

▶ THANK YOU FOR CHOOSING ◀



HELIX
COLOR SYSTEMS

Before beginning any project, please review the enclosed training and materials packets in full, including:

**TECH
DATA SHEET**

**SAFETY
DATA SHEET**

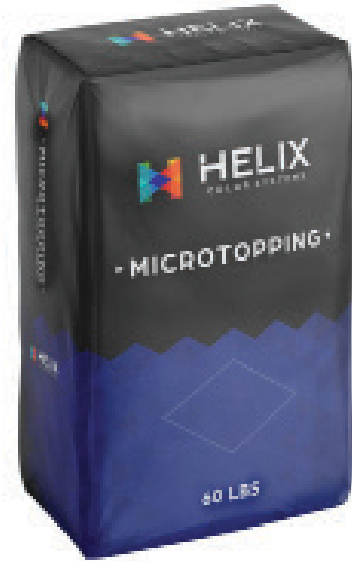
Overlays & Toppings

MICROTOPPING

NT

TECH DATA SHEET

Helix Color Systems is a premier line of specialty decorative concrete systems manufactured for the professional installer. Specializing in custom colors, specialty products, and superior service, Helix Color Systems offers an innovative alternative in the decorative concrete industry.



► DESCRIPTION

Helix Microtopping NT is an ultra-thin, architectural concrete topping and can transform structurally sound substrates into colorful surfaces that have great architectural impact, while delivering exceptional abrasion resistance. Helix Microtopping NT creates surfaces with solid color, subtle variegation, marbled hues and various textures.

A three-part cementitious system, Helix Microtopping NT tenaciously bonds to virtually any well prepared substrate, including concrete, wood, metal, plastic and sheet rock. Helix Microtopping NT is a combination of liquid polymer and specially formulated colored powder mixtures. Helix Microtopping NT is applied in layers—using trowels, brushes and squeegees, each producing a different finish texture—at a recommended thickness of 20 mils – 60 mils, the approximate thickness of a credit card.

Helix Microtopping NT Liquid is added to both Helix Microtopping NT Base Coat and Helix Microtopping NT Finish Coat to achieve the desired material consistency. Helix recommends two base coat applications and one finish coat application as a minimum coverage guideline.

► PRODUCT BENEFITS

- Helix Microtopping NT is extremely versatile. This product can be feathered to a zero edge, used in interior applications and applied to vertical or horizontal surfaces.
- Helix Microtopping NT features exceptional bond strength. This product adheres to most properly prepared, stable substrates, well bonded adhesives and coatings on stable substrates. However, optimal performance is only achieved if these adhesives and coatings are removed.
- Helix Microtopping NT is a non-toxic design product and dries completely in 12–24 hours, varies based on weather conditions (70 °F/21 °C).
- Helix Microtopping NT is available in unpigmented white or gray powder.
- The durable, high-strength Helix Microtopping NT colors can be chosen from the Helix Microtopping NT color chart/brochure.
- Finish effects can include, but are not limited to, broom finished solid colors to knock down with subtle variegation to smooth marbled hues.
- Helix Microtopping NT can significantly reduce construction costs when elaborate graphics or extensive color changes are needed, which would otherwise require multiple forming and pouring phases.
- Because of the ultra-thin application, Helix Microtopping NT offers substantial savings over high

dosage cement coloring used in typical concrete construction.

- One of the advantages of Helix Microtopping NT is that it can be used to color and/or recolor old concrete surfaces. This ultra-thin concrete topping can be installed over damaged but stable existing concrete (or other materials) to transform surfaces into a cementitious palette, without affecting surrounding materials or substantially increasing the elevation of the finished surface.
- Some concrete surfaces possess flaws that make staining unpredictable, undesirable and often incompatible. Helix Microtopping NT delivers a fresh, durable canvas, optimal for the application of Helix Acid Stain* or Helix Concrete Dye*.
- Because of cost and time savings, Helix Microtopping NT may also be the ideal design alternative to the following projects that would otherwise require costly repairs or removal and replacement:
 - Slabs that have been badly scarred by heavy equipment or machinery.
 - Surfaces where carpet, laminate or tile have been removed.
 - Helix Microtopping NT gives architects, designers and owners an expanded range of cementitious color selection that, in the past, was only available in less wear-resistant paint-type materials or multiple costly and time intensive colored concrete pours.

