PSX® 700

July 2013
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DESCRIPTION

Engineered Siloxane

PRINCIPAL CHARACTERISTICS

- Unique, high gloss epoxy siloxane
- Virtually HAPs free, ultra-low VOC
- High durability in challenging environments
- Abrasion resistant
- Resists dirt pickup, easily cleaned
- Can be applied directly to zinc primers as a 2-coat system
- Can be applied direct-to-steel in ISO 12944 C1-C3 environments

COLOR AND GLOSS

Gloss

Standard and Custom Colors available

Yellow, red, and orange colors will fade faster than other colors due to the replacement of lead-based pigments with lead free pigments in these colors.

BASIC DATA

Volume solids	90% ± 3%
VOC*	0.7 lbs/gal (84 g/L) * *The mixed and applied coating cure reaction will produce VOC of mixed alcohols. For 100 g/l VOC requirements, a VOC - exempt thinner such as 97-939 may be used as needed.*
Recommended Dry film thickness*	3 - 7 mils per coat (75-175 microns) * *When applying more than one coat, it is recommended that the total dry film thickness not exceed 10 mils.*
Theoretical Spread Rate	1444 ft²/gal @ 1 mils dft 289 ft²/gal @ 5 mils dft
Components	2
Dry Temperature Resistance*	Continuous — 200°F Intermittent — 250°F (<5% of the time, max 24 hours) * *Color will drift at elevated temperatures.*
Shelf Life	2 years from date of manufacture when stored indoors in the original unopened container. Store product in dry conditions at temperatures of 40-100°F

SURFACE PREPARATION

Coating performance is proportional to the degree of surface preparation.

Steel	– Abrasive blast to SSPC SP-6 or higher with an angular 1.0-3.0 mil surface profile. Or see instructions for specific primer Apply *PSX* 700 as soon as possible to prevent the blasted surface from rusting. Keep moisture, oil, grease, or other organic matter off surface before coating. For touch up and repair, power tool cleaning in accordance with SSPC SP-11 is acceptable.
Concrete	– See specific primer
Non-Ferrous Metals and Stainless Steel	– Abrasive blast in accordance with SSPC SP-16 guidelines to achieve a uniform and dense 1.5-4.0 mil anchor profile. Size and hardness of abrasive should be adjusted as necessary based on the hardness of the substrate. Aluminum may be treated with a surface treatment compliant with Mil-DTL-5541 or equivalent (non-immersion applications only).
Galvanized Steel	– Remove oil or soap film with detergent or emulsion cleaner. Lightly abrasive blast with a fine abrasive in accordance with SSPC SP-16 guidelines to achieve a profile of 1.5-3.0 mils. When light abrasive blasting is not possible, galvanizing can be treated with a suitable zinc phosphate conversion coating. Galvanizing that has at least 12 months of exterior weathering and has a rough surface with white rust present may be over-coated after power washing and cleaning to remove white rust and other contaminants. The surface must have a measurable profile.

	A test patch is recommended to confirm adhesion. Not recommended over chromate sealed galvanizing without blasting to thoroughly remove chromates. Adhesion problems may occur.
Aged Coatings	– Contact your PPG representative. A test patch of *PSX* 700 over in-tact clean coating and observation for film defects and adhesion over a period of time may be required, dependent upon the type of coating. – *PSX* 700 is compatible over *Amercoat* 450-series.

ENVIRONMENTAL CONDITIONS

Ambient temperatures	32°F to 100°F (0°C to 32°C) (FD cure should be used below 40°F)
Material temperatures	32°F to 100°F (0°C to 32°C)
Relative humidity	40% minimum *Work area can be artificially humidified by atomized water spray and/or ponding water under the coated structures.*
Surface temperature	32°F to 120°F (0°C to 49°C) Surface temperature must be at least 5°F above dew point temperature. *Note: PSX 700 should be allowed to reach a Dry-to-Touch condition before force curing above 140°F*
General air quality	Area should be sheltered from airborne particulates and pollutants. Ensure good ventilation during application and curing. Provide shelter to prevent wind from affecting spray patterns.

