► THANK YOU FOR CHOOSING ◀

TELIX COLOR SYSTEMS

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





Concrete Sealer

TOPICAL

SATIN

TECH DATA SHEET

Helix Color Systems is a premier line of specialty decorative concrete admixtures 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 Satin sealer is a high quality, 100% acrylic, solvent-based breathable sealer designed to seal concrete and masonry surfaces. Helix Satin sealer will protect surfaces from water, dust, stains and dirt. Helix Satin sealer produces a gloss finish when dry.

▶ PRODUCT BENEFITS

- Helix Satin sealer is best applied by spray or rolldown method.
- When applied according to directions, Helix Satin sealer provides a breathable, non-yellowing protective finish and enhance exterior concrete, brick and masonry surfaces. Please see 'Limitations and
- Precautions' section of this bulletin for important information regarding
- interior use, vapors and flammability.
- Helix Satin sealer provides a semi to Satin finish. Helix recommends a minimum of two coats for best results.
 Always test in an inconspicuous area for desired gloss and compatibility.

- Helix Satin sealer is an excellent choice for sealing and enhancing the following surfaces:
- · Colored, imprinted concrete
- Colored concrete that has been unsealed or stripped
- Concrete that has been treated with water-based stain, acid stain, or dye that has been left unsealed or stripped
- Color hardened concrete that has been left unsealed or stripped
- Uncolored concrete that has been left unsealed or stripped
- Exterior concrete surfaces that will weather naturally
- Exposed aggregate
- This sealer protects surfaces against dusting, staining and dirt with nonyellowing finishes. The sealer enrich the tone of concrete colored with Helix Integral Color*, Helix Color Hardener* and Helix Stampable Overlay*, as well as accentuate the surface character of concrete treated with Helix ChromaStain*or Helix Concrete Dye*.



▶ PRE-APPLICATION

- 1. When using any Helix Solvent Sealer the surface must be clean and completely dry before application. If the surface is not clean or completely dry, the sealer may turn white or hazy, or the sealer may fail to form a proper film. If excessive moisture in the concrete is suspected, contact ChemSystems, Inc. for technical assistance before applying a Helix Solvent Sealer.
- Before applying product to new or existing concrete, test the Helix Solvent Sealer in an inconspicuous area for desired results. For any questions regarding application, contact ChemSystems, Inc.

► APPLICATION

Warning: Do not apply any Helix Satin sealer to fresh concrete. These sealers are not curing compounds. Allow at least 7 days for concrete to cure or, at a very minimum, wait until the concrete has reached a uniform color. For optimum results, allow concrete to cure for 28 days or longer.

- The surface should be completely clean and dry before application. For cleaning use at least 2 ounces of Helix Neutralizing Degreaser* per gallon of water. If applying over old lacquer or sealer, test a small area to determine compatibility. Loose, flaky sealer should be removed using a high-pressure washer.
- Satin sealer should be applied with a high-quality pumpup or airless sprayer or a low nap solvent resistant roller.
- 3. Important: When applying Helix Satin sealer, do not allow the sealer to puddle. Maintain a wet edge to avoid roller marks. Apply the sealer as uniformly as possible without leaving either spaces or puddles. Multiple thin applications will give better results than a single, heavy application.
- 4. Two light coats of Helix Satin sealer at the recommended coverage rate are usually sufficient to seal and protect. For increased gloss, durability and extra protection, apply additional coats after initial coats are dry.

► SURFACE PROTECTION & MAINTENANCE

- For areas where oil spills may occur, like parking garages and driveways, use Helix Satin sealer according to application directions as stated above. Helix Satin sealer will resist oil stains initially upon contact.
- **Note:** If oil is left on the surface for an extended period of time or if the oil is not properly cleaned up, the oil may penetrate the sealer and go into the concrete. Should oil penetrate the sealer, that area can be degreased with a good commercial cleaner/degreaser and recoated with Helix Satin sealer.
- Remove any Helix Solvent Sealer using a good commercial stripper.
- Maintain the sealed surface with regular cleaning:
 - Day-to-Day Cleaning Helix Satin sealer, like all surface sealers, must be kept clean for maximum durability and protection. Frequent sweeping or vacuuming of loose soils will significantly increase the wear-life of Helix Satin sealer.
 - Maintenance Cleaning Clean sealed surfaces with a neutral pH floor cleaner, rinse and let dry.
 - Removing Ground-in Soils For removal of ground-in soils, use a neutral pH floor cleaner, scrub with a low-speed buffer. Rinse by pressure washing thoroughly. Let dry before allowing traffic.



