FP Slow Cure Polyaspartic 5020

TECHNICAL DATA SHEET

PRODUCT DESCRIPTION

FP Slow Cure Polyaspartic 5020 is a two-component, slow-curing, aliphatic polyaspartic topcoat designed for exceptional abrasion, chemical, and stain resistance. Available in a clear gloss finish, it can also be pigmented using Florid Polymer Pigment Packs.

Once cured, it forms a durable, inert surface with outstanding impact, abrasion, and chemical resistance. The FP Slow Cure Polyaspartic Topcoat offers excellent adhesion to Florida Polymers epoxy systems and resists mild chemical exposure, making it an ideal finish coat for long-lasting performance.

FP Slow Cure Polyaspartic is an upgraded finish option for Florida Polymers products and systems, designed for facilities exposed to heavy foot traffic, forklift traffic, and chemical exposure. It is VOC compliant in all states and provinces across North America.

For detailed technical specifications or application-specific guidance, please consult with a Florida Polymer Representative.

BENEFITS

- Advanced Composition
- LEED requirements
- Low maintenance
- Lower odor than most Polyaspartics
- Excellent abrasion resistance
- Superior Mechanical and Chemical properties
- UV Stable
- Chemical Resilience
- Seamless Coating
- Resistant to hot tire peel
- High Sheen
- Impermeability / Mold resistant
- VOC and EPA Compliant in all States and Canadian Provinces CIFA, USDA,
- FDA, Food Safety Compliant

APPLICATIONS

The chemical and mechanical properties of FP Slow Cure Epoxy provides excellent results for several applications.

- Industrial Flooring
- Garage floors
- Kitchens
- Public Transit Facilities
- Boutiques and Showrooms
- Pharmaceutical
- Commercial Centers
- Schools
- Commercial Spaces
- Healthcare Facilities
- Food and Beverage Industries
- Residential Projects
- Heavy Manufacturing
- Aerospace Facilities
- Electronics Manufacturing
- Warehouses
- Or any other areas where superior quality protection is required

PACKAGING

FP Slow Cure Polyaspartic 5020 kit consists of two parts, A & B.

Ratio 1:1	Part A	Part B
2 Gallon Kit	1 Gallons	1 Gallon
10 Gallon Kit	5 Gallons	5 Gallons

COLORS

- CLEAR
- Color Packs Available

TESTING

All surfaces are not the same. It is recommended to create a sample area before starting the project. The test should be performed on site, using the method offered by your Florida Polymer Products representative to ensure good adhesion and color. A sampling area should also be performed on existing coatings to determine if there are any contaminants or if delamination will occur.

CHECK CONCRETE MOISTURE

Concrete must be dry before application of this floor coating material. Concrete moisture tests are required, either ASTM F1869 (calcium chloride) or ASTM F2170 (in situ RH probe) or any other methods approved by Florida Polymer Products Corp.

TEMPERATURE AND HUMIDITY

Floor and material temperature must be at or above the published Technical Data Sheet requirements. Dew point must be 7°F (3°C) or more below the temperature. Do not apply if humidity is at or above 80%.

SURFACE PREPARATION

Surface preparation in accordance with: ICRI Guideline No. 310.2R Selecting and Specifying Concrete Surface Preparation for Sealers, Coatings, Polymer Overlays, and Concrete Repair. The pH of the concrete substrate should be at 9 or above.
All bond-breaking material must be removed.