The uses of Helix Microtopping NT include, but are not limited to, large-scale commercial flooring, graphic artwork, stenciling, monograms, logos, accenting or antiquing imprinted concrete, traversing vertical surfaces, countertops, residential flooring and artistic pallets for Helix Acid Stain* or Helix Concrete Dye*.

► PRE-APPLICATION

1. Sweep or vacuum loose dirt from the surface. Use a floor scraper or grinder to remove bumps and surface build-up. For best results, surface should be as smooth and level as possible. Tools and equipment requirements are largely dependent on the project. Common to most projects are: mixing motor, mixing paddle, eye goggles, polyethylene sheeting (and/or rosin paper), duct or reinforced tape, graduated measuring containers, empty containers for mixing and cleanup, gloves and rags. Application tools depend on the project and include squeegees, hopper guns, trowels, drywall knives, brushes and rollers. Suggested prep, cleanup and trimming tools include: scrapers, drywall knives, hammers, chisels, brooms, dustpan and vacuum. Additional specialty tools may be necessary, depending on the type and extent of preparation required.
2. ChemSystems, Inc. utilizes the International Concrete Repair Institute (ICRI) Concrete Surface Profile (CSP) standards for specifying finished surface roughness prior to applying Helix Microtopping NT. For proper adhesion, the concrete must be a minimum #2 according to the ICRI CSP chart. This is typically accomplished by either grinding or a light sandblast finish. Acid etching or pressure washing alone is not sufficient. Contact the ICRI at www.ICRI.org or ChemSystems, Inc. for more information on these surface profiles.
3. If there are foreign materials (such as adhesives, paints or high-performance coatings) on the substrate, Helix Microtopping NT will bond tenaciously to those foreign materials. However, the ultimate test of the stability of the substrate depends on the integrity of the bond between the foreign material and the substrate (not between the foreign material and Helix Microtopping NT). If stable glossy coatings are to be covered, abrade with an 80-100 grit sanding screen.
4. Standing oil and grease should be wiped clean, scrubbed with an appropriate industrial detergent, rinsed with clean water and completely dried before application of Helix Microtopping NT. Any remaining oil or grease stains should not affect adhesion, but over time can produce shadowing or ghosting of the original stain.
5. Helix Microtopping NT will not adhere to wet or damp surfaces.
6. Holes and large chips should be filled and troweled flat using an appropriate structural-grade repair product prior to the base coat application.
7. Control joints and moving/working cracks in the existing concrete are expected to transfer through the surface of the topping and create potential cracking problems. To isolate moving cracks, use a semi-rigid crack repair material. Install according to kit instructions. In the case of existing joints or saw cuts, new joints or saw cuts must be placed in the Helix Microtopping NT directly over the existing joints or saw cuts. Any new joint or saw

cut must penetrate entirely through the new layers of Helix Microtopping NT.

- Mask off perimeter and vertical surfaces for protection. Remove masking as soon as possible after application.
- If the concrete surface exhibits moisture issues, dusting or flaking, a concrete densifying sealer should be used to waterproof and densify problem areas prior to application of Helix Microtopping NT.

▶ APPLICATION

- Helix Microtopping NT should be applied at a minimum of two coats, two Helix Microtopping NT Base Coats, followed by one (optional) Helix Microtopping NT Finish Coat. (Additional coats of either base coat or finish coat may be applied depending on project specifications).
- For best results, the use of a mechanical mixer with a multibladed mixing paddle is recommended. **Do not mix by hand.**
- Suggested Mix
 - Horizontal Surface – Approximately 2.5 gallons of Liquid Polymer to one 50 lb. bag of base powder or one 40 lb bag of finish powder.
 - Vertical Surface – Approximately 2 gallons of Liquid Polymer to one 50 lb. bag of base powder or one 40 lb. bag of finish powder.

