

sti® Seamless Technologies, Inc.

SeamTek® N² 1034 UV Seal Coat

Product Data

1. Product Description

Basic use

SeamTek® 1034 is a UV activated, low-odor, no VOC, NO-HAP, LEED compliant pure vinyl ester resin that serves as the seal coat for N² flooring systems. It forms a clear temperature resistant binder for high performance surface with outstanding chemical resistance for strong acids and most high ph chemicals. It has been specifically designed for outstanding flow characteristics and air release and to wexhibit high gloss retention and wear course properties.

Features and benefits include:

- Good Thermal Properties
- Excellent chemical resistance
- No HAP
- Excellent adhesion properties
- High impact resistance
- No VOC
- Low odor
- LEED Compliant
- High Taber Resistance

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 1034 is a pure vinyl ester resin with low odor. It is cured with a UV activator that is incorporated into the resin. This feature eliminates mixing ratio mistakes. It has excellent UV stability once cured.

Sizes

The binder resin is packaged in 4 U.S. gallon pails.

Limitations

1034 is an excellent chemical resistant resis at low and intermediate ph ranges and with solvent action. Ph ranges near 14 can affect it's performance. 1034 is to be used as a seal coat resin only. Surface or air temperature must be between 65°F minimum and 80°F maximum and relative humidity below 80%. Lower temperatures will affect aesthetics.

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Storage and Handling

Because SeamTek 1034 has a flash point above 200°F (93°C), transportation, storage and handling are less restricted.

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 1034 has been tested in accordance with American Society for Testing and Materials (ASTM) methods. Refer to Table 1 on page 1 for more information.

Surface Preparatory Work

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

Mixing

It is always advisable to premix resins before using to assure settled materials are re-suspended prior to use. Otherwise no mixing is required since the UV activator is added at the time of formulation. When premixing it is also advisable to not over mix air into the liquid material.

Table 1 Typical Physical Properties

Property	Measuring Standards and Conditions	Results Part A/Part B
Specific Gravity	ASTM D 70, Fisher #3-247 pycnometer	1.2 AP
Weight +/- 0.4 lbs./gal.	ASTM E 201	11.009lbs./gal.
Non-volatile Content	ASTM D 1353, 18 hrs. at 200°F (93°C)	100%
Viscosity, cps	LV #3 Spindle, Thix 3.01, 77 degree F	6500 cps
Flash Point, TCC minimum	Seta Flash	Greater than 200°F (93°C)
Solvent Odor	ASTM D 1296	Extremely low
Pot Life		20 minutes at 72°F (22°C) & 50% R.H.

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: 4 to 6 hrs., max. To complete: 24 hrs. max.
Hardness (indentation)	ASTM D 2240 Rex D Model 1700	80 resin only 80-85 with aggregate
Elongation	ASTM D 638	Less than 15 %
Tensile Strength	ASTM D 638	4000 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	UV Stable
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 psi (2.4 to 3.4 MPa) Concrete 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.

3. Warranty

STI floor 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.

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