SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

CHEMICAL NAME: Methacrylate Blend
PRODUCT NAME: STARLITE UV GEL Whiter White
TRADE NAME/PRODUCT CODE: 0028
PRODUCT USE: Organic Process Chemical
MANUFACTURER: Star Nail International, Inc.
ADDRESS: 29120 AVENUE PAINE VALENCIA, CA 91355
24 HR. EMERGENCY TELEPHONE: CHEMTEL: 813-248-0573 OR 1-800-255-3924
PREPARATION/UPDATE DATE: 01/02/2014
MSDS ID: M31-02

SECTION 2 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

Routes of Exposure: Inhalation, Skin or Eyes.

Acute Health Hazards:

Eyes: Although no appropriate human or animal health effects are known to exist, this material is expected to cause slight irritation. Symptoms may include redness, tearing and excessive blinking. Severe irritant. Can cause redness, irritation, corneal opacity, permanent damage to the cornea.

Skin: It is suspected to be a slight skin irritant and sensitization hazard. May cause delayed skin irritation and blistering. Redness or rash and swelling of the affected area may occur. Prolonged contact may cause a more severe response such as ulcers and scarring. Although no appropriate human or animal health effects data are known to exist, this material is expected to be a slight skin absorption hazard.

Inhalation: No appropriate human or animal effects are known to exist but 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: No appropriate human or animal effects are known to exist but is suspected to be an ingestion hazard.

Conditions Aggravated by Exposure:

This material may cause an allergic skin reaction (sensitization) in susceptible individuals upon repeated exposure. May cause more significant skin irritation in people with pre-existing skin conditions.

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

<table>
<thead>
<tr>
<th>ITEM</th>
<th>CHEMICAL NAME</th>
<th>CAS #:</th>
<th>EINECS #:</th>
<th>R Phrases</th>
<th>WT/WT %</th>
</tr>
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<td>01</td>
<td>Urethane Acrylate</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
<td>60.0-100.0</td>
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<tr>
<td>02</td>
<td>Methacrylic Acid</td>
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<td>NA</td>
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<td>1.0-10.0</td>
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<td>05</td>
<td>Pigment</td>
<td>NA</td>
<td>NA</td>
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<td>1.0-5.0</td>
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</tbody>
</table>

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 affected 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, 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.
SECTI ON 7- HANDLE NG AND ST ORAGE

HAN DLE NG PROCEDURE S: 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. Do not use localized heat source such as band heaters to heat/melt product. Do not use steam. Hot boxes or hot rooms are recommended for heating the product which can be set at a maximum temperature of 60°C/140°F.

STORAGE PROCEDURE S: 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. Product residue may remain in empty containers. Observe all label precautions until the container is cleaned, reconditioned, or destroyed.

SECTI ON 8 - EXPOSURE CONTROL/PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>ITEM*</th>
<th>ACGIH</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mixture</td>
<td>TLV-TWA NE</td>
<td>TLV-STEL NE</td>
</tr>
</tbody>
</table>

* 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: Clear to pigmented
PHYSICAL STATE: Liquid.
ODOR: Acrylate.
ODOR THRESHOLD: NE
pH: NE
FREEZING POINT: NE
BOILING POINT: NE
FLASH POINT (closed cup): NE
EVAPORATION RATE (BuAc = 1): NE
FLAMMABLE LIMIT, AIR VOL% LOWER: NE
UPPER: NE
VAPOR PRESSURE: NE
VAPOR DENSITY (AIR = 1): NE
RELATIVE DENSITY: NE
SPECIFIC GRAVITY (H₂O = 1): NE
SOLUBILITY IN WATER: NE
AUTOIGNITION TEMPERATURE: NE
DECOMPOSITION TEMPERATURE: NE
PERCENT VOLATILE W/W%: NE

SECTION 10 - STABILITY AND REACTIVITY

STABILITY: Stable

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: NE

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 are extensive 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 manufacturer at the telephone number found in Section 1.

SENSITIZATION:
No data available.