INSTRUCTIONS FOR USE

Mixing ratio by volume

4 parts base to 1 part hardener

Only mix full kits. Pre-mix base component with a pneumatic air mixing at moderate speeds to homogenize the container. Pour in the hardener component and power agitate until thoroughly mixed.

Pot life

Temperature	50°F	70°F	90°F
PSX 700 & *PSX* 700FD	6.5 hours	4 hours	1.5 hours

Airless spray	Standard airless spray equipment, 30:1 pump or larger, 0.015 – 0.017 fluid tip recommended
Air spray	Thin up to 10%, standard conventional equipment, 0.070” fluid orifice. A moisture and oil trap in the main line is recommended. Separate regulators for air and fluid pressure are recommended. Use an agitated pressure pot.
Brush & roll	Use a well loaded, high quality natural bristle brush. Maintain a wet edge. Use a high quality, well loaded, solvent resistant, low nap (1/4”-3/8”) roller. *Amercoat* 851 flow control additive may be used to enhance flow and leveling of brush strokes and roller stipple. Be aware that multiple coats may be required to achieve uniform and sufficient film thickness to provide proper hiding when applying by brush or roller.
Thinner	*Amercoat* 911, *Amercoat* 101 (recommended for > 90°F)
Cleaning solvent	*Amercoat* 12 Cleaner or *Amercoat* 911 thinner
Primers	*Dimetcote* 9-series, *Dimetcote* 21-5, *Dimetcote* 302H, *Amercoat* 68HS, *Amerlock* 2/400, *Amercoat* 370, *Amercoat* 385, *Amercoat* 240, *Amercoat* 235 A mist coat / full coat application technique is required when applying over inorganic zincs to prevent application bubbling. Thin the mist coat up to 15% with *Amercoat* 911 or *Amercoat* 101. Ensure dry spray is removed from the surface.
Limitations for use	For Industrial or Professional Use Only
Safety precautions	For paint and recommended thinners see safety sheet 1430, 1431 and relevant material safety data sheets This is a solvent borne paint and care should be taken to avoid inhalation of spray mist or vapor as well as contact between the wet paint and exposed skin or eyes.

DRY/CURE TIMES*

PSX 700 @ 4 mils dft and 40% relative humidity

	40°F	50°F	70°F	90°F
Dry to touch	9 hours	6 hours	3 hours	1.5 hours
Dry through	24 hours	11 hours	6 hours	4 hours
Dry to overcoat*	20 hours	9 hours	4.5 hours	3 hours
Maximum overcoat	unlimited*			

* *Surface must be power washed as needed to remove all surface contaminants. Surface must be clean and dry. Use Prep 88 for very dirty surfaces. When re-coating between the dry through time and 7 days, solvent wipe the surface with Amercoat 911 or Amercoat 12 prior to application of the second coat.*

PSX 700FD @ 4 mils dft and 40% relative humidity

	32°F	50°F	70°F	90°F
Dry to touch	7 hours	4.5 hours	2 hours	1 hour
Dry through	16 hours	8.5 hours	4.5 hours	3 hours
Dry to overcoat*	12 hours	7 hours	3 hours	2 hours
Maximum overcoat	unlimited*			

* *Surface must be power washed as needed to remove all surface contaminants. Surface must be clean and dry. Use Prep 88 for very dirty surfaces. When re-coating between the dry through time and 7 days, solvent wipe the surface with Amercoat 911 or Amercoat 12 prior to application of the second coat.*

PRODUCT QUALIFICATIONS

- SSPC Paint 36 Level 3 Performance
- NFPA Class A Flame Spread
- USDA Incidental Food Contact
- AWWA D102-08 Outside Coating System

AVAILABILITY

Packaging: Available in 1 gallon and 5 gallon kits

Product codes:

PX70023	Pearl Gray Base
PX7003	White Base
PX7009	Black Base
PX700T1	Deep Tint Base*
PX700T2	Light Tint Base*
PX700T3	Neutral Tint Base*
PX700T4	Red Tint Base*
PX700T5	High Hiding Yellow Tint Base*
PX70071	Safety Red Base
PX70081	Safety Yellow Base
PX700-B	Hardener component
PX700FD-B	Fast Dry hardener component

** Product must be tinted with special PSX tints only. Tintable with UCD PS Line colorants only.*

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