

► 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

orders@shophelix.com • 713.329.9066 • shophelix.com

Concrete Sealer

FRESH CONCRETE

CURE & SEAL

TECH DATA SHEET

Helix Color Systems is a premier line of specialty decorative concrete admixtures manufactured by ChemSystems Inc. Helix Color Systems is manufactured for the discriminating installer or designer who values service and quality. Specializing in custom colors, specialty products, and superior service, Helix Color Systems offers an innovative alternative in the decorative concrete industry.



► DESCRIPTION

Helix Cure and Seal is a high-solids acrylic polymer, film-forming curing and sealing compound that is available in a gloss or matte finish. Helix Cure and Seal leaves a clear film that assists the cure of freshly-placed concrete and helps protect surfaces from chalking, staining and dirt contamination.

► PRODUCT BENEFITS

- Meets ASTM C-309, ASTM C-1315, AASHTO M148 and USDA/EPA 40CPR-D regulations.
- Provides both a protective and decorative finish.
- Helix Cure and Seal can be re-coated after 28 days with other Helix Sealers.
- Helix Cure and Seal is offered in Federal VOC or California VOC regulation versions.
- Helps protect surfaces from chalking, staining and dirt contamination.
- When applied according to directions, the sealer will deepen and enhance the color of concrete, terrazzo or masonry surfaces.
- Helix Cure and Seal. Is a class 3 Cure and Seal without any UV blockers. It may yellow over time.

► APPLICATION

1. Surface should be clean and clear of any standing water.
2. Helix Cure and Seal is best applied with a professional quality metal/Teflon-coated sprayer.
3. Important: When applying a Helix Cure and Seal, do not allow product to puddle. Apply product as uniformly as possible.
4. One light application is typically sufficient.
5. After 28 days, concrete cured with Helix Cure and Seal can be re-coated with a second application or with any other Helix Sealers.

► COVERAGE RATE AND DRYING TIMES

Coverage Rates – Actual coverage may vary depending on the texture, age and condition of the concrete, the application method and other local conditions.

- Smooth Finish, Per Coat – Material usage, per coat, is approximately 300 square feet per gallon.
- Rough or Broom Finish, Per Coat – Material usage, per coat, is approximately 200 square feet per gallon.
- Aggregates, Per Coat – Material usage, per coat, is approximately 100 square feet per gallon.

Drying times below will vary depending on temperature and humidity. Do not apply if rain is imminent.

- Approximate dry time at 73° F, 50% RH is <1 hour.
- Foot Traffic – Surface will dry 2–4 hours after application for foot traffic.
- Vehicle Traffic – vehicles can be allowed 24 hours after final coat.

► PACKAGE SIZES

Helix Cure and Seal is available in 1-gallon, 5-gallon and 55-gallon units.

► APPLICABLE STANDARDS

Helix Cure and Seal complies with the following regulations and requirements:

- Helix Cure and Seal is available for Federal VOC compliance or CA VOC compliance. Please specify version when placing order.
- ASTM C 309 – Liquid Membrane-Forming Compounds for Curing Concretes.
- AASTM C 1315 – Liquid Membrane-Forming Compounds Having Special Properties for Curing and Sealing.
- AASHTO M 148 – Liquid Membrane-Forming Compounds for Curing Concretes. USDA/EPA 40 CFR-D

► TECHNICAL DATA

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

Color	Clear, viscous solution.
Odor	Typical aromatic hydrocarbon odor.
Solids Content	25%
Specific Gravity	0.87
Density	7.67 pounds per gallon
Flash Point	100° F
VOC Content	700 G/L (Federal), 350 G/L (CA)
Opacity	Clear

► PRODUCT HANDLING

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

► WARRANTY

Helix Cure and Seal, 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.

Concrete Sealer

FRESH CONCRETE

CURE & SEAL

TECH DATA SHEET

► SECTION 1 PRODUCT DESCRIPTION

Product Name:

Cure & Seal

Recommended Use:

Sealer for concrete

Supplier:

ChemSystems, Inc. 10101 Genard Road Houston, TX 77041

P: 800.545.9827 F: 713.329.9065

www.chemsystemsinc.net

Emergency Phone:

INFOTRAC 1-800-535-5035

► SECTION 2 HAZARD IDENTIFICATION

Category 3 Flammable Liquid

Category 3 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:**

- H226 Flammable liquid and vapor.
- H304 May be fatal if swallowed and enters airways
- H315 Causes skin irritation
- H319 Causes serious eye irritation
- H331 Toxic 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+P310+P331 IF SWALLOWED: Do NOT induce vomiting. Immediately call a poison center or doctor/physician
- 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

- 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 to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Get medical advice.
- P305+ P351+P338+P314 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing. Get medical advice if you feel unwell.

