

sti[®] Seamless Technologies, Inc.

SeamTek[®]

Pigmented Epoxy Resin WP 850

Product Data

1. Product Description

Basic use

SeamTek[®] Pigmented Epoxy Resin WP850 is a two component 100% solids, low-odor, low viscosity, low VOC resin that chemically cures to form a rigid and highly abrasion resistant binder for high performance interior flooring systems. It has been specifically designed to exhibit excellent flow characteristics, air release, and workable viscosity.

This product is compatible with most aggregates used to achieve skid, impact or wear resistance. It may be used as Seal or finish coat as well as a binder resin.

Features and benefits include:

- No amine blush – no frosting
- Self leveling
- Low foaming
- Excellent adhesion to concrete
- Good workability – easy to spread
- 100% solids – solvent free
- Low VOC
- Low odor
- Low flammability
- Compatible with wide range of aggregates

The STI SeamTek systems are composed of resins and aggregates which utilize the best available technology for safety and performance. All products and systems are extensively field tested prior to use on SeamTek projects.

Composition and Materials

SeamTek Pigmented Epoxy Resin WP850 is a chemical curing, two component, 100 % solids epoxy coating.

Sizes

The binder resin and hardener are packaged in 5 U.S. gallon (18.9 liter) pails.

Limitations

SeamTek WP850 must not be used to bridge moving cracks or joints. Non-moving cracks or joints that must be over coated require rigid repairs. See STI Technical Manual System Specifications for details. Surface or air

temperature must be between 65°F minimum and 80°F maximum and relative humidity below 80%. Lower temperatures will extend cure time and higher temperatures will reduce pot and work life.

Storage and Handling

Because WP850 has a flash point above 200°F (93°C), transportation, storage and handling are less restricted. The binder resin is freeze/thaw stable, which allows flexibility in storage of the product, on or off site.

Product Health and Safety Information

Refer to container labels and Material Safety Data Sheets available from STI for health, safety and environmental information. If necessary, call STI at (800) 666-6216.

Applicable Standards

STI SeamTek Pigmented Epoxy Resin WP850 has been tested in accordance with American Society for Testing and Materials (ASTM) methods. Refer to Table 1 on page 1 for more information. SR101 can be used as a floor coating in food processing areas and other similar applications. The USDA and FDA no longer regulates coatings used on floors, walls, and ceilings in food process areas, since the surfaces are not intended for food contact.

Surface Preparatory Work

Preparatory work must be done in accordance with procedures described in STI Technical Manual.

Table 1 Typical Physical Properties

Property	Measuring Standards and Conditions	Results Part A/Part B
Specific Gravity	ASTM D 70, Fisher #3-247 pycnometer	1.07
Weight +/- 0.4 lbs./gal.	ASTM E 201	9.2 lbs./gal.
Non-volatile Content	ASTM D 1353, 18 hrs. at 200°F (93°C)	100%
Viscosity, cps	ASTM D 1475 77°F (25°C)	Self-leveling 1200-1500
Flash Point, TCC minimum	Seta Flash	Greater than 200°F (93°C)
Solvent Odor	ASTM D 1296	Extremely low
Pot Life		50 to 60 minutes at 72°F (22°C) &

Mixing

Caution, Containers used to measure WP850 resin and Harder must be marked appropriately and only used to measure the indicated component. Container used to mix both resin and hardener must be cleaned or changed after mixing each batch to avoid residual material affecting viscosity and cure rates.

Measure both parts by volume 2 to 1 into square plastic marked containers. Pour resin and hardener into a separate container and agitate using a jiffy paddle and low speed drill (400-600 rpm). Agitate for 2 minutes, then scrape sides of container and mix for an additional minute. Avoid generating air bubbles and foam. Consider mixing small batches to reduce potential waste. To avoid exothermic reaction in mixing container, do not let mixed components sit in container. Immediately, either pour the mixed epoxy binder resin onto the floor to be coated or thoroughly mix with aggregate and then pour onto floor. Spread or finish material according to application instructions contained in STI Technical Manual.

3. Warranty

STI Flooring Systems are installed by STI Associate Contractors and are available with the STI Single Source Limited Warranty for Labor and Material. This Product Data Sheet is for your information and is not a contract nor a product warranty. Your installation contract is provided by your STI Associate Contractor. STI's warranty to you is made solely in the STI Single Source Limited Warranty for Labor and Material. Contact your Associate Contractor for the specific warranty document.

4. Maintenance

SeamTek Systems are hard seamless surfaces that will provide years of life with little maintenance. For more detailed maintenance instructions, please request STI Floor Maintenance Instructions. Periodic inspections by your STI Associate Contractor are recommended to discuss ways to extend the life of the floor care.

5. Technical Service

Call your STI representative for assistance.

Table 2 – Typical Performance Properties

Property	Measuring Standards and Conditions	Binder Resin Results Only See Note 1 below
Drying time	ASTM D 1475 77°F (25°C)	To Touch: 8 to 12 hrs., max. To complete: 24 hrs. max.
Hardness (indentation)	ASTM D 2240 Rex D Model 1700	65-70 resin only 80-85 with aggregate
Elongation	ASTM D 638	Less than 0.1%
Tensile Strength	ASTM D 638	4500 psi (31 MPa)
Water Absorption	ASTM D 570-95	Less than 0.2%
Indentation Resistance	Mil. Std. D-3134	Zero
Water Vapor Transmission	ASTM E 96-94	Less than 0.10 U.S. perms
Weathering Resistance	ASTM G 26 Type B, BH, 300 hrs	Slight Yellowing
Abrasion Resistance	ASTM C 501, CS-17 Wheel, 1000 rev. with 1000 gram weight	Less than 0.1 grams weight loss
Bond Strength to Concrete	ASTM D 4541	350 to 500 psi (2.4 to 3.4 MPa) epoxy holder fails
Electrical Conductivity		Non conductive
Flammability	ASTM D 635	Self-Extinguishing

1. For additional performance properties for binder resin with aggregate added (ie. Tensile Strength, Flexural Strength, Flexural Modulus, Compressive Strength, Coefficient of Linear Expansion, etc.) refer to STI technical manual for specific system(s) selected.

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Your STI Associate is:

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