

Helix PolySpartic 65 SB

Technical Data Sheet 45.0510DS



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 PolySpartic 65 SB is a fast-curing two-part polyaspartic aliphatic polyurea sealer/finish coating for both decorative and protective applications. Being self-priming, the material is applied in single or multiple coats by brush, roller, squeegee or sprayer of varying thicknesses to a variety of substrates including concrete, wood and metal. It can be applied over decorative concrete surfaces such as acid, color- or dye-stained, semi-polished concrete, polymermodified cementitious overlays, or employed within seamless multi-build paint chip/quartz flooring systems. Important characteristics of Helix PolySpartic 65 SB are its excellent penetration and bond strength, UV resistance and excellent color/gloss retention.

Helix PolySpartic 65 SB provides excellent impact, abrasion, and chemical resistance characteristics, with flexible properties. Suitable for high traffic interior or exterior applications, the material is ideal for clear topcoat sealer applications over decorative concrete, walkways, commercial applications, industrial facilities, swimming pool decks and garage floors.

Product Benefits

- Excellent penetration & bond strength
- Self-Priming
- Excellent abrasion, impact & wear resistance
- UV-Resistant; retains optical clarity of clear sealer/finish
- Short re-coat time: 1-2 hours
- Low temperature cure (-30° F/-34°C)
- Excellent chemical & stain resistance, resistant to skydrol
- Resistant to hot-tire pickup
- Micro-Media agents can be introduced as traction additives
- VOC Compliant
- Tolerant to 300°F for random, incidental heat contact
- Meets FDA/CFR, U.S. Food Code, physical facilities criteria as outlined in 6.100.11 Surface Characteristics USDA acceptable. Not intended for 21 CFR food contact.
- Accepts Helix Concrete Dye that has been diluted with acetone to create a “sealer stain system”
- Accepts color media to create “color flake” garage floor type of flooring system
- Accepts solvent based color tints systems to create both a translucent and opaque flooring system

Common Uses

- Multi-coat high traffic commercial and industrial solid color concrete flooring system consisting of multiple pigmented coats and clear top coat(s).

- Multi-coat residential garage floor coating consisting of multi-build simulated granite paint chip or quartz flooring systems.
- Two-coat blasted steel coating application consisting of 1 zinc-rich primer coat followed by one-coat of Helix PolySpartic 65 SB
- Clear sealer or finish coating over decorative concrete surfaces. Includes acid stained and semi polished concrete, polymer modified overlays and stamped concrete.
- UV-resistant sealer for exterior applications

Pre-Application

1. Always properly prepare surface as an open, porous surface is necessary for primer bonding. The surface must be deemed structurally and mechanically sound, clean, and dry. Proper surface preparation is required for decorative-concrete, thin-film “Class-A-type” flooring systems or sealer/finish coatings. This is best achieved with mechanical grinding machines using diamond heads achieving a final 30 to 120-grit profile. Recommended surface profile is SP-2, Reference ICRI Technical Guideline No. 03732.
2. Surfaces to be coated must be free of previous coatings, sealers, grease and any other contaminants that may impede adhesion. Always check the surface for any bond inhibitors prior to application. Any repairs must be addressed prior to application and should be repaired in accordance with ICRI standards.

Application

1. A moisture emission measurement system is necessary to assess the moisture drive of a concrete slab prior to installation of any toppings or coatings. The transmission rate must not exceed three pounds per 1,000 square feet per 24 hours. The relative humidity of the slab must not exceed 80%. If there is a moisture emission situation in excess of the above rate, consult ChemSystems, Inc. for vapor control flooring application systems. The application process will depend on the system being installed, reference appropriate specification for details.
2. Mix part A and part B in equal parts (1:1) using a clean, dry working vessel. Stir gently, avoid over-mixing or creating a vortex that would introduce moisture. Do not mix below the dew point, which will shorten the pot life. No induction time is required prior to use. If micro-media agents are to be incorporated, they are to be added after thoroughly mixing A and B.
3. Roller application is recommended. The roller must have an industrial grade phenolic resin core with a synthetic nap or lambs-wool cover. 1/8” to 3/8” nap. Small chip brushes may be used along the perimeter and in more difficult to reach areas. Helix PolySpartic 65 SB will typically be dry to the touch 1 to 2 hours after application, dependent on ambient temperature, slab temperature and humidity. Product may be re-coated at that time or when deemed appropriate by system specification. Foot traffic is generally acceptable after 2-4 hours with 24 hours minimum required for vehicular traffic.

Coverage Rates

Coverage rates may vary depending on the texture, porosity, age and condition of the concrete, the application method, and other local conditions. Helix PolySpartic 65 SB coverage rates are contingent on solids content. Consult appropriate specification for system thickness and coating application.

	Solids Content
Thickness	65%
1 Mil	1,075
2 Mils	537
3 Mils	358
4 Mils	269
5 Mils	215
6 Mils	179

Shelf Life and Storage

Helix PolySpartic 65 SB if sealed and unopened is under warranty for one year. Store at 40 °F to 100 °F in a covered area (out of the sun).

Package Sizes

Helix PolySpartic 65 SB is available in 2- and 5-gallon kits

Technical Data

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

Type of Material:Polyaspartic Aliphatic Polyurea
VOC Content:Ultra-Low VOC content, 0 to < 100g / L
Recommended Dry Film Thickness:..... 2 to 6 mils per coat
Pot Life:*25 to 30 minutes
Minimum Re-coat:*1-Hour, minimum
Light Foot Traffic:* 1 to 2 hours minimum
Maximum Re-coat:* 48 hours (contact manufacturer)
Mixing Ratio:* 1.0 part A; 1.0 part B
Tensile Strength:ASTM D 638: 4,500 to 5,000 psi
Impact Resistance:Direct/Reverse 160/160
Falling Sand Abrasion Resistance ASTM D 968:
Clear.....30 liters sand/1 dry mil
Pigmented.....38 liters sand/1 dry mil
Mandrel Bend, ASTM D 522:....Passes, no cracking, 1/8" mandrel bend

Product Handling

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

Warranty

Helix PolySpartic 65 SB 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.



*For complete information on all CSI products—including product information catalogs, product brochures, color charts, technical specifications, sales aids and more—contact ChemSystems, Inc.

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