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	25.0 – 30.0
Glycol Ether	Proprietary	50 ppm	20 ppm	2.0-2.5
Bis(2-ethylhexyl)phthalate	117-81-7	5 ppm	5 ppm	0.1 – 0.2
Light Solvent Naphtha	64742-95-6	None Established	None Established	43.0 – 75.0
Cumene	98-82-8	50 ppm	50 ppm	3.0 – 7.5
1,2,4 Trimethylbenzene	95-63-6	25 ppm(1989 std.)	25 ppm	20.0 – 30.0
Cymenes	25155-15-1	None Established	None Established	0.7 – 1.1
Xylene isomers	1330-20-7	100 ppm	100 ppm	0.7 – 4.0
Benzene, Trimethyl-	25551-13-7	25 ppm	25 ppm	36.0 – 44.0

► 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
- **Suitable Extinguishing Media:** High-volume water jet
- **Flash Point (TCC):** 106° F
- **Flammable Limits (% volume in air for solvents):**
LEL=1.0 UEL=7.0
- **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 adequately-ventilated 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 liquid
- **Odor:** Aromatic hydrocarbon
- **Odor Threshold:** 0.07 ppm
- **pH:** None
- **Freezing/Melting Point:** -76° F
- **Boiling Point:** 154° F
- **Flash Point:** 106° F
- **Evaporation Rate:** 0.15 (butyl acetate = 1)
- **Flammability (solid, gas):** Flammable Liquid
- **Lower/Upper Flammability:** 1.0-7.0
- **Vapor Pressure:** 2.5 mm of Hg at 20° C
- **Vapor Density:** 4.3
- **Relative Density:** 0.91 g/cc
- **Solubility:** <1% w/w in water
- **Partition Coefficient:** No data available
- **Auto-ignition Temperature:** 462° C
- **Decomposition temperature:** No data available
- **Viscosity:** 75 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) 6.12 mg/l
 - LD50 (oral) 6667 mg/kg
 - LD50 (skin) 6410 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 hearing loss. May cause anemia, decreased blood cell count, and bone marrow hypoplasia. Liver and kidney damage may occur.
- **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:** May cause redness, tearing, and irritation of the eyes. Direct contact may cause permanent eye damage.
- **Inhalation:** May cause headache, nausea, dizziness, and loss of coordination. Continued inhalation may result in unconsciousness and death.
- **Ingestion:** May be harmful if swallowed. Aspiration of the material into the lungs can cause chemical pneumonitis, which can be fatal.

- **Carcinogen:** Contains ingredients suspected of causing cancer in humans:

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

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

Bis(2-ethylhexyl) phthalate 117-81-7 (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 10.3 mg/L (calculated)
- **Acute Toxicity to Aquatic Invertebrates:** LC50 4.64 mg/L (calculated)
- **Toxicity to Aquatic Plants:** EC50 3.19 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:** 3
- **UN:** UN1263
- **Packing Group:** PGIII
- **Marine 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 Cumene

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

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

Massachusetts Right To Know:

- 25551-13-7 Benzene, Trimethyl- 36.0 – 44.0
- 95-63-6 1,2,4-Trimethylbenzene 20.0 – 30.0
- 98-82-8 Cumene 3.0 – 7.5
- 1330-20-7 Mixed Xylenes 0.7 – 4.0
- 117-81-7 bis(2-Ethylhexyl) phthalate 0.1 – 0.2
- Proprietary Glycol Ether 2.0 – 2.5

Pennsylvania Right To Know:

- 64742-95-6 Light Solvent Naphtha 43.0 – 75.0
- 25551-13-7 Benzene, Trimethyl- 36.0 – 44.0
- 95-63-6 1,2,4-Trimethylbenzene 20.0 – 30.0
- 98-82-8 Cumene 3.0 – 7.5
- 1330-20-7 Mixed Xylenes 0.7 – 4.0
- 117-81-7 bis(2-Ethylhexyl) phthalate 0.1 – 0.2
- Proprietary Glycol Ether 2.0 – 2.5

New Jersey Right To Know:

- 64742-95-6 Light Solvent Naphtha 43.0 – 75.0
- 25551-13-7 Benzene, Trimethyl- 36.0 – 44.0
- 95-63-6 1,2,4-Trimethylbenzene 20.0 – 30.0
- 98-82-8 Cumene 3.0 – 7.5
- 1330-20-7 Mixed Xylenes 0.7 – 4.0
- 25155-15-1 Cymenes 0.7 – 1.1
- 117-81-7 bis(2-Ethylhexyl) phthalate 0.1 – 0.2
- 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.