LIMITATIONS AND PRECAUTIONS

• These Products are Highly Flammable.

Keep away from heat, sparks, and flame. Vapors may cause flash fire. Do not smoke. Extinguish all flames and pilot lights, and turn off stoves, heaters, electric motors and other sources of ignition during use and until all vapors are gone. Prevent buildup of vapors by opening all windows and doors to achieve cross-ventilation. Use only with adequate ventilation.

- Use on interior concrete: If used on interior concrete, ensure adequate ventilation and block all HVAC ventilation ducts which may distribute solvent odor.
 - Do not breathe vapors or spray mists. Ensure fresh air entry during application and drying.
 - Prevent buildup of vapors by opening all windows and doors to achieve cross-ventilation. Use only with adequate ventilation.
- Do not apply when concrete surfaces or ambient temperatures are below 40 °F or above 90 °F. Use with adequate ventilation and keep away from open flames
- If solvent odor is objectionable, the use of a waterbased, low odor product, such as Helix ChemSeal* may be preferred.
- Helix Satin sealer will protect concrete from dusting and soiling if applied properly, evenly, with adequate film thickness, and with sufficient coverage as outlined in the application directions. Insufficient number of coats when applying a Helix Solvent Sealer will result in inadequate protection for the concrete.
- Failure to remove dirt and debris from the surface or failure to properly clean the surface will result in premature wear and will impair penetration.
- Adhesive-backed tape (such as duct tape) left on a
 Helix Solvent Sealer over an extended period of time
 will create a chemical "weld" between the tape and the
 sealed substrate. If this happens, the sealer may be
 subject to delamination. Delamination can also occur
 when plastic or synthetic rubber mats are placed on
 the surface and left undisturbed over extended periods
 and when rubber tires on the sealed surface have been
 exposed to heat.

▶ SHELF LIFE AND PRECAUTIONS

Helix Satin sealer has a shelf life of one year. Store product indoors, away from heat, direct sunlight and sources of ignition. Do not allow product to freeze.

COVERAGE RATE AND DRYING TIMES

Coverage rates may vary depending on the texture, porosity, condition of the concrete, the application method, and other local conditions. Two light coats of Helix Satin sealer at the recommended coverage rates are usually sufficient to seal and protect. However, if you want increased gloss, durability, and extra protection, apply additional coats after initial coats are dry.

- Smooth Finish Material usage is 300 square feet per gallon/coat.
- Rough or Broom Finish Material usage is 250 square feet per gallon/coat.

Drying times will vary depending on surface porosity, temperature, humidity and other local conditions.

Note: When the air temperature reaches 85 °F or higher and the surface to be sealed is in the direct sunlight, the temperature can be 10–20 degrees higher thus causing the sealer to flash off which in turn may cause blistering or bubbling of sealer. If this occurs wait for the temperature to drop and apply a light thin coat of xylene to re-dissolve the sealer.

• Helix Satin sealer Satin

- Set to Touch Surface can be lightly touched one to two hours after each application.
- Recoat Surface can be recoated two to four hours after each application.
- Light Traffic Light traffic can be allowed 24 hours after final coat.
- Vehicle Traffic Vehicle traffic can be allowed one to two days after final coat, depending on temperature.





▶ PACKAGE SIZES

Helix Satin sealer is available in 1-, 5- and 55-gallon units.

▶ COLORS

Using Helix Tint Concentrate SB*, Helix Satin sealer may be tinted to match any color shown on any Helix color chart or may be tinted to match any custom color. Order enough tinted sealer to complete a specific job as tint colors may vary slightly from batch to batch.

► APPLICABLE STANDARDS

Helix Satin sealer is not VOC compliant in all areas. Before use, consult local and state regulations, the U.S. EPA, or ChemSystems, Inc. to determine if this product complies with VOC regulations in your area.

- Helix Satin sealer is approved by the USDA for secondary food contact surfaces
- ASTM D2047 exceeds slip-resistance requirements with Helix Polygrit
- · ASTM D2801 for leveling
- · ASTM D3153 for recoatability
- ASTM D523 for gloss: Helix Satin sealer Satin is 85

► TECHNICAL DATA

Please refer to the corresponding SDS for hazard-related information.

