Technical Data E-GREEN Polyurea

DESCRIPTION

Floorguard Products® E-GREEN is two component 100% solids, plant-based Polyurea coating that is environmentally friendly and VOC Compliant. E-GREEN exhibits superior bonding properties, has virtually no odor, and has fantastic viscosity, exhibiting amazing workability. Because of its supreme flexibility, when used as a basecoat, the floors will have exceptional chip and impact resistance. E-GREEN is ideal for one day systems because of its fast cure rate.

Recommended for:

Any area that requires a fast-curing base coat to achieve a 1 day system.

Considerations

- Do not store product in direct sunlight
- Surfaces must be dry and without contaminants
- Application Temperature 0-90°F with relative humidity below 85%
- Due to quick cure rate and dry time, it's suggested to thoroughly evaluate the product before using

Chemical Resistance

Reagent	Rating
Acetic Acid-5%	С
Xylene	С
Mek	А
Ethyl Alcohol	В
Skydrol	В
50% Sodium Hydroxide	E
10% Sulfuric Acid	С
10% Hydrochloric Acid	С
1,1,1 trichloreothane	В

A-not recommended, B-2 hour term splash spill, C-8 hour term splash spill, D-72 hour immersion, E-long term immersion

Physical Properties

Solids by Weight	100% (±3%)
Solids Content, %vol	100% (±3%)
VOC	Zero lbs per gallon
Colors	Clear or Pigmented. See Floorguard Products® Color Chart
Recommended Film Thickness	8-9 mils wet depending on system
Coverage per Gallon	170-200 ft ² per gallon depending on system
Packaging Information	3 gallon and 15 gallon kits
Mix ratio	2 parts A to 1 part B by Volume
Tear Strength	350 ASTM 2240
Shelf Life	12 months in unopened containers
Flexibility 1/8" Mandrel	Passed. ASTM D1737
Impact Resistance	260/295 inch pounds. ASTM D2794
Tensile Strength	3,700 psi@ ASTM D412
Ultimate Elongation	300%
Adhesion	>500 psi ASTM D4541
DOT Classifications	Part A: Not Regulated Part B: UN 2735, Amines, Liquid, Corrosive, N.O.S, Class 8, II
Viscosity	<1000 centipoise typical

Cure Schedule: (70°F)

Working time	20-25 minutes
Tack free (dry to touch)	2-4 Hours
Recoat or topcoat	2-4 Hours (screen floor after 10 hours of curing)
Light foot traffic	2-4 Hours
Full Cure (Heavy Traffic)	24 Hours

Limitations

- Colors or gloss may be affected by high humidity, low temperatures, chemical exposure, or exposure to lighting such as sodium vapor lights.
- Do NOT add fumed silica to this product to make gel
- Do not expose this product to water until fully cured
- Substrate temperature must be 5°F above dew point
- All new concrete must be cured for at least 30 days
- Physical properties are typical values and not specifications
- Light or bright colors (white, safety yellow, etc. may require multiple coats or a suitable color coordinated primer to achieve a satisfactory hide
- Always apply a test patch to determine product suitability and adhesion performance for your proposed application method and procedures
- Colors may vary from batch to batch, therefore use only product from the same batch for an entire job.

MIXING AND APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION: Preparation methods may vary depending on the system being applied. For a complete system thickness that is higher than 10 mils dry, a fine brush blast (shot blast), is recommended. To assure a trouble-free bond, all dust, oil, dirt, foreign contaminants and laitance must be removed. It is recommended to perform a moisture test to determine that the concrete has an appropriate vapor barrier. This can be done by placing a 4'X4' plastic sheet on the substrate and taping down the edges. Once 24 hours has passed, and the substrate is still dry below the plastic sheet, then the substrate does not show signs of eventual hydrostatic pressure problems that may later cause bonding issues. This test does not guarantee that there may not be future hydrostatic pressure issues.

PRODUCT STORAGE: Product must be stored in an area that will bring the product to room temperature prior to using. Continuous storage should be between 60- and 90-degree F. Do not store product in trucks or trailers where material can get hot.