Note: Mixing ratios can vary without affecting bond and material strength. Helix Microtopping NT can be mixed dry (paste consistency) or wet (paint consistency) depending on where and how it is being applied. However, it is critical to maintain the material's consistency for the entire area being treated. Change in mix ratio during a project could result in a color variation.

Mixing Preparation – Mixing should be done in a cool area in 5-gallon buckets or 15-gallon drums for larger jobs. Because material dries quickly when exposed to air, buckets and small mixing drums work best. Do not allow Helix Microtopping NT to air dry on tools or equipment. Wash mixing equipment immediately or place in water for later cleaning.

Mixing Instructions – The following instructions are for both Helix Microtopping NT Base Coat and Helix Microtopping NT Finish Coat.

- Mix only enough material for the immediate area to be covered. Use Helix Microtopping NT as soon as possible after mixing.
- If there is any unused material, it should be kept in a cool and covered place – do not leave exposed to sunlight. Pot life is approximately 2 hours at 70 °F. Pot life may be shortened considerably in hotter weather or extended in cooler weather. If the unused mixture begins to thicken, return it to original fluid consistency by remixing. If the mixture does not return to its original state, then discard.
- Place 3/4 of the Helix Microtopping NT Liquid Polymer needed in a clean mixing container.
- While mixer is running, slowly add 1/2 of the Helix Microtopping NT powder. If using a Microtopping NT Tint pack, add the liquid tint pack to the liquid and mix prior to adding the Microtopping NT powder.
- Mix until lump free.
- Add remaining Liquid Polymer and powder and mix until lump free.
- Add small quantities of Liquid Polymer or powder to achieve the desired consistency depending on the type of area to be covered and application method.
- For horizontal surfaces, a more fluid mix is desired, while for vertical surfaces, a drier stickier mix is desired. Test areas are always recommended to ensure desired results.

Primer and Base Coat Application: 2 Coats Recommended

- Prime the surface. Spray a thin, even coat of Helix Universal Primer to prime the surface. Agitate the primer into the substrate with a stiff bristle brush or low RPM rotary scrubber, making sure to eliminate any puddles.
- Apply the first base coat of Helix Microtopping NT while the primer is still wet or tacky. If the primer dries, reapply and agitate to achieve a wet or tacky surface. The primer is needed for the initial base coat application only. The initial application of Helix Microtopping NT Base Coat should be applied in a wet fluid state to ensure proper adhesion and surface penetration.

3. Pour only enough material that can be laid down in a 5- to 10-minute time frame.
4. Maintain a wet edge.
5. Hot surfaces can accelerate the hydration rate, while cool temperatures will tend to slow the hydration rate. Moderate surface temperatures of 60 °F to 80 °F are recommended for best results.
6. When working large areas, the base coat can be easily applied with a squeegee or roller. When working smaller areas or corners, trowels can be used to apply base coat.
7. Spread thin even coats of base coat across the surface.
8. At 70 °F, the base coat should dry in about 20 minutes. If high humidity exists, fans can be used to move across the surface to speed set time.
9. Once the first base coat has dried, proceed with the second base coat application.
10. On new concrete surfaces, typically two base coat applications are sufficient. On pitted, damaged or rough surfaces, additional coats may be required.
11. Once each base coat application can be walked on without marring the surface, care should be taken to knock down any irregularities, lumps or squeegee marks with a trowel, scraper or drywall knife. If base coat material dries to a final hardness before the surface can be manually smoothed, a 80- to 120-grit sanding screen may be needed to smooth the surface.
12. It is critical to achieve a uniform, smooth base coat prior to application of the finish coat. Any imperfections in the base coat will telegraph through the finish coat.