Helix Satin sealer

Color Clear (unless tinted to Helix spec. colors)

Odor Sweet
Solids Content 18%
Flash Point 100 °F

VOC Content 600 grams per liter

Resin Pure acrylic, non-yellowing

▶ PRODUCT HANDLING

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

► WARRANTY

Helix Satin sealer, 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. If you have any questions, please contact ChemSystems, Inc.







▶ SECTION 1 PRODUCT DESCRIPTION

Product Name:

Satin

Recommended Use:

Sealer for decorative concrete

Supplier:

ChemSystems, Inc. 10101 Genard Road Houston, TX 77041 P: 800.545.9827 F: 713.329.9065 www.chemsystemsinc.net

Emergency Phone:

CHEMTRAC 1-800-424-9300

► SECTION 2 HAZARD IDENTIFICATION

Category 2 Flammable Liquid

Category 4 Acute Inhalation Toxicity

Category 2 Acute Aquatic Toxicity

Category 2 Skin Irritant

Category 2A Eye Irritant

Category 1B Germ Cell Mutagenicity

Category 1B Reproductive Toxicity

Category 2 Carcinogenicity

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

Category 2 Specific Target Organ Chronic Toxicity (liver,

kidney, central nervous system)

Category 1 Aspiration Hazard







Signal Word: Danger

Hazard Statements:

- H225 HighlyFlammable liquid and vapor
- H304 May be fatal if swallowed and enters airways
- H315 Causes skin irritation
- H319 Causes serious eye irritation
- H332 Harmful if inhaled
- H335 May cause respiratory irritation
- H336 May cause drowsiness or dizziness
- H340 May cause genetic defects
- H351 Suspected of causing cancer
- H360 May damage fertility or the unborn child
- H373 May cause damage to organs (liver, kidney, central nervous system) through prolonged exposure
- H401 Toxic to aquatic life

Precautionary statements:

Prevention:

- P210 Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking
- P233 Keep container tightly closed
- P260 Do not breathe mist/vapors/spray
- P264 Wash skin thoroughly after handling
- P271 Use only outdoors or in a well-ventilated area
- P281 Use personal protective equipment as required

Response:

- P301+P312+P331 IF SWALLOWED: Do NOT induce vomiting. Immediately call a poison center or doctor/ physician if you feel unwell.
- P303+P361+P353 IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower



- P304+P340+P311 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician.
- P305+p351+p338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P332+P313 If skin irritation occurs: Get medical advice/attention P501 Dispose of contents/container in accordance with
- P362 Take off contaminated clothing and wash before reuse

 P370+P378 In case of fire: Use dry sand, dry chemical, or alcohol-resistant foam for extinction

Storage:

 P403+P233+P235 Store in a well-ventilated place. Keep container tightly closed. Keep cool.

Disposal:

 P501 Dispose of contents/container in accordance with local/federal regulations.

▶ SECTION 3 COMPOSITION/ INFORMATION ON INGREDIENTS

	CAS#	OSHA PEL(TWA)	ACGIH(TLV-TWA)	Conc.(wt. %)
Acrylic Polymer	Proprietary	Not established	Not established	18.0 - 20.0
Glycol Ether	Proprietary	50 ppm	20 ppm	2.0 - 2.5
Dioctyl Phthalate	117-81-7	5 ppm	5 ppm	0.1 - 0.15
p-Dodecylphenol	210555-94-5	5 ppm	5 ppm	0.1 - 0.15
Acetone	67-64-1	1000 ppm	750 ppm	35.0 - 40.0
Light Solvent Naphtha	64742-95-6	Not established	Not established	24.0 - 42.0
Cumene	98-82-8	50 ppm	50 ppm	2.0 - 4.1
1,2,4 Trimethylbenzene	95-63-6	25 ppm(1989 std.)	25 ppm	12.0 – 16.5
Cymenes	25155-15-1	Not established	Not established	0.4 - 0.6
Xylene isomers	1330-20-7	100 ppm	100 ppm	0.4 - 2.0
Benzene, Trimethyl-	25551-13-7	25 ppm	25 ppm	20.6 - 24.7

▶ SECTION 4 FIRST AID MEASURES

Emergency First Aid Procedures

- Skin: Clean material from skin with acetone, then wash with soap and water followed by moisturizer. If irritation persists, contact a physician.
- Eyes: Flush with a gentle but large stream of clean water for 15 minutes, lifting the lower and upper eyelids occasionally. Remove contact lenses if able. Call a physician if irritation persists.
- *Inhalation:* Move to fresh air and provide oxygen if breathing is difficult. Seek medical attention.
- Ingestion: DO NOT INDUCE VOMITING. Give large quantities of water. Do not give milk or alcoholic beverages. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs. Get medical attention immediately.

