

product data

SELECTION & SPECIFICATION DATA

TYPE & DESCRIPTION	GPS 700 Floor Coating is a water based epoxy floor surfacer created with a unique microporous structure that is breathable and water vapor permeable. It has superior performance with zero VOC.
ADVANTAGES	Cures quickly to form an impact and extremely abrasion resistant system, cured at temperatures as low as 50°F. Excellent adhesion to concrete, steel, and wood. Minimum down time. Sanitary, non-shrinking polymer. Easy to clean - USDA acceptable.
CHEMICAL RESISTANCE	Not affected by water, oil, brine, most acids, and alkalines. For specific recommendations, please refer contact GPS Technical Service.
USES	Can be used alone, or as part of a polymer system for resurfacing floors in food production plants, aisle ways, chemical spill containment area's, industrial production facilities, and pulp and paper mills.
GOVERNMENT AGENCY	Meets the requirements of the U.S. Department of Agriculture (USDA) for use as an incidental food contact flooring system.

FOR INDUSTRIAL USE ONLY!

PHYSICAL DATA	Working Time - approximately 45 minutes at 75°F. Potlife - 20-30 minutes at 75°F. Cure Time - hardens in 8-12 hours at 75°F. The warmer the temperature, the faster it cures. Allow a minimum cure of 24 hours for light traffic, and 96 hours for heavy traffic loads and chemical spillage. Water Vapor Permeability - 6.67×10^{-7} Water Vapor Transmission - 9.75×10^{-4} (approximately 100x the water vapor permeability and water vapor transmission of standard cycloaliphatic epoxy floor coating.) Hardness (Shore D) (14 days) - 80 Bond Strength on Concrete (psi) - 500 (Concrete Failure) Temperature Resistance - 350° F - dry service Colors - Standard Gray, Light Gray, Tile Red.
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PACKAGING / COVERAGE	700 Floor Coating - 1 GALLON KIT - covers approximately 80 square feet at 20 mils - containing the following - 1 container - Part A (resin) 1 container - Part B (hardener) 3 GALLON KIT - covers approximately 240 square feet at 20 mils - containing the following - 1 container - Part A (resin) 1 container - Part B (hardener)
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SUPPLEMENTAL PRODUCTS	740 Floor Surfacer
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SURFACE PREPARATION AND SUBSTRATES

SURFACE PREPARATION	New Concrete: must have a minimum of 28 days cure, and no curing agents or sealers shall be used. Remove oil, grease or other loose or foreign materials and contaminants. A good bonding tooth, the texture of rough sandpaper, is required to maximize adhesion, with the removal of all glaze. Examples of mechanical surface prep including, but not limited to - A. Sandblast with steel shot, fine silica, or other similar material. B. Wheel Abrader C. Scarify
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Existing Concrete: remove all loose, weak concrete, and any paint wax, oil, grease or other contaminants. Once the concrete has been cleaned and neutralized, mechanical surface preparation shall be used to provide a good bonding tooth, a texture of rough sandpaper, with the removal of all glaze. Examples of mechanical surface preparation including, but not limited to -

- A. Sandblast with steel shot, fine silica, or other similar material.
- B. Wheel Abrader
- B. Scarify

Note: Holes and depressions 3/32" or deeper should be prefilled prior to application of GPS 700. All surfaces must be dry prior to application of polymer system.

Metal Surfaces: Degrease surface prior to sandblasting. Use organic solvents, alkaline solutions, steam, hot water with detergents, or other systems that will completely remove dirt, oil, grease, etc. Blast the surface to near white SSPC-SP 10-70, or NACE No. 2 using a Venturi blast nozzle with 100psi air. To produce the 4 mil minimum anchor pattern or tooth, the blasting media used shall be a properly graded, clean, sharp angular abrasive similar to Humble Abrasive Flint S7 (6-30 mesh), Steel Grit (HG25), or Black Beauty (BB1040).

MIXING AND EQUIPMENT

MIXING

Mix Part A and B thoroughly, with a low rpm "jiffy" type mixer for 2 minutes until completely homogeneous, and spread evenly at approximately 16 mils (approximately 106 square feet per gallon).

Important! - The working life of the mixed blend is approximately 45 minutes. Mixed materials remaining in a container will produce heat. Keep away from combustible materials. Do not reseal mixed containers!

APPLICATION AND SAFETY

APPLICATION

Caution! Application in direct sunlight, resulting in rising surface temperature, may cause blistering of the materials due to expansion of entrapped air or moisture in the concrete. Concrete surfaces that have been in direct sunlight must be shaded for 24 hours prior to application, and remain shaded until the initial set of the polymer. When the substrate temperature is rising, it is recommended to postpone application.

Minimum application temperature: Do not apply when substrate temperature is below 50°F.

For application, the 700 Floor Coating & Hardener should be at a minimum temperature of 75°F. Always spread the material as soon as blended. The pot life is approximately 20-30 minutes, and the working life is approximately 45 minutes.

BASE COAT: Spread the mixed system with a squeegee and back-roll with a medium (3/8") nap roller at a rate of 16-20 mils (80-100 square feet per gallon), per coat. 2 coats are REQUIRED with a full broadcast (silica) to provide good film continuity.

SEED COAT: Required - immediately broadcast a good, clean, graded 30 mesh silica sand or comparable aggregate (not supplied) into the base coat at a rate of approximately 1/2# per square foot, or until the base coat is completely covered without any visible wet or shiny spots. Allow the polymer to cure until the loose sand can be removed without disturbing the base coat.

TOPCOAT: Spread the mixed system with a squeegee and back roll with a medium (3/8") nap roller at a rate of 16-20 mils (80-100 square feet per gallon).

CURE TIME - Will harden in approximately 8-12 hours at 75°F. The warmer the temperature, the faster the cure. Allow 24 hours, at 75°F, for light traffic, and 96 hours for full cure.

CLEAN-UP - Cured or hardened 100 is almost impossible to remove. Clean tools and equipment immediately with hot soapy water, or a mixture a acetone and ethanol.

SAFETY

Observe good personal hygiene. Certain personnel may be sensitive to various types of resins which may cause dermatitis. Avoid contact with skin and breathing of vapor. Read and follow all caution statements on product info bulletin, material safety data sheet and container labels for this product. This bulletin provides standard information for the system and application procedure. Since varying application conditions may not be covered, consult GREENSTONE Technical Service Department for further information.