevent water absorption and contamination.

## SECTION 8 - EXPOSURE CONTROL/PERSONAL PROTECTION

<b>VENTILATION:</b>	Use good, local exhaust at processing equipment, including buffers, sanders, grinders and polishers.
<b>RESPIRATORY PROTECTION:</b>	Use type for Particulates Not Otherwise Classified, if needed.
<b>EYE PROTECTION:</b>	Safety glasses or chemical splash goggles.
<b>PROTECTIVE GLOVES:</b>	Impervious, nitrile, if hot plastic is handled.
<b>OTHER PROTECTIVE EQUIPMENT:</b>	Provide eyewash, safety shower and impervious clothing are recommended. High temperature processing equipment should be well ventilated.
<b>INDUSTRIAL HYGIENE PRACTICES:</b>	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

<b>APPEARANCE:</b>	Fine white powder.
<b>ODOR:</b>	Faint odor in bulk.
<b>pH:</b>	ND
<b>ODOR THRESHOLD:</b>	ND
<b>BOILING POINT:</b>	NA
<b>FREEZING POINT:</b>	ND
<b>VISCOSITY:</b>	NA
<b>SPECIFIC GRAVITY (H<sub>2</sub>O=1):</b>	1.25
<b>VAPOR PRESSURE:</b>	NA
<b>PERCENT VOLATILE W/W%:</b>	NA
<b>VAPOR DENSITY (AIR=1):</b>	NA
<b>EVAPORATION RATE (BuAc =1):</b>	3.0
<b>SOLUBILITY IN WATER:</b>	Insoluble.
<b>COEFFICIENT OF WATER/OIL DISTRIBUTION:</b>	ND

## SECTION 10 - STABILITY AND REACTIVITY

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

## SECTION 11- TOXICOLOGICAL PROPERTIES

**TARGET ORGANS:**

For Polymer; None Listed.  
 For Benzoyl Peroxide: Skin and eyes.  
 For Titanium Dioxide: None Listed.

For Decomposition Products:  
 Methyl Methacrylate: Nose, Liver and kidneys.  
 Ethyl Methacrylate: None Listed.

**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:  
 Methyl Methacrylate:  
     Ovary Hamster Cytogenetic Analysis: 1600 mg/L.  
     Inhalation Rat Cytogenetic Analysis: 4 mg/m<sup>3</sup>/16W.  
     Lymphocyte Mouse Gene Mutation in Mammalian Cells: 704 mg/L.  
     Lymphocyte Mouse Microsomal Assay: 500 mg/L.  
     Ovary, Hamster Sister Chromatid Exchange: 1500 mg/L.  
 Ethyl Methacrylate: None Listed.

**REPRODUCTIVE TOXICITY DATA:**

For Polymer: None Listed.

For Decomposition Products: None Listed.  
 Methyl Methacrylate:  
     Inhalation Rat TC<sub>Lo</sub>: 109 gm/m<sup>3</sup>/17M.  
     Inhalation Rat TC<sub>Lo</sub>: 109 gm/m<sup>3</sup>/54M, 6-15 days of pregnancy.  
     Inhalation Rat TC<sub>Lo</sub>: 54mg/m<sup>3</sup>/24H, 8 weeks of pregnancy.  
     Inhalation Rat TC<sub>Lo</sub>: 4480 mg/m<sup>3</sup>/2H, 6-18 days of pregnancy.  
     Intraperitoneal Rat TC<sub>Lo</sub>: 405 mg/kg.  
     Intraperitoneal Rat TC<sub>Lo</sub>: 801mg/kg.  
 Ethyl Methacrylate:  
     Intraperitoneal Rat TD<sub>Lo</sub>: 735 mg/kg, 5-15D preg.  
     Intraperitoneal Rat TD<sub>Lo</sub>: 366 mg/kg, 5-15D preg.

## SECTION 11- TOXICOLOGICAL PROPERTIES CONTINUED

**TUMOROGENIC DATA:**

For Polymer:		None Listed.
For Benzoyl Peroxide:		
Skin Mouse	TD <sub>Lo</sub> :	24 gm/kg/30W.
For Titanium Dioxide:		
Inhalation Rat	TC <sub>Lo</sub> :	250 mg/m <sup>3</sup> /6H/2Y
Intramuscular Rat	TD <sub>Lo</sub> :	360 mg/kg/2Y.
Intramuscular Rat	TD:	260 mg/kg/84W.

**TOXICITY DATA:**

For Polymer:		None Listed.
For Benzoyl Peroxide:		
Inhalation Rat	LC <sub>50</sub> :	24.3 mg/L/4hr.
Intraperitoneal Mouse	LD <sub>Lo</sub> :	250 mg/kg.
Oral Rat	LD <sub>50</sub> :	7710 mg/kg.
For Titanium Dioxide:		
Oral Rat	LD <sub>50</sub> :	9000 mg/kg.
For Decomposition Products:		
Methyl Methacrylate:		
Acute Oral Rat	LD <sub>50</sub> :	7990 mg/kg.
Acute Dermal Rabbit	LD <sub>50</sub> :	35,500 mg/kg.
Acute Inhalation Rat	LC <sub>50</sub> :	>12,500 to 16,500 ppm for 0.5 hours.
Inhalation Human	TC <sub>Lo</sub> :	125 ppm.
Inhalation Human	TC <sub>Lo</sub> :	60 mg/m <sup>3</sup> .
Human Patch Test:		Approximate one-third of subjects developed mild redness at the site of application. Twenty percent showed sensitivity when tested 10 days later.
Ethyl Methacrylate:		
Inhalation Rat	LC <sub>50</sub> :	8300 ppm/4H.
Intraperitoneal Mouse	LD <sub>50</sub> :	1369 mg/kg.
Intraperitoneal Rat	LD <sub>50</sub> :	1223 mg/kg.
Oral Mouse	LD <sub>50</sub> :	7836 mg/kg.
Oral Rat	LD <sub>50</sub> :	14800 mg/kg.
Oral Rabbit	LD <sub>50</sub> :	3630 mg/kg.
Subcutaneous Rat	LD <sub>Lo</sub> :	25 gm/kg.

## SECTION 12 - ECOLOGICAL INFORMATION

**AQUATIC TOXICITY:**

For Polymer: None Listed.

For Decomposition Products:

Methyl Methacrylate:

Flathead Minnows TLM96H: 100-1000 ppm.

Goldfish TLM24H: 420 ppm.

Bluegills TLM24H: 368 ppm.

Ethyl Methacrylate: None Listed.

**ECOLOGICAL TOXICITY:**

For Polymer: Not Known.

For Titanium Dioxide: Not Known.

## 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:**

**CERLA RQ:**

For Decomposition Products:

Methyl Methacrylate Monomer: 1000 lb.

Ethyl Methacrylate Monomer: 1000 lb.

## SECTION 15 - REGULATORY INFORMATION

ITEM	TSCA	EINECS	CERCLA	313	CAA	RCRA
01						
02						
03	X	X		X		
04	X	X				
05	X	X	X	X	X	U 162
06	X	X	X	X	X	U 118
ITEM	CWA	PA	NJ	CA 65	WHMIS	DAK
03					X	5 mg/m <sup>3</sup>
05		X	X		X	50 ppm
06		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 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

## 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		

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

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.