Finish Coat Application: Optional Number of Coats

1. Finish Coats are optional and primarily done for desired aesthetic purposes.
2. Finish Coats should be applied with a trowel or squeegee.
3. Different colors of finish coat material can be blended to create marbled tones and effects.
4. Pour only enough material that can be laid down in a 5- to 10-minute time frame.
5. Maintain a wet edge.
6. As the finish material begins to set, a "second pass" with a trowel may be necessary to minimize application marks, and create a smooth surface.
7. A 150-grit sanding screen can be used on a rotary buffer to create an extra smooth surface

**► HELIX ACIDSTAIN AND
HELIX CONCRETE DYE APPLICATION**

1. Once desired finish is achieved, material should be left to cure for 24 hours prior to staining.
2. Helix Microtopping NT may not stain according to the Helix Acid Stain* Color Charts. The combination of polymers and cement in Helix Microtopping Smooth Finish may cause stains to react differently.
3. Always test or sample stains in an inconspicuous area to ensure desired color effects are achieved.
4. Sanding the top finish coat with a 100- to 150-grit sanding screen, or the use of a good commercial pretreatment and cleaner may allow better adhesion of the sealer.
5. For best results, stain Helix Microtopping NT within 72 hours of application. Waiting longer than 72 hours can result in the stain not penetrating fully.

► SEALING

1. **IMPORTANT:** Use only premium Helix sealers and finish coatings. Recommended sealers include Satin, High Gloss, Cemseal, Satin WB or Polyurethane WB Gloss/Mattel, and recommended top coating Helix Integral Color Classics or Premium Blends*.
2. Prior to sealing, the newly completed surface should be barricaded or blocked off to protect against foot traffic or contamination.
3. Allow Helix Microtopping NT to fully cure (minimum 24 hours) before sealing. Sanding the top finish coat with a 100- to 150-grit screen may allow better adhesion of the sealer.
4. Do not allow water on the surface until Helix Microtopping NT has completely cured. Excessive water before sufficient cure will affect bond and durability.

5. After sufficient curing, if water gets on the surface before sealing, a white film can result. While this film won't affect bond or durability, the film should be cleaned off prior to sealing. Clean with a good commercial cleaner/degreaser and clear water rinse.
6. Sealing should be done as soon as possible after the surface has completely dried.
7. A minimum of two thin coats of sealer should be applied.
8. On interior surfaces, a sacrificial top coating, such as a good commercial wax should be applied after the initial sealing has been completed to increase durability and provide a sacrificial wear surface

▶ SURFACE PROTECTION AND MAINTENANCE

All installations should be maintained on a routine basis with the use of Helix maintenance products to ensure the preservation of a high-quality, long-lasting surface. Maintenance schedules will vary depending on a number of factors, including volume and intensity of traffic, ultraviolet light exposure, geographical location and weather conditions. Resealing will be required periodically, depending on the amount of foot traffic. As with any other surface treatment, the lifetime of this product is dependent on the care it is given. The use of a qualified flooring maintenance contractor is recommended for resealing, especially in commercial applications.

▶ LIMITATIONS AND PRECAUTIONS

- Helix Microtopping NT will not properly bond to wet or damp concrete.
- Helix Microtopping NT will not adhere properly to salt-damaged concrete (i.e. salt-finished surfaces or de-icing salt-infested surfaces).
- Helix Microtopping NT will not adhere to standing oil or grease.
- Certain aggressive stains, such as hydraulic fluids, proteins and animal waste by-products, may appear through the topping as "shadowing"

on the finished surface. Any of these materials found on the substrate should be cleaned with an appropriate cleaner and then sealed with a water-based epoxy.

- If heavy adhesive tapes (such as duct tape) are left on sealed Helix Microtopping NT over an extended period of time, a chemical "weld" will be created between the tape and the Helix Microtopping NT. If this happens, the Helix Microtopping NT may be subject to delamination.

▶ SHELF LIFE AND STORAGE

Helix Microtopping NT has a shelf life of approximately 18 months.

Liquid Polymer: Helix Microtopping NT Liquid Polymer should be stored indoors and above freezing temperatures. If Helix Microtopping NT Liquid Polymer freezes, discard.

Powder: Helix Microtopping NT powders should be stored indoors and away from moisture.

▶ COVERAGE RATE AND PACKAGE SIZES

Note: Coverage rates given below may vary slightly depending on surface profile and application method. Coverage may be significantly different on damaged, spalled or textured surfaces.

