EzNails, Inc.

MATERIAL SAFETY DATA SHEET

SECTION 1 – CHEMCIAL PRODUCT AND COMPANY IDENTIFICATION

CHEMICAL NAME:	Urethane Dimethacrylate Mixture
PRODUCT NAME:	Pure Gel UV/LED Topcoat
TRADE NAME/PRODUCT CODE:	Gella Topcoat
PRODUCT USE:	Organic Process Chemical
MANUFACTURER:	EzNails, INC.
ADDRESS:	11652 Monarch Street Garden Grove, CA 92841
WEBSITE:	www.eznails.net
24 HR. EMERGENCY TELEPHONE:	CHEMTREC: 1-800-424-9300 (Outside U.S. 1-703-527-3887)
PREPARED BY:	EzNails, Inc.
PHONE:	1-855-EZNAILS

SECTION 2 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:	Irritating to eyes, respiratory system and skin. May cause sensitization by skin contact. Unstable/Reactive upon depletion of inhibitor.
Routes of Exposure:	Inhalation, Skin or Eyes.
Physical Hazards:	Unstable/Reactive upon depletion of inhibitor. Check inhibitor levels periodically.
Acute Health Hazards:	See section 11 for more information.
Eyes:	Liquid and vapors may cause irritation and possibly permanent injury with symptoms including burning sensation, excessive tearing, redness, itching, or swelling.
Skin:	Liquid or high vapor concentration may cause irritation, including redness and swelling. It may also cause sensitization and allergic reaction in some individuals resulting in contact dermatitis, severe irritation, dryness and cracking. May cause delayed blistering. Expected to be a slight absorption hazard.
Inhalation:	Is a suspect slight respiratory tract irritation hazard if used at elevated temperatures or processes which generate an aerosol or mist. Symptoms of irritation may include coughing, mucous production and shortness of breath.
Ingestion:	If product is swallowed, may cause nausea, headache, vomiting, diarrhea, and/or central nervous system effects.
Conditions Aggravated by Exposure:	May cause more significant skin irritation in people with pre-existing skin conditions. Repeated or prolonged exposure may cause lung and/or kidney damage.
Chronic Health Hazards:	See section 11 for details.
Carcinogenicity:	See section 11 for details.
Potential Environmental:	See section 12 for details.

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

ITEM	CHEMICAL NAME	CAS #:	EINECS #	R Phrases	WT/WT %
01	Urethane Dimethacrylate	NA	NA	R36/37/38, R43	30.0-60.0
02	Hydroxypropyl Methacrylate (HPMA)	27813-02-1	248-666-3	NA	15.0-40.0
03	Photoinitiator Blend	NA	NA	NA	10.0-30.0
04	Trimethylolpropane Trimethacrylate (TMPTMA)	3290-92-4	221-950-4	NA	7.0-13.0
05	Phosphate Ester	52628-03-2	258-053-2	NA	5.0-10.0
06	2-Hydroxyethyl Methacrylate (HEMA)	868-77-9	212-782-2	R36/38, R43	5.0-10.0

Note this material contains an inhibitor (HQ, MEHQ, etc) at <1%. The type and amount meet product specifications. Contact manufacturer for exact concentration and details on inhibitor level maintenance.

SECTION 4 - FIRST AID MEASURES

EMERGENCY AND FIRST AID PROCEDURES:

EYES: If product gets in the eyes, flush with lukewarm water for at least 15 minutes. If irritation occurs, contact a physician.

SKIN: Rinse thoroughly with lukewarm water, followed by a thorough washing of the effected area with soap and water. If irritation, redness or swelling persists, contact a physician immediately.

INHALATION: Remove to fresh air. Seek immediate medical attention.

INGESTION: If ingested, do not induce vomiting. If product has been swallowed, drink plenty of water or milk IMMEDIATELY. If the patient is vomiting, continue to offer water or milk. Never give anything by mouth to an unconscious person. Provide an estimate of the time at which the material was ingested and the amount of the substance that was swallowed. Get medical attention immediately.

CLOTHING: Remove contaminated clothing, wash thoroughly before reuse.

