Star Nail International, Inc. **M A T E R I A L S A F E T Y D A T A S H E E T**

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

CHEMICAL NAME: Acrylic Liquid

PRODUCT NAME: Star Nail Odorless Acrylic Liquid

PRODUCT USE: Organic Process Chemical

MANUFACTURER: Star Nail International, Inc.
ADDRESS: 29120 Avenue Paine
Valencia, Ca. 91355

24 HR. EMERGENCY TELEPHONE: **CHEMTEL:** 1-800-255-3924

PREPARATION/UPDATE DATE: **01/02/2014**
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MSDS ID: M21-01

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

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	10.0-40.0

	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

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

See Section 16 for Abbreviations.

SECTION 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

WARNING:

Physical Hazards:		Unstable/Reactive upon depletion of inhibitor.
Acute Hazards:	Eyes:	Liquid or high vapor concentration may cause irritation and possibly permanent injury. Irritation may include excessive tearing, blinking and redness.
	Ingestion:	May be toxic. Swallowing significant amounts could cause irritation of mouth, throat and digestive tract, central nervous system depression.
	Inhalation:	Liquid or high vapor concentration may cause irritation of the nose, throat and respiratory tract. Irritation may include coughing, mucous production and shortness of breath.
	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. May cause delayed blistering. Expected to be a slight absorption hazard.
Chronic Hazards:		Prolonged exposure may lead to headaches, nausea, drowsiness and unconsciousness.

CARCINOGENICITY:

Hydroxyethyl Methacrylate contains trace amounts of Ethylene Oxide, substances known to the state of California to cause cancer and/or reproductive toxicity. Triethylene Glycol Dimethacrylate may contain trace quantities of substances known to the state of California to cause cancer and/or reproductive toxicity. All carcinogen studies for all types of cancers were negative. 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 product gets in the eyes, flush with copious amounts of lukewarm water for at least 15 minutes. If irritation occurs, contact a physician.
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.
INHALATION:	Remove to fresh air. Seek immediate medical attention.
SKIN:	If irritation occurs and product is on the 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.
CLOTHING:	Remove contaminated clothing, wash thoroughly before reuse.
TREATMENT:	Treat symptoms 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: Chemical foam, carbon dioxide, dry chemical.

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. Use a water spray or fog to reduce or direct vapors. Water may not be effective in actually extinguishing a fire involving this product.

SPECIAL FIRE FIGHTING PROCEDURES: 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

ACCIDENTAL RELEASE:

Before cleaning any spill or leak, individuals involved must wear appropriate Personal Protective Equipment (e.g., goggles, gloves). Deny entry to all unprotected individuals. Dike and contain spill with inert material (e.g. sand or earth). Maximize ventilation (open doors and windows) and secure all sources of ignition. Place into appropriate closed container(s) for disposal in accordance with local, state and federal regulations. Wash all affected areas with plenty of warm water and soap. Remove any contaminated clothing and wash thoroughly before reuse. Keep spills and cleaning runoffs out of municipal sewers and open bodies of water.

SECTION 7- HANDLING AND STORAGE

PRECAUTIONS FOR HANDLING: Use good, local 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 Hygienist. Avoid contact with skin, eyes and clothing. Use good personal hygiene and housekeeping. Observe precautions found on label.

PRECAUTIONS FOR STORAGE: Store containers in a cool, dry location, away from direct sunlight, heat, sparks, flame, other light sources, or sources of intense heat. Keep container closed after each use. **Check inhibitor levels periodically.** 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.

INDUSTRIAL HYGIENE PRACTICES: Avoid prolonged contact with the product. Use in a well-ventilated location (e.g., local exhaust ventilation, fans). After use, wash hands and exposed skin with soap and water. Do not eat, drink or smoke while handling product.

SECTION 8 - EXPOSURE CONTROL/PERSONAL PROTECTION

VENTILATION: Refer to Section 7 regarding the ventilation requirements for working with this product. Use local exhaust at processing equipment, including buffers, sanders, grinders and polishers. High temperature processing equipment should be well ventilated.

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 in Section 2. If necessary, use only respiratory protection authorized per U.S. OSHA's requirement in 29 CFR §1910.134 or other appropriate governing standard.