- Helix Microtopping NT 50-lb bags of Base Coat—Covers approximately 400 square feet

Helix Microtopping Smooth Finish Base Coat is available in 50-lb bags. Each bag will require 2 to 2.5 gallons of Helix Microtopping NT Liquid Polymer.

- Helix Microtopping NT 40 lb bag of Finish Coat—Covers approximately 600-1000 square feet

Helix Microtopping NT Finish Coat is available in 40lb bags. Each bag will require 2 to 2.5 gallons of Helix Microtopping NT Liquid Polymer.

- Helix Microtopping NT Liquid Polymer is available in 1 and 5 gallon pails

▶ TECHNICAL DATA

Please refer to the corresponding-color MSDS for hazard-related information.

| | |
|---------------------------|--|
| Bond Strength D4541) | 414–466 PSI (ASTM |
| Compressive Strength | 7-day cure: 6,225 PSI (ASTM C579) 28-day cure: 6,622 PSI |
| Abrasion Resistance | |
| | 1,000 cycles, H-22 calibrade wheels – average depth of wear: 24 mils (roughly the equivalent to 5,000 PSI concrete in accordance with ASTM C501) |
| Weathering | |
| | After 31 cycles (5,208 hours), no sign of peeling, chalking, blistering, loss of adhesion, fading or algae growth (ASTM G43 – modified to include freeze–thaw cycle) |
| Smoke/Toxic Fume Emission | Negligible emission (British Standard 6853) |
| Skid Resistance | Dry: 65, Wet: 58 (British Pendulum Test) |

▶ PRODUCT HANDLING

For complete instructions on handling and use, consult the corresponding Material Safety Data Sheet before using product.

▶ WARRANTY

Helix Microtopping NT, a proprietary product, is warranted to be of uniform quality within manufacturing tolerances. Since control is not exercised over its use, no warranty, expressed or implied, is made as to the effects of such use. Seller's and manufacturer's obligation under this warranty shall be limited to refunding the purchase price of that portion of the material proven to be defective. The user assumes all other risks and liabilities resulting from use of this product.

Overlays & Toppings – MicroTopping

POWDER

NT

SAFETY DATA SHEET

▶ SECTION 1 PRODUCT DESCRIPTION

Product Name:

Microtopping NT Powder

Recommended Use:

Cementitious Overlay

Supplier:

ChemSystems, Inc. 10101 Genard Road Houston, TX 77041
P: 713.329.9066 support@helixcolorsystems.com
www.helixcolorsystems.com

Emergency Phone:

CHEMTRAC 1-800-424-9300

Note: product may contain small traces of silica below 0.1.%

Use respiratory protection and hazard controls. Use particulate protection.

Gloves and /or skin protection is recommended.

Safety glasses or eye protection recommended.

Emergency overview: Immediate or delayed hazard: Exposure of sufficient time to wet Portland cement directly on surface, OR on moist areas of the body to DRY powder cement, can cause serious skin or eye injuries in the form of chemical or caustic burns.

Human Health Hazards: Not to be expected if handled and used properly.

Chronic Health Hazard: Product contains a substance which may have chronic respiratory health hazards including cancer and silicosis. Handle with the proper hazard controls.

▶ SECTION 2 HAZARD IDENTIFICATION

Category 2 Skin Irritant

Category 2B Serious Eye Damage/Eye Irritant

Category 3 Specific Target Organ Acute Toxicity
(respiratory system, central nervous system)



Signal Word: Warning

Hazard Statements:

- H333 – May be harmful if inhaled
- H313 – May be harmful in contact with skin
- H303 – May be harmful if swallowed
- H334 – May cause allergy or asthma symptoms or breathing difficulties if inhaled

Precautionary statements:**Prevention:**

- P264 – Wash thoroughly after handling
- P352 – Wash with soap and water

► SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

| Component | CAS # | OSHA PEL (TWA) | ACGIH (TLV-TWA) | Conc. (wt. %) |
|-----------------|------------|---|-----------------|---------------|
| Portland Cement | 65997-15-1 | 5.0 mg/m ³ Respirable Dust 10 mg/m ³ Total | N/A | 40-50% |
| Silica | 14808-60-7 | 0.1 mg/m ³ | N/A | 20-50% |
| Lime | 39445-23-3 | 15 mg/m ³ Total | N/A | <5% |

► SECTION 4 FIRST AID MEASURES

Emergency First Aid Procedures

Skin: Wash the affected area with water to remove any residue. If irritation develops, get medical attention.