▶ SECTION 5 FIREFIGHTING PROCEDURES

 Suitable Extinguishing Media: Dry chemical, CO2, alcohol-resistant foam

- Unsuitable Extinguishing Media: High-volume water jet
- Flash Point (TCC): 0° F
- Flammable Limits (% volume in air for solvents): LEL=1.0 UEL=12.8
- Special Fire Fighting Procedures: Evacuate area and fight fire from a distance. Firefighters wear NIOSH approved self-contained breathing apparatus. Cool containers exposed to fire with water. Vapors are heavier than air and may travel along the ground to distant ignition sources. Do not allow runoff from firefighting to enter drains or water courses.

► SECTION 6 SPILL OR LEAK PROCEDURES

Steps to Take if Material is Released or Spilled:
 No health affects expected from the clean-up of the material if contact can be avoided. Follow the protection information found in Section 8 of this SDS. Ventilate the contaminated area. Prevent the spread of spilled material by using a suitable absorbent material or sand dam.





► SECTION 7 HANDLING AND STORAGE

- Normal Handling: Always use good industrial hygiene practices and safety guidelines.
- Storage: Store material in its original container. Keep containers tightly closed when not in use. Keep material away from open flame, sparks, or other sources of heat and ignition.
- Waste Disposal Method: Liquid material is an ignitable waste (D001). Dispose of material in accordance with federal, state, and local guidelines.
- Special Precautions: Use proper bonding/grounding techniques to avoid static buildup/discharge, which can ignite vapors. Empty containers may contain explosive levels of vapor. Do not cut, drill, or weld on or near the containers.

▶ SECTION 8 PROTECTION INFORMATION

- Respiratory Protection: Use NIOSH-approved organic vapor respirator when exposure levels can't be kept below limits.
- Ventilation: Provide adequate mechanical ventilation to keep exposure levels below TLV's.
- Protective Gloves: Wear impervious chemical gloves.
- Eye Protection: Wear chemical safety glasses.
- Other Protective Clothing or Equipment: As needed to prevent repeated/prolonged contact.
- Work/Hygienic Practices: Use only in adequatelyventilated area unless recommended respiratory protection is used. 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: Clear to slightly hazy liquid

• Odor: Characteristic ketone

• Odor Threshold: 13 ppm

• pH: None

• Freezing/Melting Point: -138.3° F

• Boiling Point: 133.5° F

• Flash Point: 0° F

- Evaporation Rate: 14.4 (butyl acetate = 1)
- Flammability (solid, gas): Flammable Liquid

• Lower/Upper Flammability: 1.0-12.8

• Vapor Pressure: 24.7 kPa @ 20° C

• Vapor Density: 2.0

• **Density:** 0.88 g/cc

• Solubility: 37.5% w/w in water

• Partition Coefficient: No data available

• Auto-ignition Temperature: 1004° F

• Decomposition temperature: No data available

• Viscosity: 18-20 centipoise

► SECTION 10 REACTIVITY DATA

• Reactivity: Stable

- Conditions to avoid: Prevent vapor accumulation. Avoid heat and flames.
- Incompatibility (Materials to Avoid): Strong oxidizers
- Hazardous Decomposition (Byproducts): Carbon monoxide and carbon dioxide.
- Hazardous Polymerization: Should not occur.

► SECTION 11 TOXICITY DATA

- Routes of Exposure: Inhalation, Ingestion, eyes, and Skin.
- Acute Toxicity Lethal Doses (ATE):
 - LC50 (inhl) 10.7 mg/l
 - LD50 (oral) 6579 mg/kg
 - LD50 (skin) 8475 mg/kg

• Health Hazards:

- Acute: May cause eye, skin, gastrointestinal, and lung irritation. May cause central nervous system depression.
- Chronic: Prolonged and repeated exposures to high concentrations may cause liver and kidney damage.
- Skin Contact: May cause irritation and redness.
 Prolonged or repeated exposure can cause defatting and drying of the skin which may result in a burning sensation and a dried, cracked appearance.





