VERSATILE
HIGH-PERFORMANCE COATINGS

5100 100% SOLIDS POLYASPARTIC

Technical Install Guide

PRODUCT DESCRIPTION:

5100 Polyaspartic 100% Solids Clear Topcoat is a fast-drying topcoat designed for industrial, commercial, and residential concrete floors. The high solids content allows for significant film thickness, providing a clear, smooth, and glossy finish. Its lower viscosity and extended pot life make it easier to apply compared to traditional 100% solids polyaspartic coatings.

Suitable for areas where solvent odors are unacceptable, such as strip malls and other shared spaces, 5100 Polyaspartic is ideal for installers seeking a high-performance, easy-to-apply topcoat. With zero VOC, it combines exceptional durability with outstanding results, ensuring a superior finish.

APPLICATIONS:

- Residential Floors
- Commercial Floors
- Industrial Floors
- Exterior Applications

ADVANTAGES:

- Very High-Build
- Low VOC
- 100% Solids
- High-Gloss
- Non-Yellowing
- SCAQMD Complaint

LIMITATIONS:

- Requires Moisture Vapor Primer for on-grade slabs with MVE of 3 Lbs or higher.
- Will not bridge cracking.
- Products are combustible; all sources of ignition should be turned off, and proper ventilation should be used.

COLORS:

CLEAR

PACKAGING:

2 Gallon Kit	10 Gallon Kit

COVERAGE RATES:

OVER CONCRETE SUBSTRATE		
1ST COAT	150 FT² / GAL @ 10.7 MILS WET FILM	
2ND COAT	175 FT² / GAL @ 9.1 MILS WET FILM	
OVER FLAKE SYSTEM		
1/4" FLAKE	**1/8" FLAKE**	**1/16" FLAKE**
150 FT² / GAL	125 FT² / GAL	100 FT² / GAL

TECHNICAL PROPERTIES:

VOLUMETRIC MIX RATIO	1A:1B	
VOLUMETRIC SOLIDS	100%	
VOC	0 g/L	
POTLIFE (2 GAL MASS)	40 ± Mins @ 75°F	
WORKING TIME	20 Mins @ 75°F	
DRY TO TOUCH	3 Hours @ 75°F	
RECOAT WINDOW	3-8 Hours	
FULL CURE	5-7 Days	
SHORE D HARDNESS	ASTM D2240	75-80
ABRASION RESISTANCE	ASTM D4060	3 mg Lost
ADHESION	ACI 503R	300 PSI
GLOSS RETENTION	ASTM G154	100%
FLAMMABILITY	COMBUSTIBLE	

CHEMICAL RESISTANCE:

ACETONE	NO EFFECT
XYLENE	NO EFFECT
10% HCL	NO EFFECT
AMMONIA	NO EFFECT
DEGREASER	FAINT SPOTTING
LIQUID PLUMMER	NO EFFECT
VINEGAR	NO EFFECT
CLOROX	NO EFFECT
WINDEX	NO EFFECT
MOTOR OIL	NO EFFECT
GASOLINE	NO EFFECT
SKYDROL	NO EFFECT
HOT TIRE	NO EFFECT

STORAGE:

Store materials indoors between 50°F & 75°F

SHELF LIFE:

One year from date of manufacture

APPLICATION EQUIPMENT:

Protective Clothing	**18" Roller Frame** *SKU - 7012*
Jiffy Mixing Paddle *SKU – 7050*	**18"x3/8" Nap Roller Cover** *SKU – 7006-1*
Slow Speed Drill	**8-12 mil Notched Squeegee** *SKU – 7090-K*
Spike Shoes *SKU – 7045-D*	**Magic Trowel** *SKU – 7071-22*

SUBSTRATE REQUIREMENTS:	
CONCRETE:	Concrete must be structurally sound and free of all dirt, debris, and contaminants.
PROFILE:	Concrete shall be porous and have a Concrete Surface Profile (CSP) level between 2 & 4
MOISTURE:	The substrate shall have a Moisture Vapor Emission Rate (MVER) of 3lbs / 1000 ft^2 / 24 hr. or less
TEMPERATURE:	Ambient and substrate temps must be above 35°F and Relative Humidity should not exceed 65%

SURFACE PREPARATION:	
	Perform Moisture Test using Calcium Chloride concrete moisture test kit per ASTM F1869 (Moisture Test) (Moisture Test) 1 test/1000 ft2 is recommended.
	**Patch** all depressions, divots, and cracks using 4900 5-minute Crack Weld, 4930 Polyurea Crack & Spall Filler, or Divot Patch to reduce the ability to see the defect through the epoxy coating.
	**Concrete** should be mechanically profiled and prepared to produce a Concrete Surface Profile (CSP) level between #2 & #4 according to the (ICRI) Guideline No. 03732.

