



PLEXICREST-P POLYESTER POLYURETHANE GLOSS FINISH

DESCRIPTION

PlexiCrest-P Polyester Polyurethane Gloss coating system is the latest, most advanced technology in coatings for interior/exterior concrete, exterior metal structures, construction industries, and equipment protection. The finished system displays exceptional moisture and abrasion resistance, while the hard slick film is easy to clean. PlexiCrest-P has outstanding flatness, incredible weathering characteristics and exceptional UV resistance, providing extended service life compared to conventional urethane coating systems. Typical applications would be over properly prepared concrete or metal surfaces over epoxy systems to provide enhanced weathering and UV resistance.

Product Specifications

Material Type	Modified Polyurethane
Solids Content	60% by volume - White; 50% by volume - Clear
Coverage (Estimated)	336 sq. ft. per gallon 2.0 mil DFT (30% loss factor) - White 280 sq. ft. per gallon 2.0 mil DFT (30% loss factor) - Clear
Number of Coats	One @ 2.0 mils DFT
Application Method	Airless spray preferred, conventional spray acceptable, may be brushed in small areas
Thinner	MAK (slow) or MIBK (fast)
Clean-Up solvent	MAK, MIAK, MIBK
Shelf Life at 75F	One year from date of manufacture, unmixed
Dry Time at 75F	4 hours tack free; 24 hours hard; 7 days full cure
Temperature Limits	300F intermittent dry heat
Flash Point (SETA)	93F
Color, Gloss	White and Clear, high gloss (most colors available)
Pot Life	3 hours @ 70F (24C)
Mixing Ratio	2 to 1 by volume
VOC Content	2.8 pounds / gallon - White 3.5 pounds / gallon - Clear
Shipping Information	Approx 12.25 pounds / gallon including container - White Approx 10.0 pounds / gallon including container - Clear
Freight	PAINT, FLAMMABLE LIQUID, UN1263

Limitations

Apply coating only when surface temperature is more than 5°F above the dew point temperature of the surrounding air and the relative humidity must remain below 85%. This 5°F differential is necessary to prevent condensation or moisture on the surface. Apply this coating system only when the temperature of the ambient air and the receiving surface is between 50°F and 90°F. For optimum application properties, the temperature of the stored material should be between 50°F and 80°F prior to mixing and application. Maintain unmixed material in closed containers in protected storage at 40°F to 100°F out of direct sunlight or rain

Physical Property	Test Method	Result
Impact Resistance	ASTM D-2794	>160 in.-lb.
Solids by volume		65+
Adhesion	ASTM D-4541	550 psi
Hardness	ASTM D-3363	4H
	ASTM-D2134	40+
QUV	UVB-373/1500hrs	10%
Flame Spread/NFPA-101	ASTM E-84	Class A
Elongation	ASTM D-2370	7%
Tensile Strength	ASTM D-2370	7,500 psi
Coefficient of Friction	ASTM D-2047	>0.6
Abrasion Resistance CS17 wheel (1000g load) 1000 Cycles	ASTM D-4060	14 mg loss

Surface Preparation

Good surface preparation and cleaning of the substrate is essential to a satisfactory coating system. All surfaces to be coated should be dry, clean, and free of all contaminants.

Ferrous Metal: Abrasive blast steel to SSPC-SP 6 to SSPC-SP 10 "Commercial Blast" to "Near White Metal Blast" with a surface profile of 1.5 to 2.0 mils (25 to 50 microns). NOTE: On old or previously finished surfaces, the degree of cleaning required prior to blast cleaning is dependent upon the condition of the substrate. Brush apply one coat of polyamide primer over welds, corners and crevices. Apply a full coat of polyamide primer over entire area to 3.0 mils DFT upon completion of the brushed areas. Apply primer to all areas as soon as possible after blasting but not longer than eight hours. Check dry film thickness. All areas must have a minimum coating of 3.0 mils DFT of primer. Areas with less than 3.0 mils DFT of primer should have an additional coat of primer or intermediated applied. Some specifications will require two coats of primer/intermediate at 2.0 to 4.0 mils DFT each to assure proper coverage with a total DFT of primer/intermediate to be 4.0 to 8.0 mils. Apply PlexiCrest-P at 2.0 to 3.0 mils DFT to obtain a total dry film thickness of the coating system of 5.0 to 8.0 mils.

Galvanized Metal: Remove oil and prime with Pretreatment (Wash) Primer such as DOD-P-15328D or equivalent.

Aluminum: Clean thoroughly and etch with phosphoric acid based cleaning solution. Rinse well and allow to dry. Prime with a polyamide primer.

Fiberglass: Must be clean, dry, properly cured and free from all surface contaminants. Hand or mechanically sand entire surface until smooth and to remove any gloss. Solvent wipe surface with MAD, MIBK, MED or Acetone, turning rag continuously to remove all sanding dust. Repeat if necessary to assure a clean dry surface. Apply 1 or 2 coats of polyamide epoxy primer prior to PlexiCrest-P finish.

New Concrete: Surfaces should be made free of oil, grease, water, and other contaminants that may inhibit bonding. This can be achieved by chemical cleaning. Abrasive blast, high-pressure water blast, or acid etch concrete to remove laitance and obtain uniform surface texture, exposing fine aggregate resembling coarse sandpaper.

Old Concrete: Mechanical methods should be utilized to remove laitance, old paints, protective

coatings, and attacked or delaminated concrete. Surfaces should be free of oil, grease, water, and other contaminants that may inhibit bonding. This can be achieved by chemical cleaning. Abrasive blast, high-pressure water blast, or acid etch concrete to obtain uniform sound substrate. All cracks should be repaired with an epoxy paste.

Mixing

PlexiCrest-P is a two component coating supplied in two separate containers. Part A (base) material should be thoroughly mixed with mechanical agitation and Part B (activator) should be lightly shaken prior to mixing. Pour contents of Part B into Part A while under light agitation and stir well for 3 to 5 minutes prior to application. No induction time is required, just thorough mixing of the mixed materials. The coating should be kept covered at all times after mixing and during application to prevent contamination. Usable pot life depends on the temperature of the material but will be about 3 hours @ 70°F. NOTE: This material is moisture sensitive. Any introduction of moisture or water into the material during mixing will shorten usable pot life drastically.

Thinning

PlexiCrest-P, when mixed, should be ready to apply. Minimal field thinning for application should be required. If thinning is required, use only the recommended thinners. If thinning is necessary, thin up to approximately 10%, maximum per gallon.

Application

PlexiCrest-P is designed for roller, brush, or squeegee application. Use of an airless spray unit, conventional spray, or HVLP spray is recommended for large areas. No special system for cleaning or repairing is required. Steel surfaces should be abrasive blasted and primed. It is desirable to limit the area blasted to allow the application of the primer coat during the same shift. No longer than eight hours should elapse prior to the application of the prime coat.

Safety

Safe storage, handling, and use dictate that adequate health and safety precautions are observed with this product. User is specifically directed to consult the current Material Safety Data Sheet for this product as well as precautions contained on product labeling.

Notice: The technical data contained herein are true and accurate to the best of our knowledge. All products are offered and sold subject to Plexi-Chemie Standard Conditions of Sale. Published technical data and instructions are subject to change without prior notice.