EYE PROTECTION: Depending on the use of this product, splash or safety glasses may be worn. 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.

PROTECTIVE GLOVES: If anticipated that prolonged & repeated skin contact will occur during use of this product, wear chemical resistant gloves for routine industrial use. If necessary, refer to U.S. OSHA 29 CFR §1910.138, or other appropriate governing standards.

OTHER PROTECTIVE EQUIPMENT: No special body protection is required under typical circumstances of use and handling. If necessary, refer to appropriate governing standards. An eyewash station and a safety shower are recommended.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Clear, water white liquid.
ODOR:	Mild ester-like odor.
pH:	ND
ODOR THRESHOLD:	ND
BOILING POINT:	NE
FREEZING POINT:	NE
VISCOSITY:	NE
SPECIFIC GRAVITY (H_2O=1):	NE
VAPOR PRESSURE:	NE
PERCENT VOLATILE W/W%:	100
VAPOR DENSITY (AIR=1):	NE
EVAPORATION RATE (BuAc =1):	NE
SOLUBILITY IN WATER:	Miscible with water.
COEFFICIENT OF WATER/OIL DISTRIBUTION:	NE

SECTION 10 - STABILITY AND REACTIVITY

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

INCOMPATIBILITY (MATERIALS TO AVOID): 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:

STABILITY: Unstable/Reactive upon depletion of inhibitor.

SECTION 11- TOXICOLOGICAL PROPERTIES

TARGET ORGANS:
For Mixture: None Listed.

MUTAGENICITY DATA: This product is not reported to produce mutagenic effects in humans.

REPRODUCTIVE TOXICITY DATA:

Embryotoxicity: This product is not reported to produce embryotoxic effects in humans.
Teratogenicity: This product is not reported to cause teratogenic effects in humans.
Reproductive Toxicity: This product is not reported to cause reproductive effects in humans.

SECTION 11- TOXICOLOGICAL PROPERTIES CONTINUED

TOXICITY DATA:
This product has NOT been tested on animals to obtain toxicology data. There is toxicology data for the components of the product, which is found in scientific literature. Some of this data is presented below.

For 2-Hydroxyethyl Methacrylate:

Oral Mouse	LD_{50}:	3275 mg/kg.
Oral Rat	LD_{50}:	5050 mg/kg.
Oral Guinea Pig	LD_{50}:	4680mg/kg.
Intraperitoneal mouse	LD_{50}:	497 mg/kg.
Intraperitoneal Rat	LD_{50}:	1250 mg/kg.

For Triethylene Glycol Dimethacrylate:

Oral Mouse	LD_{50}:	10750 mg/kg.
Oral Rat	LD_{50}:	10837 mg/kg.

SECTION 12 - ECOLOGICAL INFORMATION

AQUATIC TOXICITY:
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.

ENVIRONMENTAL FATE:
There is no specific data available for this product.

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

DOT/UN SHIPPING NAME: PLASTICS MATERIAL, NOI
DOT/UN CLASS:
NA/UN NUMBER:
PACKING GROUP:
LABEL:
IMDG CLASS:
IMDG PG:
CERCLA RQ:

SECTION 15 - REGULATORY INFORMATION

SARA Reporting Requirements:	NA
SARA Threshold Planning Quantity:	There are no specific Threshold Planning Quantities for the components of this product.
TSCA Inventory Status:	The components of this product are listed on the TSCA Inventory.
CERCLA Reportable Quantity (RQ):	NA
Other Federal Requirements:	This product complies with the appropriate sections of the Food and Drug Administration's 21 CFR.
Other Canadian Regulations:	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. The components of this product are listed on the DSL/NDSL. None of the components of this product are listed on the Priorities Substances List.
State Regulatory Information:	This product may contain components that are covered under specific state criteria.

RISK STATEMENTS:

R21/22 - Harmful in contact with skin and if swallowed.
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 breathe 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:	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

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
DSL	Canadian Domestic Substances List
NDSL	Canadian Non-domestic Substance List
IARC	International Agency for Research for Cancer
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

THIS MATERIAL SAFETY DATA SHEET IS PREPARED IN COMPLIANCE WITH FEDERAL REGULATIONS (29 CFR 1910.1200), 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.