TREATMENT: Treat symptoms conventionally, after thorough decontamination.

NOTE TO PHYSICIANS: None available.

SECTION 5 - FIRE FIGHTING MEASURES

FLASH POINT: Refer to Section 9 for details.

SUITABLE EXTINGUISHING MEDIA: Chemical foam, carbon dioxide, dry chemical.

UNSUITABLE EXTINGUISHING MEDIA: Water may not be effective in extinguishing this fire.

PRODUCTS OF COMBUSTION: Oxides of Carbon

FIRE AND EXPLOSION HAZARDS: High temperatures, inhibitor depletion, accidental impurities, or exposure to radiation or oxidizers may cause spontaneous polymerizing reaction generating heat/pressure. Closed containers may rupture or explode during a runaway polymerization.

SPECIAL FIRE FIGHTING PROCEDURES: Use a water spray or fog to reduce or direct vapors. Water may not be effective in actually extinguishing a fire involving this product. When involved in a fire, this product may ignite and decompose to produce carbon oxides. Do not enter fire area without proper protection. Fight fire from a safe location. Heat/impurities may cause pressure to build and/or rupture closed containers, spreading fire, increasing risk of burns/injuries. Structural firefighters must wear SCBAs and full protective equipment.

SENSITIVE TO MECHANICAL IMPACT: No.
SENSITIVE TO STATIC DISCHARGE: No.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Review Section 5 before proceeding with clean-up. Individuals involved must wear appropriate Personal Protective Equipment that is specified in Section 8. Deny entry to all unprotected individuals. Remove any contaminated clothing and wash thoroughly before reuse.

ENVIRONMENTAL PRECAUTIONS: Keep spills and cleaning runoffs out of municipal sewers and open bodies of water. US Regulations (CERCLA) require reporting spills and releases to soil, water and air in excess of reportable quantities. The toll free number for the US Coast Guard National Response Center is (800) 424-8802.

METHODS FOR CONTAINMENT: Dike and contain spill with inert, non-combustible material (e.g. sand or earth).

METHODS FOR CLEAN-UP: Evacuate personnel, maximize ventilation (open doors and windows) and secure all sources of ignition. Use good, local ventilation with a minimum capture velocity of 100 ft/min (30 m/min) at point of monomer release. Place into appropriate closed container(s) for disposal in accordance with local, state and federal regulations. Refer to Section 13 for additional information. Wash all affected areas with plenty of warm water and soap.

SECTION 7- HANDLING AND STORAGE

HANDLING PROCEDURES:

Keep away from heat, sparks, and flame. Keep container closed after each use. Refer to Section 8 for suggested exposure controls and personal protection. Observe precautions found on label. Avoid contact with skin, eyes and clothing. Use good personal hygiene and housekeeping.

STORAGE PROCEDURES:

Store containers in a cool, dry location, away from direct sunlight, heat, sparks, flame, other light sources, or sources of intense heat. Store in accordance with National Fire Protection Association recommendations. Check inhibitor levels periodically, adding to the bulk material if needed. Maintain at a minimum, the original 2-inch headspace in the product container and do not blanket or mix with oxygen-free gas as it renders the inhibitor ineffective. Product residue may remain in empty containers. Observe all label precautions until the container is cleaned, reconditioned, or destroyed.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

	ACGIH		OSHA	
ITEM*	**TLV-TWA**	**TLV-STEL**	**PEL TWA**	**PEL CEILING**
Mixture	NE	NE	NE	NE

* Abbreviations can be found in Section 16

ENGINEERING CONTROLS:

Use local ventilation that is adequate to keep employee exposure to airborne concentrations below exposure limits. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

RESPIRATORY PROTECTION:

A respirator should be worn whenever workplace conditions warrant a respirators use. None required if airborne concentrations are maintained below the exposure limit listed above. If necessary, use only respiratory protection authorized per U.S. OSHA's requirement in 29 CFR §1910.134 or other appropriate governing standard.