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FLORIDA POLYMERS
HIGH QUALITY FLOOR COATINGS

PHYSICAL PROPERTIES

PROPERTIES	VALUES	REFERENCES
Compressive Strength	9,500 psi	ASTM D 695
Flexibility, 1/8" mandrel:	PASS	ASTM D 1737
Tensile Strength:	6,500-7,500 psi	ASTM D 638
Adhesion:	Concrete - primer: >550 psi (Substrate ruptures)	ASTM D 4541
Taber Abrasion:	75-80Mgs	ASTM D 4060
Gloss	95+	ASTM D 523
Hardness (Shore D): Water Absorption:	50 - 55 at full cure 0.2%	ASTM D 2240 ASTM D 570
Tear Strength	No chipping,cracking, or delaminating - 350	ASTM D 2240
Viscosity Mixed:	400 - 600 CPS	
Abrasion Resistance	25 mg loss	ASTM D 4060

PRODUCT DATA

Volumetric Ratio:	1A:1B
Solids Content:	85%
*Coverage:	150-200FT2/Gal@8-10 Mils thickness
**Application Temperature:	Min 60°F <50%Rh Max 90°F <50%Rh
Min Substrate Temperature: Max Substrate Temperature:	50°F 86°F
Thinner:	Not required
Recoat Time:	24 hours
Working Time:	35 minutes (at 70°F <50%Rh)
Tack Free:	10-12 hours (at 73°F <50%Rh)
Light Foot Traffic:	24 hours (at 73°F <50%Rh)
Foot Traffic:	48 hours (at 73°F <50%Rh)
Vehicular Traffic:	72 hours (at 73°F <50%Rh)
Max Curing Time for resurfacing:	24 hours (at 73°F <50%Rh)
Shelf Life:	12 months
USDA Food & Beverage & CFIA:	Meets the requirements

*Coverage will differ depending on the quality, porosity of the substrate, thickness, and application methods.

CHEMICAL RESISTANCE

Chemical	Results @77°F
Acetic Acid 100%	C
Acetone	C
Ammonium Hydroxide 50%	RC
Benzene	C
Brine Saturated H20	R
H20 Chlorinated	R
Clorox (10%) H20	R
Diesel Fuel	RC
Gasoline	RC
Gasoline / 5% MTBE	RC
Gasoline / 5% Methanol	RC
Hydrochloric Acid 20%	R
Hydrochloric Acid 10%	NR
Hydraulic Fluid (Oil)	RC
Isopropyl Alcohol	R

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Chemical	Results @77°F
Lactic Acid	RC
MEK	RC
Methanol	R
Methylene Chloride	C
Mineral Spirits	RC
Motor Oil	R
MTBE	C
Muriatic Acid 10%	R
NACL / H20 10%	R
Nitric Acid 20%	NR
Phosphoric Acid 10%	R
Phosphoric Acid 50%	NR
Potassium Hydroxide 10%	R
Potassium Hydroxide 20%	R, DIS
Propylene Carbonate	RC

Chemical	Results @77°F
Skydrol	C
Sodium Hydroxide 25%	R
Sodium Hydroxide 50%	R, DIS
Sodium Bicarbonate	R
Stearic Acid	R
Sugar / H20	R
Sulfuric Acid 10%	R
Sulfuric Acid >50%	RC
Toluene	R
1,1,1 - Trichloroethane	C
Trisodium Phosphate	R
Vinegar / H20 5%	R
H20	R
H20 - 14 Days @179.6	R
Xylene	RC

R = Recommended / little or no visible damage
RC = Recommended conditional / some effect, swelling or discoloration
C = Conditional / Cracking-wash within one hour of spillage to avoid affects
NR = Not Recommended
DIS = Discolorative

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HIGH QUALITY FLOOR COATINGS

APPLICATION INSTRUCTIONS

1. **Temperature Considerations During Application:** When applying FP Slow Cure Polyaspartic 5020, it is crucial to consider temperature changes. Always apply the coating during decreasing temperatures. Concrete is a porous material that traps air; as temperatures rise (typically in the morning), the trapped air expands, which can result in gas escaping through the coating, leading to imperfections. For optimal results, especially in exterior applications, it is safer to apply the coating in the late afternoon when temperatures are on the decline.

2. **Ambient Temperature Recommendations:** For optimal performance during application, ensure the ambient temperature is maintained between 50°F and 86°F <50% Rh. Adhering to this temperature range helps achieve proper curing and overall product efficacy.

