Product Data Sheet

Sparta-flex® by HP Spartacote®

Available in New Zealand from
Floor Masters Ltd
www.floormasters.co.nz

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

www.hpspartacote.com

Product Data

Type of Material: Polyaspartic Aliphatic Polyurea
Recommended Dry Film Thickness: 2 to 6 mils per coat
Shelf Life: 12 months unopened. Store at 40ºF to 100ºF 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

General Information

Sparta-Flex® 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 and metal. It can be applied over decorative concrete surfaces such as acid, color-or dye-stained, polymer-modified cementitious overlayments, or employed within seamless multi-build paint chip/quartz flooring systems. Important characteristics of Sparta-Flex® are its excellent penetration and bond strength, UV resistance and excellent color/gloss retention.

Sparta-Flex® 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.

Features & 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 (-30º F/-34ºC)
- 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 300ºF for random, incidental heat contact
- Meets USDA/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.

Colors

Sparta-Flex® is available in 2-levels of sheen for clear sealers/finish topcoats (Gloss, Lo Gloss) as well as a wide range of colors. Refer to Sparta-Flex® Color Chart for standard color selections. Custom colors are also available.

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 Sparta-Flex®.
- Clear sealer or finish coating over decorative concrete surfaces. Includes acid stained concrete and polymer modified overlays.
- UV-resistant sealer for exterior applications

Coverage

Solids Content	1-mil	2-mils	3-mils	4-mils	5-mils	6-mils
65%	1,040	520	347	260	208	173
72%	1,155	577	385	289	231	192

Sparta-Flex® coverage rates are contingent on solids content. Consult appropriate specification for system thickness and coating application. Theoretical square footage coverage is listed below.

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 30 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. Do not use Alcohol to clean or tack substrate or previous coat prior to application. Any repairs must be addressed prior to application and should be repaired in accordance with ICRI standards.

A moisture emission measurement system is necessary to asses 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.

Mixing

Note:
Maintaining a consistent storage temperature prior to application will maximize working time.
Pigmented Coatings:
Add full contents of aspartic resin tint pack directly into short filled Part A Tint Base. Mix pigment into Part A with a slow speed drill mixer for 2 minutes to fully disperse the resin pigments. Failure to properly mix pigments may lead to an inconsistent finish and reduced product performance.
Mixing Part A with Part B:
Mix part A and part B in equal parts (1:1) using a clean, dry working vessel. Stir gently with a wooden stir stick, avoid over-mixing or creating a vortex that would introduce air. 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. Product may be thinned up to 10% with Xylene. Do not use alcohol at any point during application of the system.

Application

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-Flex® 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 Xylene 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.

Warranty

HP Spartacote® warranties that this product will be within consistent quality and manufactured in accordance with manufacturer’s specifications. Given that the manufacturer holds no control over the use, HP Spartacote® does not warranty the installation Sparta-Flex®. Manufacturer’s warranty shall be limited to the refunding of any materials determined to be defective.

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