IRRITANCY:
No data available.

CHRONIC EXPOSURE:
Carcinogenicity: None of components of this material are listed by IARC, NTP, OSHA, or ACGIH as carcinogens.
Reproductive Toxicity: No data available.
Teratogenicity: No data available.
Mutagenicity Data: No data available.

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 manufacturer 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). Dispose of 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 (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: No.
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: NE
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: May contain substances known to the state of California to cause cancer and/or reproductive toxicity.

Canada:
DSL/NDSL: The components of this product are listed on the DSL or NDSL.
WHMIS Hazard Class: Not Classified.

Europe:
EINECS: The components of this product are listed on or are exempt from listing on EINECS.
Candidate List: NA.
CSR Available: No.

HAZARD SYMBOLS: Xi – Irritant

RISK STATEMENTS: R21/22 – Harmful in contact with skin and if swallowed.
R35 – Causes severe burns.
R36/38 – Irritating to eyes skin.
R43 – May cause sensitization by skin contact

SAFETY STATEMENTS: S1/2 – Keep locked up and out of reach of children.
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 and seek medical advice.
S38/27/29 – Wear suitable protective clothing, gloves and eye/face protection.
S45 – In case of accident or if you are unwell, seek medical advice immediately.
HAZARDOUS MATERIAL IDENTIFICATION SYSTEM (HMIS) RATING:

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

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) HAZARD IDENTIFICATION RATING:

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

ABBREVIATIONS:

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NA</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>NE</td>
<td>Not Established</td>
</tr>
<tr>
<td>ppm</td>
<td>parts per million</td>
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<tr>
<td>mg</td>
<td>Milligram</td>
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<td>Pascals</td>
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<tr>
<td>LC</td>
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<tr>
<td>TC</td>
<td>Toxic Concentration</td>
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<tr>
<td>BOD</td>
<td>Biological Oxygen Demand</td>
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<td>Lowest</td>
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<tr>
<td>TLM</td>
<td>Threshold Limit</td>
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<tr>
<td>DOC</td>
<td>Dissolved Organic Carbon</td>
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<tr>
<td>H</td>
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<td>D</td>
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<td>Theoretical Oxygen Demand</td>
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<td>M</td>
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</tr>
<tr>
<td>Y</td>
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<tr>
<td>ACGIH</td>
<td>American Conference of Governmental Industrial Hygienist</td>
</tr>
<tr>
<td>CPR</td>
<td>Controlled Product's Regulation</td>
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<tr>
<td>CSR</td>
<td>Chemical Safety Report</td>
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<tr>
<td>DOT</td>
<td>Department of Transportation</td>
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<tr>
<td>DSL</td>
<td>Canadian Domestic Substances List</td>
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<tr>
<td>EINECS</td>
<td>European Inventory of Existing Commercial Chemical Substances</td>
</tr>
<tr>
<td>IARC</td>
<td>International Agency for Research for Cancer</td>
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<td>NDSL</td>
<td>Canadian Non-Domestic Substance List</td>
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<td>NOEL</td>
<td>No Observed Effect Level</td>
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<tr>
<td>NOAEL</td>
<td>No Observed Adverse Effect Level</td>
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<tr>
<td>OSHA</td>
<td>Occupational Safety and Health Administration</td>
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<tr>
<td>PEL</td>
<td>Permissible Exposure Limit</td>
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<td>TLV</td>
<td>Threshold Limit Value</td>
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<td>TSCA</td>
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</tr>
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</table>

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

Preparation Date: 01/02/2014
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.
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

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PRODUCT NAME: STARLITE UV GEL - Clear
TRADE NAME/PRODUCT CODE: 0008
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ADDRESS: 29120 AVENUE PAINE
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24 HR. EMERGENCY TELEPHONE: CHEMTEL: 813-248-0573 OR 1-800-255-3924
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**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.

SUITEABLE 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, 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.

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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. Do not use localized heat source such as band heaters to heat/melt product. Do not use steam. Hot boxes or hot rooms are recommended for heating the product which can be set at a maximum temperature of 60ºC/140ºF.