Mixing Instructions: Prepare the resin by following the previously outlined mixing instructions: Combine One (1) part A (resin) with One (1) part B (hardener) by volume. Use a drill equipped with a mixing paddle to ensure a thorough and homogenous blend before application.

3. **Application Technique:** Apply the product at a maximum coverage rate of 220 ft² per gallon when clear to avoid milking. Pour the mixture onto the surface in a continuous ribbon pattern, ensuring an even distribution. Walk steadily while pouring to maintain a consistent flow, continuing this process until the bucket is completely emptied.

4. **Avoid Dripping:** Ensure that the bucket is never allowed to drip onto the floor during application. Any excess unmixed material that drips may result in improperly cured areas, leading to defects in the final coating. Ensure that the contents are poured completely, and the container is promptly removed. Handle the bucket with precision to maintain a consistent and high-quality finish.

5. **Squeegee Application Technique:** Using a squeegee attached to an extension, spread the FP SC Polyaspartic evenly over the substrate as thinly as possible to thoroughly wet the surface and ensure even coverage. When applying a single coat over an existing layer of FP SC Epoxy, maintain a coverage rate based on system's recommended thickness to achieve consistent results.

6. **Roller Application Technique:** Use a 3/8" Nap roller to evenly apply the FP SC Polyaspartic. Roll systematically forward and backward across the surface, ensuring smooth, consistent coverage. Apply steady pressure throughout the process to achieve optimal results and a uniform finish.

7. **Final Step - Cross-Rolling for a Smooth Finish:** Complete the application process by backing up with the squeegee in the opposite direction of the initial pass outlined in step 6. This ensures even distribution and eliminates streaks or inconsistencies for a flawless finish.

8. **Surface Preparation – Cleaning and Smoothing:** Thoroughly clean and sweep the floor to remove any debris or dust. Identify and sand down any high points or imperfections to ensure a smooth, even surface. This step is crucial for achieving optimal adhesion and a flawless finish for the coating.

9. **Additional Protection Requirement:** If enhanced chemical resistance, abrasion durability, or anti-slip protection is needed, consult your Florida Polymer Products representative for tailored recommendations. They can guide you on suitable products or solutions to meet specific project requirements.

PRODUCT LIMITATIONS

Concrete slabs at ground level naturally emit invisible moisture vapor. To ensure coating integrity, the permissible moisture emissions must not exceed 3 lbs./1,000 ft² over 24 hours (<4%), as determined by the calcium chloride test. Alternatively, a relative humidity (RH) test, compliant with ASTM F2170, can be used to assess moisture vapor levels. The RH test results should remain below 80%. If either test reveals moisture levels above these thresholds, blistering and delamination of the coating may occur.

It is essential to perform a calcium chloride or RH test to evaluate the concrete's moisture levels before application. Should the RH exceed 80% or the calcium chloride test result surpass 3 lbs., a concrete moisture vapor control system must be installed prior to applying the coating system.

Humidity Control System Recommendation: For cases where humidity levels exceed acceptable limits, it is recommended to use; Florida Polymer Moisture Vapor Barrier. This MVB system meets the F3010 specification as verified by E96 test results. For further information or guidance, please contact a Florida Polymer Products representative.

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Joint and Crack Treatment: To minimize the risk of cracking in the coating system caused by concrete movement or separation, proper treatment of joints and cracks is essential prior to application.

- **Control Joints & Random Cracks:** These should be either sawn or chiseled before being filled with crack filler to ensure stability and smoothness.

- **Construction/Cold Joints:** These joints, where two slabs meet and may experience movement, must be addressed before coating. After the coating has been applied and fully cured, saw off the coating over the construction joints and fill them with an elastomeric joint filler for flexibility and durability.

- These procedures are critical for maintaining the integrity and longevity of the coating systems.

For further information or guidance, please contact a Florida Polymer Products Representative.

