► THANK YOU FOR CHOOSING ◀

# COLOR SYSTEMS

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





### Concrete Sealer TOPICAL

## HIGH GLOSS

### 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 High Gloss sealer is a tough pure 100% acrylic concrete sealer in a solvent base. It is designed to protect types of concrete surfaces from water, dust, stains with a beautiful high gloss durable clear coating. Helix High Gloss sealer is non-yellowing to preserve the appearance of all types of decorative concrete.

#### ▶ PRODUCT BENEFITS

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

- · Helix High Gloss sealer is an excellent choice for sealing an d enhancing the following surfaces:
  - Colored, imprinted concrete
  - · Colored concrete that has been unsealed or stripped
  - · Concrete that has been treated with waterbased 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 enriches 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 Acid Stain or Helix Concrete Dye.



#### ▶ PRE-APPLICATION

- 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.
- 2. Before applying product to new or existing concrete, test the Helix solvent sealer in an inconspicuous area for desired results.

#### APPLICATION

**Warning:** Do not apply any Helix solvent 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.
- 2. High Gloss sealer should be applied with a high-quality pump-up or airless sprayer or a low nap solvent resistant roller.
- 3. Important: When applying a Helix solvent 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 a Helix solvent sealer, at the recommended coverage rate, are usually sufficient to seal and protect. However, 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 a Helix Solvent Sealer according to application directions as stated above. High Gloss 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 a Helix Solvent Sealer.
- Remove any Helix Solvent Sealer using a good commercial stripper.
- Maintain the sealed surface with regular cleaning:
  - Day-to-Day Cleaning Helix High Gloss 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 High Gloss 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 High Gloss 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 High Gloss 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 High Gloss 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 300 sq/ft per gallon
- Rough or Broom Finish 200 sq/ft per gallon
- Exposed Finish 100 sq/ft per gallon

**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 High Gloss sealer High Gloss

- 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 High Gloss sealer is available in 1-gallon, 5-gallon, and 55-gallon units.

#### **▶** COLORS

Using Helix Tint Packs, Helix High Gloss 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 High Gloss sealer is not VOC compliant in all areas. Before use, consult local and state regulations or the U.S. EPA to determine if this product complies with VOC regulations in your area. Contact support@helixcolorsystems with any questions or visit helixcolorsystems.com:

- Helix High Gloss 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 High Gloss sealer High Gloss is 95

#### **► TECHNICAL DATA**

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

#### Helix High Gloss sealer High Gloss

Color	Clear (unless tinted to Helix specification
colors)	
Odor	Sweet
Solids Content	27%
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 High Gloss 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





### Concrete Sealer TOPICAL

## HIGH GLOSS

#### SAFETY DATA SHEET

#### ► SECTION 1 PRODUCT DESCRIPTION

#### **Product Name:**

**High Gloss** 

#### **Recommended Use:**

Sealer for decorative concrete

#### 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

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+P312+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 if you feel unwell.
- 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 or rash 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

#### 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
Dioctyl Phthalate	117-81-7	5 ppm	5 ppm	1.0 - 1.4
p-Dodecylphenol	210555-94-5	5 ppm	5 ppm	0.1 - 0.17
Light Solvent Naphtha	64742-95-6	Not established	Not established	40.0 - 69.5
Solvent Naphtha	Proprietary	17 ppm	5 mg/m3	1.0 - 1.5
Cumene	98-82-8	50 ppm	50 ppm	3.0 - 7.0
1,2,4 Trimethylbenzene	95-63-6	25 ppm(1989 std.)	25 ppm	20.0 - 28.0
Xylene isomers	1330-20-7	100 ppm	100 ppm	0.7 - 3.5
Benzene, Trimethyl-	25551-13-7	25 ppm	25 ppm	34.5 – 41.5

#### **▶ 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): 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 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 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 Hg at 20° C

• Vapor Density: 4.3

• Density: 0.93 g/cc

• Solubility: <1% by weight in water

• Partition Coefficient: No data available

• Auto-ignition Temperature: 462° F

• Decomposition temperature: No data available

• Viscosity: 85 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) 6.4 mg/l
  - LD50 (oral) 6653 mg/kg
  - LD50 (skin) 6289 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 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 8.5 mg/L (calculated)
- Acute Toxicity to Aquatic Invertebrates: LC50 4.2 mg/L (calculated)
- Toxicity to Aquatic Plants: EC50 3.2 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 • 71-43-2 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	34.5 – 41.5
•	95-63-6	1,2,4-Trimethylbenzene	20.0 – 28.0
•	98-82-8	Cumene	3.0 - 7.0
•	1330-20-7	Mixed Xylenes	0.7 - 3.5
•	117-81-7	bis(2-Ethylhexyl) phthalate	0.1 - 0.14
	Proprietary	Glycol Ether	20-25

#### Pennsylvania Right To Know:

• 64742-95-6	Light Solvent Naphtha	40.0 – 69.5
<ul> <li>Proprietary</li> </ul>	Solvent Naphtha	1.0 – 1.5
• 25551-13-7	Benzene, Trimethyl-	34.5 – 41.5
• 95-63-6	1,2,4-Trimethylbenzene	20.0 - 28.0
• 98-82-8	Cumene	3.0 - 7.0
• 1330–20–7	Mixed Xylenes	0.7 - 3.5
• 117–81–7	bis(2-Ethylhexyl) phthalate	0.1 – 0.14
<ul> <li>Proprietary</li> </ul>	Glycol Ether	2.0 - 2.5

#### **New Jersey Right To Know:**

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• 64742-95-6	Light Solvent Naphtha	40.0 – 69.5
<ul> <li>Proprietary</li> </ul>	Solvent Naphtha	1.0 – 1.5
• 25551-13-7	Benzene, trimethyl	34.5 – 41.5
• 95-63-6	1,2,4-Trimethylbenzene	20.0 - 28.0
• 98-82-8	Cumene	3.0 - 7.0
• 1330–20–7	Mixed xylenes	0.7 - 3.5
• 25155-15-1	Cymenes	0.7 - 1.0
• 117–81–7	bis(2-Ethylhexyl) phthalate	0.1 - 0.14
<ul> <li>Proprietary</li> </ul>	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.