EYE/FACE PROTECTION:

Wear safety glasses, chemical goggles when splashing is possible, when dealing with this material. If necessary, refer to U.S. OSHA 29 CFR §1910.133, or other appropriate governing standard. Ensure that an eyewash station, sink or washbasin is available in case of exposure to eyes.

HAND/SKIN PROTECTION:

Avoid skin contact. Wear chemical resistant gloves for routine industrial use. If necessary, refer to U.S. OSHA 29 CFR §1910.138, or other appropriate governing standards. Wear impervious clothing to prevent any contact with this product, such as gloves, apron, boots, or whole body suit.

GENERAL HYGIENE CONSIDERATIONS:

Wash thoroughly after handling. An eyewash station and a safety shower are recommended. Food, beverages, and tobacco products should not be carried, stored, or consumed where this material is in use. Wash hands thoroughly before eating, drinking, or smoking.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE/COLOR:	Viscous
PHYSICAL STATE:	Liquid
ODOR:	Characteristic methacrylate odor
ODOR THRESHOLD:	ND
pH:	ND
FREEZING POINT:	NE
BOILING POINT:	NE
FLASH POINT (closed cup):	>200 °F, >93 °C
EVAPORATION RATE (BuAc =1):	NE
FLAMMABLE LIMIT, AIR VOL% LOWER:	NE
UPPER:	NE
VAPOR PRESSURE:	NE
VAPOR DENSITY (AIR=1):	ND
RELATIVE DENSITY:	NE
SPECIFIC GRAVITY (H_2O=1):	ND
SOLUBILITY IN WATER:	Negligible.
AUTOIGNITION TEMPERATURE:	NE
DECOMPOSITION TEMPERATURE:	NE
PERCENT VOLATILE W/W%:	Negligible.

SECTION 10 - STABILITY AND REACTIVITY

STABILITY: Unstable/Reactive upon depletion of inhibitor and/or heat.

CONDITIONS TO AVOID: Avoid excessive temperatures, localized heat sources (example drum or band heaters), oxidizing conditions, freezing conditions, direct sunlight, ultraviolet radiation, inert gas blanketing.

INCOMPATIBLE MATERIALS: Strong oxidizers, strong reducers, free radical initiators, inert gases, oxygen scavengers.

HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of Carbon when burned.

HAZARDOUS POLYMERIZATION: MAY OCCUR: X WILL NOT OCCUR:

POSSIBILITY OF HAZARDOUS REACTIONS: MAY OCCUR: X WILL NOT OCCUR:

SECTION 11- TOXICOLOGICAL PROPERTIES

TARGET ORGANS:

For Mixture:	None listed with exception below.
For HEMA:	Liver or Kidney (repeated and prolonged exposure).

SYMPTOMS: Refer to Section 2 for information.

IMMEDIATE/DELAYED EFFECTS: Refer to Section 2 for information.

TOXICITY DATA:

This product has NOT been tested on animals to obtain toxicology data. There may be toxicological data available on the various components of this product. An adequate representation of all these data is beyond the scope of this document. If you need more information, please contact Esschem at the telephone number found in Section 1.

SENSITIZATION:

No data available.

IRRITANCY:

No data available.

CHRONIC EXPOSURE:

Carcinogenicity:	None of the components of this material are listed by IARC, NTP, OSHA, or ACGIH as carcinogens.
Reproductive Toxicity:	This product is not reported to cause reproductive effects in humans.
Teratogenicity:	This product is not reported to cause teratogenic effects in humans.
Mutagenicity Data:	Mouse lymphoma studies for TMPTMA 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.

NAME OF TOXICOLOGICALLY SYNERGISTIC PRODUCTS:

No data available.

SECTION 12 - ECOLOGICAL INFORMATION

ECOTOXICITY:

AQUATIC:

There is no specific data available for this product; however, very large releases of this product may be harmful or fatal to overexposed aquatic life. There may be data available on the various components of this product. An adequate representation of all these data is beyond the scope of this document. If you need more information, please contact Esschem at the telephone number found in Section 1.

SOIL:	No data available.
AIR:	No data available.

ENVIRONMENTAL FATE:

Persistence and Degradability:	
Biodegradation:	Not known.
Bioaccumulative Potential:	Not known.
Mobility in soil:	Not known.
Other Adverse effects:	None known.