- Higher temperatures and humidity levels may reduce working time

- Lower temperature levels may slow the drying and curing process.

- Tire transfer may occur when products are subjected to excess heat and humidity levels. Appropriate ventilation is recommended to minimize the curing period and maximize proper evaporation.

DISPOSAL

- Excess material of (A and B) should be mixed and allowed to cure. Cured product may be disposed without restriction.

- Uncured materials should be stored in a suitable and sealed container and may be disposed in accordance with provincial, State, municipal, and /or Federal regulations.

⚠ SAFETY WARNING

Avoid contact with the skin. Some people may be allergic to epoxy resin. Protective gloves, eyewear, protective clothing, and adequate ventilation are recommended.

For additional information and advice on the safe handling, storage and disposal of chemical products, please contact a Florida Polymer Products Representative.

– KEEP OUT OF REACH OF CHILDREN –

- FOR INDUSTRIAL USE ONLY -

– KEEP FROM FREEZING –

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DISCLAIMER

All guidelines, recommendations, statements, and technical data contained herein are based on information and tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty, either expressed or implied. It is the user's responsibility to satisfy himself, by his own information and test, to determine suitability of the product for his own intended use, application and job situation and user assumes all risk and liability resulting from his use of the product. We do not suggest or guarantee that any product limitations are the only ones which may exist. Neither Seller nor Manufacturer shall be liable to the buyer or any third person for any injury, loss or damage directly or indirectly resulting from use of, or inability to use, the products. Recommendations or statements, whether in writing or oral, other than those contained herein shall not be binding upon the Manufacturer, unless in writing and signed by an authorized corporate officer of Manufacturer. Technical and application information is provided for the purpose of establishing a general profile of the material and proper application procedures. Test performance results were obtained in a controlled environment and Manufacturer makes no claim that these tests or any other tests accurately represent all environments. Manufacturer is not responsible for typographical errors.

Limited Warranty

Before applying any material, please ensure you have thoroughly reviewed all relevant information found in the General Guidelines, Technical Data Sheets, Guide Specifications, and Safety Data Sheets (SDS). These products are intended for professional use only and should be applied by trained professionals or individuals with previous experience using the Manufacturer's products, in compliance with the Manufacturer's guidelines, specifications, SDS, sound engineering practices, and applicable regulatory standards.

Please note that published technical data and instructions may change without prior notice. For the most current technical data, instructions, and project-specific recommendations, please reach out to your local Manufacturer representative or visit our website.

The Manufacturer guarantees that its products will be free from manufacturing defects and will conform to the published physical properties specified in the product's Technical Data Sheet (TDS) at the time of application. The sole responsibility of the Seller and Manufacturer is limited to replacing any defective portion of the product. No other warranties, either expressed or implied—including warranties of merchantability or fitness for a specific purpose—are provided by the Manufacturer in relation to this product.

The Manufacturer is not liable for any damages, including indirect or consequential damages, resulting from any alleged breach of warranty, whether expressed or implied. Additionally, the Manufacturer is not responsible for any infringement of patents held by others arising from the use of this product.

This warranty does not apply to products that have been modified, altered, improperly stored, handled, abused, or misused. The Manufacturer also does not provide warranties for parts, accessories, or products not supplied by it, nor does it guarantee the workmanship of any individual or company installing its products.

Furthermore, there are no warranties regarding appearance, color, fading, chalking, staining, shrinkage, peeling, normal wear and tear, or improper application by the applicator. Damage resulting from abuse, neglect, insufficient maintenance, acts of nature, or physical movement of the substrate or structural defects is also excluded from this limited warranty.

The Manufacturer reserves the right to conduct performance tests on any material claimed to be defective prior to any repairs made by the owner, general contractor, or applicator. This warranty is governed by the laws of California, without regard to any conflict of laws.

TECHNICAL SUPPORT

For technical support, please call (407)308-2898. For further inquiries or assistance, users may also contact Florida Polymer Products Corp. via email at info@floridapolymer.com