Eyes: Flush eyes with water. May cause irritation. If irritation develops, get medical attention.

Inhalation: Move to fresh air. Seek medical attention if irritation persists.

Ingestion: If irritation develops, get medical attention.

► SECTION 5 FIREFIGHTING PROCEDURES

Extinguishing Media: Not combustible

Flash Point (TCC): N/A

Flammable Limits (% volume in air for solvents):

LEL: N/A **UEL:** N/A

Special Fire Fighting Procedures: N/A

Unusual Fire and Explosion Hazards: N/A

► SECTION 6 SPILL OR LEAK PROCEDURES

Steps to Take if Material is Released or Spilled: Sweep or vacuum using good ventilation.

► SECTION 7 HANDLING AND STORAGE

Normal Handling: Always use good industrial hygiene practices and safety guidelines.

Storage: Store in dry area. Keep containers tightly closed when not in use.

Waste Disposal Method: Dispose of material in accordance with federal, state, and local guidelines.

Special Precautions: None.

► SECTION 8 PROTECTION INFORMATION

Respiratory Protection: If environment is dusty use NIOSH approved respirator

Ventilation: Provide adequate mechanical ventilation.

Protective Gloves: Rubber gloves recommended.

Eye Protection: Wear tight fitting goggles if area is dusty.

Other Protective Clothing or Equipment: As needed to prevent repeated/prolonged contact.

Work/Hygienic Practices: Wash thoroughly with soap and water after handling and before eating, smoking, or using washroom. If clothes become contaminated, change to clean clothing and wash contaminated clothes before re-use.

▶ SECTION 9 PHYSICAL DATA

- **Appearance:** Powder
- **Odor:** None
- **Odor Threshold:** No data available
- **pH:** N/A
- **Specific Gravity:** N/A
- **Freezing/Melting Point:** N/A
- **Boiling Point:** N/A
- **Flash Point:** N/A
- **Evaporation Rate:** Not determined
- **Flammability (solid, gas):** N/A
- **Upper/Lower Flammability:** Not determined
- **Vapor Pressure:** N/A
- **Vapor Density:** N/A
- **Relative Density:** N/A
- **Solubility in Water:** <1%
- **Partition Coefficient:** Not determined
- **Auto-ignition Temperature:** Not determined
- **Decomposition temperature:** Not determined
- **Viscosity:** Not determined

▶ SECTION 10 REACTIVITY DATA

Reactivity: Reacts slowly with water, liberating minimal heat

Conditions to avoid: Acids and Strong Oxidizers

Hazardous Decomposition Products: N/A

Hazardous Polymerization: Will not occur

Incompatibilities: Aluminum Powder and other acidic elements will react with wet cement liberating hydrogen, an explosive gas

▶ SECTION 11 TOXICITY DATA

Carcinogen: No.

Routes of Exposure: Inhalation, eyes, skin and ingestion.

Acute Toxicity Lethal Doses (ATE): N/A

Health Hazards:

Acute: Wet cement may cause alkali burns and dry the skin. Free silica dust may cause delayed lung injury. Dust may cause eye and nose inflammation.

Chronic: Silica is listed with IARC as a Class 2 carcinogen. Contains silica, which can cause lung damage and cancer. Risk depends upon duration and level of exposure.

Skin Contact: If in contact with moisture, may cause irritation and burns.

Eye Contact: If in contact with moisture, may cause irritation and burns.

Ingestion: May cause irritation to digestive track.

Inhalation: May cause irritation to respiratory tract if inhaled.