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. Product residue may remain in empty containers. Observe all label precautions until the container is cleaned, reconditioned, or destroyed.

SECTION 8 - EXPOSURE CONTROL/PERSONAL PROTECTION

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<tr>
<td>Mixture</td>
<td>TLV-TWA NE</td>
<td>TLV-STEL NE</td>
</tr>
</tbody>
</table>

* Abbreviations can be found in Section 16


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.

Preparation Date: 01/02/2014
SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE/COLOR: Clear to pigmented
PHYSICAL STATE: Liquid.
ODOR: Acrylate.
ODOR THRESHOLD: NE
pH: NE
FREEZING POINT: NE
BOILING POINT: NE
FLASH POINT (closed cup): NE
EVAPORATION RATE (BuAc =1): NE
FLAMMABLE LIMIT, AIR VOL% LOWER: NE
             UPPER: NE
VAPOR PRESSURE: NE
VAPOR DENSITY (AIR=1): NE
RELATIVE DENSITY: NE
SPECIFIC GRAVITY (H_2O=1): NE
SOLUBILITY IN WATER: NE
AUTOIGNITION TEMPERATURE: NE
DECOMPOSITION TEMPERATURE: NE
PERCENT VOLATILE W/W%: NE

SECTION 10 - STABILITY AND REACTIVITY

STABILITY: Stable

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: NE

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 are extensive 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 manufacturer at the telephone number found in Section 1.

SENSITIZATION:
No data available.

IRRITANCY:
No data available.

CHRONIC EXPOSURE:
Carcinogenicity: None of components of this material are listed by IARC, NTP, OSHA, or ACGIH as carcinogens.
Reproductive Toxicity: No data available.
Teratogenicity: No data available.
Mutagenicity Data: No data available.

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 manufacturer 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). Dispose of 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 (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: No.
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: NE
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: May contain substances known to the state of California to cause cancer and/or reproductive toxicity.

Canada:
DSL/NDSL: The components of this product are listed on the DSL or NDSL.
WHMIS Hazard Class: Not Classified.

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

Candidate List: NA.
CSR Available: No.

HAZARD SYMBOLS: Xi – Irritant

RISK STATEMENTS: R21/22 – Harmful in contact with skin and if swallowed.
R35 – Causes severe burns.
R36/38 – Irritating to eyes skin.
R43 – May cause sensitization by skin contact

SAFETY STATEMENTS: S1/2 – Keep locked up and out of reach of children.
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 and seek medical advice.
S38/27/29 – Wear suitable protective clothing, gloves and eye/face protection.
S45 – In case of accident or if you are unwell, seek medical advice immediately.
HAZARDOUS MATERIAL IDENTIFICATION SYSTEM (HMIS) RATING:

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

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) HAZARD IDENTIFICATION RATING:

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

ABBREVIATIONS:
NA Not Applicable
NE Not Established
ND Not Determined
ppm parts per million
mg Milligram
gm Gram
kg Kilogram
mm Millimeter
Pa Pascals
LC Lethal Concentration
TC Toxic Concentration
BOD Biological Oxygen Demand
Lo Lowest
Tlm Threshold Limit
DOC Dissolved Organic Carbon
H Hours
D Days
W Weeks
M Months
Y Years

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

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

SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

CHEMICAL NAME: Glacial Methacrylic Acid
PRODUCT NAME: Primer Pen
TRADE NAME/PRODUCT CODE: 0000
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
PRINT DATE: 6/11/14
MSDS ID: M13-01

SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS

FOR MONOMER:

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<tr>
<th>ITEM</th>
<th>CHEMICAL NAME</th>
<th>CAS NUMBER</th>
<th>WT/WT %</th>
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</thead>
<tbody>
<tr>
<td>01</td>
<td>Methacrylic acid</td>
<td>79-41-4</td>
<td>60.0-100.0</td>
</tr>
<tr>
<td>02</td>
<td>Other ester adducts</td>
<td>NA</td>
<td>0.0-2.0</td>
</tr>
</tbody>
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TLV-TWA/TLV-STEL/PEL TWA/PEL CEILING/Recommendation/SKIN

