

PRODUCT DATA SHEET
SPARTA-FLEX® BY HP SPARTACOTE®



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

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 40°F to 100°F in a covered area (out of the sun)

Pot Life:* 20 to 25 minutes

Minimum Re-coat:* 1-Hour, minimum

Light Foot Traffic:* 2 to 4 hours minimum

Maximum Re-coat:* 36 hours (contact manufacturer)

Mixing Ratio:* 1.0 part A; 1.0 part B by volume

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. As an industrial maintenance coating, this material is self-priming and may be applied in single or multiple coats by brush, roller, broom, 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 concrete, as a pigmented high performance coating, or employed within seamless multi-build chip/ quartz flooring systems. Important characteristics of Sparta-Flex® are its excellent penetration and bond strength, UV resistance and superior 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, 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 (-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 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.

COMMON USES

- High performance industrial maintenance coating for use over concrete or steel
- 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, polymer modified overlays and dyed concrete.
- UV-resistant sealer for exterior applications

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COVERAGE

Solids Content	1-mil	2-mils	3-mils	4-mils	5-mils	6-mils
65% (low gloss)	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 application guide for system thickness and coating application.

SURFACE PREPARATION

Always mechanically prepare (profile) surface. 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 100-grit profile. Recommended surface profile is a CSP-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 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 75%. 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. Material should be kept in a cool dry place prior to application.

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

Sparta-Flex® may be applied by roller, squeegee or broom. **Please consult application guides for specifics. For roller applications, the roller must have an industrial grade phenolic resin core with a synthetic nap or lambs-wool cover. A 3/8" nap size is recommended. 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® warrants 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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