Aggravation of Pre-existing Conditions: N/A

▶ SECTION 12 ECOLOGICAL DATA

Acute Toxicity to Fish: No data available

Acute Toxicity to Aquatic Invertebrates: No data available

Toxicity to Aquatic Plants: No data available

Toxicity to Microorganisms: No data available

Chronic Toxicity to Fish: No data available

Chronic Toxicity to Aquatic Invertebrates: No data available

Persistence and Degradability: No data available

Bioaccumulation Potential: No data available

Mobility in the Soil: No data available

Other Adverse Effects: None established

▶ SECTION 13 DISPOSAL INFORMATION

Waste Disposal Method: Material is not considered a RCRA Hazardous Waste. Dispose of material in accordance with all Federal, State, and Local regulations.

▶ SECTION 14 TRANSPORT INFORMATION

Proper Shipping Name: N/A

Hazard Class: N/A

UN: N/A

Packing Group: N/A

Marine Pollutant: No

▶ SECTION 15 REGULATORY INFORMATION

SARA (311/312) No.

CHEMICAL INVENTORIES All ingredients of this product are listed or are exempt from listing on the U. S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

CA Prop 65 None.

Canadian WHMIS Classification: Not classified.

▶ SECTION 16 ADDITIONAL INFORMATION

The regulatory information provided is not intended to be comprehensive. Other Federal, State and Local regulations may apply to this material.

DISCLAIMER: Although the information and recommendations set forth herein are presented in good faith and believed to be correct as of the date hereof, manufacturer makes no representations as to the completeness or accuracy thereof.

Overlays & Toppings – MicroTopping

LIQUID POLYMER

NT

SAFETY DATA SHEET

▶ SECTION 1 PRODUCT DESCRIPTION

Product Name:

Microtopping NT Liquid Polymer

Recommended Use:

Acrylic polymer emulsified in a mixture of water, surfactant and ammonia

Supplier:

ChemSystems, Inc. 10101 Genard Road Houston, TX 77041
P: 713.329.9066 support@helixcolorsystems.com
www.helixcolorsystems.com

Emergency Phone:

CHEMTRAC 1-800-424-9300

▶ SECTION 2 HAZARD IDENTIFICATION

Hazard Statements:

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Precautionary statements:**Prevention:**

- P264 – Wash thoroughly after handling
- P352 – Wash with soap and water

Use respiratory protection and hazard controls. Use particulate protection.

Gloves and /or skin protection is recommended.

Safety glasses or eye protection recommended.

Human Health Hazards: Not to be expected if handled and used properly.

▶ SECTION 3 COMPOSITION/ INFORMATION ON INGREDIENTS

Unlisted ingredients are not “hazardous” per the OSHA standard and /or are present at less than the allowable levels.

▶ SECTION 4 FIRST AID MEASURES

Emergency First Aid Procedures

Skin: Wash with soap and water. Consult physician if irritation persists. Launder contaminated clothing before reuse.

Eyes: Flush with large amounts of water for at least 15 minutes. If irritation persists consult a physician.

Inhalation: Move subject to fresh air. If not breathing, give artificial respiration. If breathing is difficult, call a physician.

Ingestion: Give two glasses of water to drink. Do not induce vomiting. Consult a physician.

▶ SECTION 5 FIREFIGHTING PROCEDURES

Extinguishing Media: Non-flammable in liquid state; use water spray, foam, dry chemical or carbon dioxide for dried product.

Flash Point (TCC): Non combustible

Flammable Limits (% volume in air for solvents):

LEL=N/A UEL=N/A

Special Fire Fighting Procedures: Wear self contained breathing apparatus and full protective gear.

Unusual Fire and Explosion Hazards: N/A

▶ SECTION 6 SPILL OR LEAK PROCEDURES

Steps to Take if Material is Released or Spilled: Use caution floor may be slippery. Contain spills immediately with inert materials. Transfer liquid and diking materials to a separate container for recovery or disposal.

▶ SECTION 7 HANDLING AND STORAGE

Normal Handling: Always use good industrial hygiene practices and safety guidelines.

Storage: Store in dry area. Keep containers tightly closed when not in use.