- Eye Contact: Causes redness, tearing, irritation of the eyes. Direct contact may will cause moderate eye irritation.
- Inhalation: May cause headache, nausea, dizziness, and loss of coordination. Continued inhalation may result in unconsciousnes and death.
- Ingestion: May be harmful if swallowed. Aspiration
 of the material into the lungs can cause chemical
 pneumonitis, which can be fatal.
- **Carcinogen:** ingredients suspected of causing cancer in humans:

Light Solvent Naphtha 64742-95-6 (IARC Group 2B)

Cumene 98-82-8 (IARC Group 2B)

• Aggravation of Pre-existing Conditions: Persons with pre-existing skin, eye, or lung disorders may be more susceptible to the effects of the substance.

▶ SECTION 12 ECOLOGICAL DATA

- Acute Toxicity to Fish: LC50 15.4 mg/L (calculated)
- Acute Toxicity to Aquatic Invertebrates: LC50 5.3 mg/L (calculated)
- Toxicity to Aquatic Plants: EC50 5.9 mg/L (calculated)
- Toxicity to Microorganisms: No data available
- Chronic Toxicity to Fish: No data available
- Chronic Toxicity to Aquatic Invertebrates: No data available
- Persistence and Degradability: Expected to degrade readily and rapidly in the presence of oxygen
- **Bioaccumulation Potential:** This material is not expected to bioaccumulate.
- Mobility in the Soil: Expected to move slowly in soil and water.
- Other Adverse Effects: None established.

► SECTION 13 DISPOSAL INFORMATION

 Waste Disposal Method: Liquid material is an ignitable waste (D001). Dispose of material in accordance with all Federal, State, and Local regulations.

▶ SECTION 14 TRANSPORT INFORMATION

For Domestic (US) Ground Transport: Non-Regulated Material in <119-gallon containers

For other modes:

• Proper Shipping Name: PAINT

Hazard Class: 3UN: UN1263

Packing Group: PGIIIMarine Pollutant: No

SECTION 15 REGULATORY INFORMATION

- SARA 311/312: Yes. (Fire, Acute, Chronic).
- OSHA: This material is hazardous by definition of Hazardous Communications Standard (29 CFR 1910.1200).
- TSCA: Components of this material are either listed or are exempt from the EPA TSCA Inventory of Chemical Substances.

California Proposition 65:

WARNING! This product contains a chemical known to the State of California to cause cancer.

98-82-8 Cumene71-43-2 Benzene

WARNING! This product contains a chemical known to the State of California to cause birth defects or other reproductive harm:

• 71-43-2 Benzene

• 117-81-7 bis(2-Ethylhexyl) phthalate

Massachusetts Right To Know:

• 25551–13–7	Benzene, Trimethyl-	20.6 – 24.7
• 95-63-61,2,4-	Trimethylbenzene	12.0 – 16.5
• 98-82-8	Cumene	2.0 - 4.1
• 1330–20–7	Mixed Xylenes	0.4 - 2.0
• 117–81–7	bis(2-Ethylhexyl) phthalate	0.1 - 0.15
 Proprietary 	Glycol Ether	2.0 - 2.5

Pennsylvania Right To Know:

• 64742-95-6	Light Solvent Naphtha	24.0 - 42.0
• 25551-13-7	Benzene, Trimethyl-	20.6 – 24.7
• 95-63-61,2,4	-Trimethylbenzene	12.0 – 16.5
• 98-82-8	Cumene	2.0 – 4.1
• 1330-20-7	Mixed Xylenes	0.4 - 2.0
• 117–81–7	bis(2-Ethylhexyl) phthalate	e 0.1 – 0.15
 Proprietary 	Glycol Ether	20-25



New Jersey Right To Know:

•	64742-95-6	Light Solvent Naphtha	24.0 – 42.0
•	25551-13-7	Benzene, Trimethyl-	20.6 – 24.7
•	95-63-61,2,4	-Trimethylbenzene	12.0 – 16.5
•	98-82-8	Cumene	2.0 - 4.1
•	1330-20-7	Mixed Xylenes	0.4 - 2.0
•	25155-15-1	Cymenes	0.4 - 0.6
•	117-81-7	bis(2-Ethylhexyl) phthalate	0.1 - 0.15
•	Proprietary	Glycol Ether	2.0 - 2.5

▶ 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.