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<th>TLV-STEL</th>
<th>PEL TWA</th>
<th>PEL CEILING</th>
<th>Recommendation</th>
<th>SKIN</th>
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<td>NE</td>
<td>20 ppm</td>
<td>NE</td>
<td>20 ppm</td>
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<tr>
<td>02</td>
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<td>NE</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
<td>NE</td>
</tr>
</tbody>
</table>

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:
For Monomer:
Physical Hazards: Unstable/Reactive upon depletion of inhibitor. Check inhibitor levels periodically.

Acute: Eyes: Material can cause corrosion to eyes and permanent eye injury.
Skin: Material can cause corrosion to skin. Harmful if absorbed through the skin.
Inhalation: Inhalation of vapor or mist can cause irritation of nose, throat, and lungs. May cause burns resulting in permanent damage.
Ingestion: May be harmful if swallowed. May cause severe and permanent damage to throat, mouth and stomach.

Chronic: Prolonged or repeated overexposure at near lethal concentrations can cause kidney damage liver damage.

CARCINOGENICITY: None of the other components of this material are listed by IARC 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. Call a physician immediately.

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. NOTE: This is a corrosive material. Do not administer any other first aid before obtaining the advice of a physician.

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

SKIN: IMMEDIATELY get under a safety shower. Remove contaminated clothing. Wash with soap and water. Immediate medical attention is required.

CLOTHING: Remove contaminated clothing and wash thoroughly before reuse.

TREATMENT: Treat symptoms conventionally, after thorough decontamination.

Notes to physician: This material will have corrosive effects in which case it may not be advisable to induce vomiting. Acute effects can include mucosal damage and severe laryngeal edema associated with corrosive agents.
SECTION 5 - FIRE FIGHTING MEASURES

FLASH POINT: 152.6° F, 67 ° C
FLAMMABLE LIMIT, AIR VOL% LOWER: NE
UPPER: NE
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: Explosion hazard. 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). Use ONLY non-sparking tools for recovery and cleanup. 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 local explosion-proof ventilation with a minimum capture velocity of 100 ft/min (30 m/min) at point of material release. Refer to Industrial Ventilation: A Manual of Recommended Practice published by the American Conference of Governmental Hygienist. Observe precautions found on label. Do NOT use localized heat source such as band heaters to heat/melt product. Do NOT use steam. Thaw frozen drums by placing them in a heated room up to 40°C/104°F for 48 hours.
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. Ground and bond all containers when transferring. **Check inhibitor levels periodically**, adding to the bulk material if needed. Maintain at a minimum, the original headspace in the product container and do not blanket or mix with oxygen-free gas as it renders the product ineffective.
SECTION 7- HANDLING AND STORAGE CONTINUED

Product freezes at 15°C/59°F. Improper thawing can result in violent polymerization. DO NOT remove any material if stock is frozen or partially frozen. Mix during and after thawing to properly distribute inhibitor. Do not allow the temperature of this material to fall below the freezing point. Store in cool place. Keep away from direct sunlight. Limit indoor storage to approved areas equipped with automatic sprinklers. Minor deviations (7°C/13°F) above the recommended temperature (see below) are acceptable for short periods of time (one week) for material in transit. Store material in containers made of stainless steel, glass, aluminum, or polyethylene. **Storage at temperatures between 18º- 40ºC/64º-104ºF.**

INDUSTRIAL HYGIENE PRACTICES:  
This material is **corrosive.** This material is a potential skin sensitizer. 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 explosion-proof 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:  
Chemical-resistant gloves should be worn whenever this material is handled. Butyl rubber or Neoprene gloves may provide protection against permeation. Gloves of other chemically resistant materials may not provide adequate protection. Gloves should be removed and replaced immediately if there is any indication of degradation or chemical breakthrough. If necessary, refer to U.S. OSHA 29 CFR §1910.138, or other appropriate governing standards.