Waste Disposal Method: Solidify and dispose in an approved landfill. Follow all Federal, State and Local regulations when storing and disposing of substance.

Special Precautions: CAUTION: Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

▶ SECTION 8 PROTECTION INFORMATION

Respiratory Protection: If airborne concentrations are:

| | |
|----------------|---|
| <250 ppm | None Required |
| >250 <1000 ppm | Wear MSHA/NIOSH approved, full-face piece, air purifying respirator. |
| >1000 ppm | Wear MSHA/NIOSH approved, self-contained breathing apparatus in the pressure demand mode. |

Ventilation: Local exhaust sufficient to keep airborne concentrations <250 ppm

Protective Gloves: Wear neoprene gloves.

Eye Protection: Use chemical splash goggles.

Other Protective Clothing or Equipment: Wear long sleeves.

Work/Hygienic Practices: Wash thoroughly with soap and water after handling and before eating, smoking, or using washroom. If clothes become contaminated, change to clean clothing and wash contaminated clothes before re-use.

▶ SECTION 9 PHYSICAL DATA

Appearance: Milky White Liquid

Odor: Ammonia

Odor Threshold: No data available

pH: Circa 9.5

Specific Gravity: N/A

Freezing/Melting Point: N/A

Boiling Point: 212 °F / 100 °C

Flash Point: N/A

Evaporation Rate: Not determined

Flammability (solid, gas): N/A

Upper/lower Flammability: Not determined

Vapor Pressure: N/A

Density: Approximately 1.05 gm/cc

Solubility in Water: Totally miscible

Partition Coefficient: Not determined

Auto-ignition Temperature: Not determined

Decomposition temperature: Not determined

Viscosity: Not determined

% Volatile (by weight): N/A

▶ SECTION 10 REACTIVITY DATA

Reactivity: Stable at normal temperatures and pressures

Conditions to avoid: Incomplete combustion may yield low molecular weight hydrocarbons. Pressure will build up in closed containers if heated.

Hazardous Decomposition Products: Thermal Decomposition may yield low molecular weight hydrocarbons.

Hazardous Polymerization: Will not occur

Incompatibilities: N/A

▶ SECTION 11 TOXICITY DATA

Carcinogen: No.

Routes of Exposure: Inhalation, eyes, skin

Acute Toxicity Lethal Doses (ATE): N/A

Health Hazards:

Acute – None known other than irritation of the eyes throat and nasal passages due to exposure to concentrations above permissible levels.

Chronic – No anticipated chronic effects. Overexposure to acrylic monomers is not expected to occur during normal handling and use.

Medical conditions aggravated by exposure – None known

▶ SECTION 12 ECOLOGICAL DATA

Acute Toxicity to Fish: No data available

Acute Toxicity to Aquatic Invertebrates: No data available

Toxicity to Aquatic Plants: No data available

Toxicity to Microorganisms: No data available

Chronic Toxicity to Fish: No data available

Chronic Toxicity to Aquatic Invertebrates: No data available

Persistence and Degradability: No data available

Bioaccumulation Potential: No data available

Mobility in the Soil: No data available

Other Adverse Effects: None established

▶ SECTION 13 DISPOSAL INFORMATION

Waste Disposal Method: Material is not considered a RCRA Hazardous Waste. Dispose of material in accordance with all Federal, State, and Local regulations.

▶ SECTION 14 TRANSPORT INFORMATION

Proper Shipping Name: N/A

Hazard Class: N/A

UN: N/A

Packing Group: N/A

Marine Pollutant: No

▶ SECTION 15 REGULATORY INFORMATION

SARA 311/312: No

CHEMICAL INVENTORIES

All ingredients of this product are listed or are exempt from listing on the U. S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

California Proposition 65: None

Canadian WHMIS Classification: Not classified

▶ SECTION 16 ADDITIONAL INFORMATION

The regulatory information provided is not intended to be comprehensive. Other Federal, State and Local regulations may apply to this material.

DISCLAIMER: Although the information and recommendations set forth herein are presented in good faith and believed to be correct as of the date hereof, manufacturer makes no representations as to the completeness or accuracy thereof.