PRODUCT MIXING: This product has a two to one mix ratio by volume. Because it is a fast curing product, it's recommended to mix no more than 1.5 gal mixes. It is very important to always pre-mix the Part A. Once it's been mixed, then add the appropriate amount of pigment, and mix again. Once the Part B is added, Mix for no more than 30 seconds, mixing from top to bottom. Do not mix for over a minute, the curing process will begin and cut into your work time. Improper mixing may result in product failure. Applying the product beyond the usable pot life can result in surface irregularities. Once it's mixed, immediately pour the ribbon on the floor, never let the material sit in the bucket or in a mass on the floor. Begin squeegeeing immediately.

Product Application: Once the ribbon has been poured, use a flat squeegee to spread out the product, then back roll using a 3/8" nap roller cover. Because it's a fast-curing product, we recommend squeegeeing the material, then back rolling, and cutting out last. There will be enough time to broadcast into the material- it will accept the aggregate. It is more important to squeegee and back roll first so the product levels out easier. Relative humidity can have a dramatic influence on the curing characteristics. The product will dry quicker and have less working time when the relative humidity is higher while a lower relative humidity will lengthen the dry time and working time. For those with limited experience working with fast curing resins, it is recommended to make small batches initially. Do not pour the ribbons in different sections of the floor, because by the time you get to the furthest ribbon, the curing process has already begun because it's in a mass. Watch our YouTube videos for a visual on pouring and squeegeeing the ribbons.

Recoat or Top coating: Installing multiple coats of this product is acceptable. Refer to the cure schedule as a guideline to follow. It is best to test the coating before recoating or top coating. This is done by pressing your thumb on the coating to ensure a fingerprint impression is not visible. If there is no impression visible, then coating the floor can be done. PLEASE NOTE: colder temperatures require longer cure times before product can be recoated. Prior to coating the floor, make sure there are no contaminants. If contaminants or a blush exists, remove with a standard detergent cleaner and ensure floor is clean and dry prior to coating.

Cleanup, Floor Cleaning and Restrictions: Use solvents for cleanup. When cleaning the floor, CAUTION! Some cleaners may affect the color of the installed floor. Test each cleaner used in a small area, ensuring no damage occurs. Restrict the use of the floor to light traffic and non-harsh chemicals until the floor is fully cured, refer to the cure schedule. Allow the floor to remain completely dry during the curing process.

Warranty: Floorguard Products® warrants that our products are manufactured to strict quality assurance specifications and that the information supplied by us is accurate to the best of our knowledge. Such information supplied about our products is not a representation or a warranty. It is supplied on the condition that you shall make your own tests to determine suitability of our product for your particular purpose. Listed physical properties are typical and should not be construed as specifications. NO WARRANTY IS MADE, EXPRESSED OR IMPLIED, REGARDING SUCH OTHER IFNORMATION, THE DATA ON WHICH IT IS BASED, OR THE RESULTS YOU WILL OBTAIN FROM ITS USE. NO WARRANTY IS MADE, EXPRESSED OR IMPLIED, THAT OUR PRODUCT SHALL BE FIT FOR ANY PARTICULAR PURPOSE. NO WARRANTY IS MADE THAT THE USE OF SUCH INFORMATION OR OUR PRODUCT WILL NOT INFRINGE UPON ANY PATENT. We shall have no liability for incidental or consequential damages, direct or indirect. Our liability is limited to the net selling price of our product or the replacement of our product, at our option. Acceptance of delivery of our product means that you have accepted the terms of this warranty whether or not purchase orders or other documents state terms that vary from this warranty. No representative is authorized to make any representation or warranty or assume any other liability on our behalf with any sale of our products. Our products contain chemicals that may CAUSE SERIOUS PHYSICAL INJURY. BEFORE USING, READ THE MATERIAL SAFETY DATA SHEET AND FOLLOW ALL PRECAUTIONS TO PREVENT BODILY HARM.