OTHER PROTECTIVE EQUIPMENT:  
Wear chemical resistant apron and/or boots for protecting against chemicals as appropriate. If necessary, refer to appropriate governing standards. An eyewash station and a safety shower are recommended.
SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Clear, colorless liquid.
ODOR: Pungent.
PH: 2.0-2.2
ODOR THRESHOLD: ND
BOILING POINT: 162°C/323.6°F
FREEZING POINT: 15°C/59°F
VISCOSITY: 1.300 mPa.s at 25°C/77°F.
SPECIFIC GRAVITY (H₂O=1): NA
VAPOR PRESSURE: 1.2932 hPa at 25°C/77°F.
PERCENT VOLATILE W/W%: 100%
VAPOR DENSITY (AIR=1): >1
EVAPORATION RATE (BuAc =1): <1
SOLUBILITY IN WATER: Completely soluble.
COEFFICIENT OF WATER/OIL DISTRIBUTION: NA

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 Methacrylic Acid: None Listed.

TOXICITY DATA:
For Methacrylic Acid:
- Acute oral toxicity, rat LD₅₀: 2,210 mg/kg
- Acute inhalation toxicity, rat LC₅₀: 7.1 mg/l, 4H
- Acute dermal toxicity, rabbit LD₅₀: >2,000 mg/kg
- Skin irritation, rabbit Corrosive
- Eye irritation, rabbit Corrosive
- Sensitization NOT a contact sensitizer
SECTION 12 - ECOLOGICAL INFORMATION

AQUATIC TOXICITY:
For Methacrylic Acid:

Rainbow trout  \( \text{LC}_{50} \)  85 mg/l, 96H
Algae  \( \text{EC}_{50} \)  0.6 mg/l, 96H
Daphnia magna  \( \text{EC}_{90} \)  >130 mg/l, 48H

ENVIRONMENTAL FATE:
For Methacrylic Acid: Elimination information (persistence and degradability)
Biodegradability: aerobic 86 %
Stable to hydrolysis at pH 3,7, 11.
Readily biodegradable, according to appropriate OECD test.

SECTION 13 - DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: 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: METHACRYLIC ACID, STABILIZED
DOT/UN CLASS: 8
NA/UN NUMBER: UN 2531
PACKING GROUP: II
LABEL: Corrosive

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:
R34 - Causes burns.
R36/37/38 – Irritating to eyes, respiratory system and skin.
R41 - Risk of serious damage to the eyes.
R43 – May cause sensitization by skin contact

SAFETY STATEMENTS:
S2 – Keep out of reach of children
S3 – Keep in a cool place.
S7 – Keep container tightly closed.
S9 – Keep container in a well-ventilated place.
S16 – Keep away from sources of ignition – No Smoking.
S20/21 – When using do not eat or drink or smoke.
S24/25 - Avoid contact with skin and eyes.
S29 – Do not empty into drains.
S36/37/39 – Wear suitable protective clothing, gloves and eye/face protection.
S38 - In case of insufficient ventilation, wear suitable respiratory equipment.

SECTION 16 - OTHER INFORMATION

HAZARDOUS MATERIAL IDENTIFICATION SYSTEM (HMIS) RATING:
HEALTH: 3
FLAMMABILITY: 2
REACTIVITY: 2
PERSONAL PROTECTIVE EQUIPMENT: Gloves and Safety Glasses or Chemical Splash Goggles.

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) HAZARD IDENTIFICATION RATING:
HEALTH: 3
FLAMMABILITY: 2
REACTIVITY: 2
SECTION 16 - OTHER INFORMATION CONTINUED

ABBREVIATIONS:

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>NA</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>NE</td>
<td>Not Established</td>
</tr>
<tr>
<td>ppm</td>
<td>parts per million</td>
</tr>
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<td>mg</td>
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<tr>
<td>Tlm</td>
<td>Threshold Limit</td>
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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.