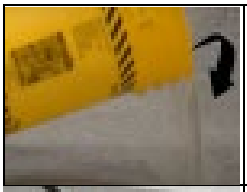
PLEASE REVIEW SAFETY DATA SHEETS (SDS) & CHEMICAL SAFETY GUIDE FOR SAFETY AND PRECAUTIONS

5100 MIXING STEPS:	
	**Pour pre-mixed A-Component and B-Component** into a clean 5-gallon bucket (If mixing bulk kit be sure to follow specified 1A:1B ratio)
	**Mix A & B Components** using a drill at a slow speed for 2 minutes.
	**Transfer mix to new mixing vessel**
	**Continue to mix** for an additional 30 seconds to ensure components are thoroughly blended.

ENVIRONMENTAL FACTORS:
Working times are affected by environmental conditions. Large masses of mixed and heated material will have a shorter pot life. **Keep material core temperatures between 50-75°F. In elevated temperatures, consider icing buckets to reduce product temperatures, and in cold climates, use pail warmers.**

5100 APPLICATION STEPS:		
COVERAGE RATES OVER CONCRETE SUBSTRATE:		
1ST COAT	150 FT^2 / GAL @ 8 MILS WET FILM	
2ND COAT	175 FT^2 / GAL @ 6.4 MILS WET FILM	
OVER FLAKE SYSTEM		
1/4" FLAKE	**1/8" FLAKE**	**1/16" FLAKE**
150 FT^2 / GAL	125 FT^2 / GAL	100 FT^2 / GAL

APPROXIMATE WORKING TIMES: 20 MINS @ 75°F

	**Pour a band** of mixed material onto the floor roughly 6-8" wide.
	**Begin spreading** with an 8-12 mil notched squeegee or Magic Trowel. Work material evenly, keeping a wet edge.
	**Perform a Single Backroll** on the surface by walking into the wet material, wearing spike shoes, and rolling perpendicular to your first application direction.
	**Allow system to dry** typically 3 hours at 75°F

CLEAN-UP:

Immediately clean up splatter marks and tools with MEK or Acetone. Clean hands and exposed skin with mild soap and water and citrus-based hand cleaners.

MAINTENANCE:

Maintain 5100 to minimum of 4 mils dry film.

DISCLAIMER:

All information provided in this technical data sheet is based on laboratory data. It is the responsibility of the customer to test the material for their application and conditions prior to using the product.

TEMPERATURE:

The product was tested at ambient temperature (75°F -77°F). Results WILL vary when the product is used at temperatures different from the testing temperature. The pot life, gel time, and cure time are generally longer for colder-temperature applications and shorter for higher-temperature applications. Physical properties are also impacted and dependent upon temperature.

SLIP RESISTANCE:

OSHA and the American Disabilities Act (ADA) have set enforceable standards for slip resistance on pedestrian surfaces. The current coefficient of friction required by ADA is .6 on level surfaces and .8 on ramps. Versatile High-Performance Coatings recommends using angular slip-resistant aggregate in all coatings or flooring systems exposed to wet, oily, or greasy conditions. It is the contractor and end users' responsibility to provide a flooring system that meets current safety standards. Versatile High-Performance Coatings or its sales agents will not be responsible for injury incurred in a slip-and-fall accident.

WARRANTY:

Versatile High-Performance Coatings guarantees that this product is free from manufacturing defects and complies with our published specifications. If the buyer proves that the goods received do not conform to these specifications or were defectively manufactured, the buyer's remedies shall be limited to either the return of the goods and repayment of the purchase price or replacement of the defective material at the option of the seller. Versatile High-Performance Coatings (herein referred to as "seller") makes no warranty, expressed or implied, regarding the use of its products. Since use of this product is beyond the seller's control, the buyer assumes all risk of use. Seller's obligation shall be to replace material if found defective. Seller shall not be liable for any damage, injury, loss, direct or consequential, resulting from the use of its products. End user must determine if substrate is suitable for coating application before installing.

TECHNICAL SERVICES:

Technical services can be obtained by contacting Versatile High-Performance Coatings directly at 214-807-6878.