SECTION 13 - DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD:

Contaminated product/soil/water may be RCRA/OSHA hazardous waste due to potential for internal heat generation (40 CFR 261 and 29 CFR 1910). After addition of excess inhibitor, dispose waste material 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 material associated with empty containers. Dispose of all empty containers properly, in accordance with Federal, State and Local regulations.

SECTION 14 – TRANSPORTATION INFORMATION

DOT (GROUND)

PROPER SHIPPING NAME:	Not regulated.
TECHNICAL NAME:	NA
DOT/UN CLASS:	NA
NA/UN NUMBER:	NA
PACKING GROUP:	NA
DOT RQ:	NA
MARINE POLLUTANT:	Yes.

Note: Larger size containers of this material may be regulated as an ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, NOS. Refer to the appropriate regulations for determination.

SECTION 15 - REGULATORY INFORMATION

United States:

OSHA:	This material is considered Hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)
TSCA Inventory Status:	The components of this product are listed, or are excluded from listing, on the TSCA Inventory.
SARA Section 302:	There are no specific Threshold Planning Quantities for the components of this product.
SARA Section 311/312:	Acute Health; Chronic Health; Reactive
SARA Section 313:	There are not any reporting requirements for this product.
CERCLA Reportable Quantity (RQ):	NA
State Regulatory Information:	This product may contain components that are covered under specific state criteria.
California Prop 65:	The monomers contain or may contain substances known to the state of California to cause cancer and/or reproductive toxicity. The Photoinitiator Blend contains, or may contain, trace quantities of the following toluene and dichloromethane.

Canada:

DSL/NDSL:	The components of this product are listed on the DSL/NDSL with the exception of a minor component of the Photoinitiator Blend. All other components of this product are listed on the DSL/NDSL.
WHMIS Hazard Class:	D2B This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR. None of the components of this product are listed on the Priorities Substances List.

SECTION 15 - REGULATORY INFORMATION CONTINUED

Europe:

EINECS: The components of this product are listed or are excluded from listing on EINECS.

Candidate List: NA.

CSR Available: No.

HAZARD SYMBOLS: Xi – Irritant

RISK STATEMENTS:
R36/37/38 – Irritating to eyes, respiratory system and skin.
R43 – May cause sensitization by skin contact
R50 – Very toxic to aquatic organisms.

SAFETY STATEMENTS:
S3 – Keep in a cool place.
S7 – Keep container tightly closed.
S9 – Keep container in a well-ventilated place.
S20 – When using do not eat or drink.
S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S28 - After contact with skin, wash immediately with plenty of water.
S29 – Do not empty into drains.
S37/39 – Wear suitable gloves and eye/face protection.
S61 - Avoid release to the environment. Refer to special instructions/Safety data sheets.

SECTION 16 - OTHER INFORMATION

HAZARDOUS MATERIAL IDENTIFICATION SYSTEM (HMIS) RATING:

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

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) HAZARD IDENTIFICATION RATING:

HEALTH:	2
FLAMMABILITY:	1
REACTIVITY:	2
SPECIAL INFORMATION:	NA

SECTION 16 - OTHER INFORMATION CONTINUED

ABBREVIATIONS:

NA	Not Applicable	ND	Not Determined
NE	Not Established		
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	cento
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
DOC	Dissolved Organic Carbon		
H	Hours	M	Months
D	Days	Y	Years
W	Weeks		

ACGIH	American Conference of Governmental Industrial Hygienist
CPR	Controlled Product's Regulation
CSR	Chemical Safety Report
DOT	Department of Transportation
DSL	Canadian Domestic Substances List
EINECS	European Inventory of Existing Commercial Chemical Substances
IARC	International Agency for Research for Cancer
NDSL	Canadian Non-Domestic Substance List
NOEL	No Observed Effect Level
NOAEL	No Observed Adverse Effect Level
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
TLV	Threshold Limit Value
TSCA	Toxic Substances Control Act
WHMIS	Workplace Hazardous Materials Information System