



US Patents: 6.833,424 & 7,169,876

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## SPARTA-STAIN® BY HP SPARTACOTE®

### TECHNICAL BULLETIN

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Sparta-Stain® is a fast-curing two-part semi-transparent polyaspartic aliphatic polyurea sealer/finish. The product contains dyes and pigments that gives the effect of variegated or altered colors meant to simulate acid and water based concrete stains. 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, polymer-modified cementitious overlayments, or employed within seamless multi-build paint chip/quartz flooring systems. Important characteristics of Sparta-Stain® are its excellent penetration and bond strength, UV resistance and excellent color/gloss retention.

Sparta-Stain® provides excellent exterior properties and is highly resistant to UV exposure, providing excellent color and gloss retention as well as tremendous resistance to abrasion and chemicals.

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#### FEATURES & BENEFITS

- Excellent penetration & bond strength
- Combination self-priming and color stain sealer/finish coat
- 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/CFSAN, U.S. Food Code, physical facilities criteria as outlined in 6.100.11 Surface Characteristics USDA acceptable. Not intended for 21 CFR food contact.

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#### GENERAL INFORMATION

##### COMMON USES

- Single or multi-coat system can be applied to achieve an array of colors and finishes. Product can be modeled, mopped and even taped off to give the appearance of acid or water based concrete stains.
- Sparta-Stain® can be used in conjunction with Sparta-Flex® clear sealer/finish to provide for additional abrasion, UV and chemical resistance. In addition, Sparta-Flex® clear top coats dramatically enhance optical clarity and quality of overall finish.

##### COLORS

Sparta-Stain® is available in 12 translucent colors. Refer to Sparta-Stain® Color Chart for standard color selections.

##### PRODUCT DATA

**Type of Material:** Polyaspartic Aliphatic Polyurea  
**VOC Content:** 0.0 lb/gal (0.0) g/L) to 0(zero) VOC content  
**Recommended Dry Film Thickness:** 2 to 6 mils per coat  
**Shelf Life:** 12 months unopened. Store at 40°F to 100°F in a covered area (out of the sun)  
**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

## **SURFACE PREPARATION**

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 80 to 120-grit profile. Recommended surface profile is SP-2, Reference ICRI Technical Guideline No. 03732.

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**

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 HP Spartacote, Inc. for vapor control flooring application systems. The application process will depend on the system being installed, reference appropriate specification for details.

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.

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. Sparta-Stain® 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.

## **CLEANUP**

Use Xylol or MEK. Do not use Alcohols

## **SAFETY**

Polyaspartic aliphatic polyurea products contain chemical ingredients that are considered hazardous. Read the container label warning and Material Safety Data Sheet prior to use.

## **MAINTENANCE**

This will vary depending on a number of factors including volume and intensity of traffic, geographic location and weather conditions. For instance, interior applications will require a different routine maintenance program than exterior products. Residential applications typically require less cleaning and maintenance than commercial and municipal projects. In large interior commercial applications, a qualified floor maintenance contractor is recommended for routine cleaning.

## **WARRANTY**

This product is warranted to be of uniform quality within manufacturing tolerances. Data provided is only intended for those possessing necessary training and skills to use products in a safe and responsible manner. Since control is not exercised over its use, no warranty, expressed or implied, is made as to the effects of such use. Seller and manufacturer obligations 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.

***Additional product information, technical bulletins, msds sheets and specifications are available online at [www.hpspartacote.com](http://www.hpspartacote.com) or through one of our HP Spartacote, Inc. certified dealers. For additional assistance with specifications, training or technical issues, contact HP Spartacote, Inc. at 866-966-1DAY(1329) or via email at [contact@hpspartacote.com](mailto:contact@hpspartacote.com).***