

PSX® 700 SG

DESCRIPTION

Semi-gloss Engineered Siloxane

PRINCIPAL CHARACTERISTICS

- Unique, semi-gloss epoxy siloxane
- Virtually HAPs free, ultra-low VOC
- High durability in challenging environments
- Tough and abrasion resistant
- Resists dirt pickup, easily cleaned
- Can be applied directly to zinc primers as a 2-coat system

COLOR AND GLOSS LEVEL

- Black, Haze Gray, and other Federal Standard Colors
- Semi-gloss

BASIC DATA AT 68°F (20°C)

Data for mixed product	
Number of components	Two
Volume solids	90 ± 2%
VOC (Supplied)	max. 0.7 lb/US gal (approx. 84 g/l)
Recommended dry film thickness	4.0 - 7.0 mils (100 - 175 µm) depending on system
Theoretical spreading rate	289 ft²/US gal for 5.0 mils (7.2 m²/l for 125 µm)
Shelf life	Base: at least 24 months when stored cool and dry Hardener: at least 24 months when stored cool and dry

Notes:

- * 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 97-739 may be used as needed.
- When applying more than one coat, it is recommended that the total dry film thickness not exceed 10 mils (250 µm)
- See ADDITIONAL DATA – Overcoating intervals
- See ADDITIONAL DATA – Curing time

RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

- Coating performance is proportional to the degree of surface preparation



PSX® 700 SG

Steel

- Abrasive Blast to SSPC SP-6 or higher with a 1.0-3.0 mil surface profile
 - Keep moisture, oil, grease and other organic matter off surface before coating
 - Apply this product as soon as possible to avoid rusting of blasted surfaces
 - For touch up and repair, power tool cleaning in accordance with SSPC-SP 11 is acceptable
 - Use a suitable primer for corrosive environments
-

Concrete

- See specific primer
-

Aged coatings

- Contact your PPG representative. A test patch of the product 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
 - The product is compatible over AMERCOAT 450-series
-

Atmospheric exposure conditions

- Ambient temperature should be between 32 °F and 120 °F.
 - Material temperature should be between 50 °F (10 °C) and 90 °F (32 °C)
 - Relative humidity should be above 40%
-

Substrate temperature

- Surface temperature during application should be between 32°F (0°C) and 120°F (49°C)
 - Surface temperature during application should be at least 5°F (3°C) above dew point
-

SYSTEM SPECIFICATION

- Primers: DIMETCOTE 9-series, DIMETCOTE 21-5, DIMETCOTE 302H, AMERCOAT 68HS, AMERLOCK 2/400, AMERCOAT 370, AMERCOAT 385, AMERCOAT 240, AMERCOAT 235
-

INSTRUCTIONS FOR USE

Mixing ratio by volume: base to hardener 4:1

- 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
-

Application

- 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
-

PSX® 700 SG

Pot life

4 hours at 70°F (21°C)

Air spray

- Separate air and fluid regulators are essential
- Ensure there is a moisture and oil trap in the main air line
- An agitated pressure pot is recommended

Recommended thinner

THINNER 60-12 (AMERCOAT 911), THINNER 21-25 (AMERCOAT 101) (recommended for > 90°F (32°C))

Volume of thinner

0 - 10%

Nozzle orifice

Approx. 0.070 in (1.8 mm)

Airless spray

- 30:1 pump or larger

Recommended thinner

THINNER 60-12 (AMERCOAT 911), THINNER 21-25 (AMERCOAT 101) (recommended for > 90°F (32°C))

Nozzle orifice

0.015 – 0.017 in (approx. 0.38 – 0.43 mm)

Brush/roller

- Use a high quality natural bristle brush and/or solvent resistant, 1/4" or 3/8" nap roller. Ensure brush/roller is well loaded to avoid air entrainment. Multiple coats may be necessary to achieve adequate film-build
- AMERCOAT 851 flow control additive can be used to for enhanced flow and leveling with brush and roll application
- Be aware that multiple coats may be required to achieve uniform and sufficient film thickness to provide proper hiding performance when applying by brush or roller

Recommended thinner

AMERCOAT 911, AMERCOAT 101 (recommended for >90°F (32°C))

Cleaning solvent

- THINNER 90-58 (AMERCOAT 12) or THINNER 60-12 (AMERCOAT 911)
-

PSX® 700 SG

ADDITIONAL DATA

Overcoating interval for DFT up to 4.0 mils (100 µm)					
Overcoating with...	Interval	32°F (0°C)	50°F (10°C)	70°F (21°C)	90°F (32°C)
itself	Minimum	32 hours	9 hours	4.5 hours	3 hours
	Maximum	Unlimited	Unlimited	Unlimited	Unlimited

Overcoating interval using FD Hardener					
Overcoating with...	Interval	32°F (0°C)	50°F (10°C)	70°F (21°C)	90°F (32°C)
itself	Minimum	18 hours	7 hours	3 hours	2 hours
	Maximum	Unlimited	Unlimited	Unlimited	Unlimited

Notes:

- Surface should be dry and free from any contamination
- When re-coat between dry to handle time and 7 days, solvent wipe surface with any of PSX 700 thinners prior to application of the second coat of PSX 700

Curing time using standard hardener for DFT up to 4.0 mils (100 µm) and 50% relative humidity		
Substrate temperature	Dry to touch	Dry to handle
40°F (4°C)	12 hours	38 hours
50°F (10°C)	6 hours	11 hours
70°F (21°C)	3 hours	6 hours
90°F (32°C)	1.5 hours	4 hours

Curing time using FD hardener for DFT up to 4.0 mils (100 µm) and 50% relative humidity		
Substrate temperature	Dry to touch	Dry to handle
32°F (0°C)	12 hours	30 hours
50°F (10°C)	4.5 hours	8.5 hours
70°F (21°C)	2 hours	4.5 hours
90°F (32°C)	1 hour	3 hours



PSX® 700 SG

Pot life (at application viscosity)	
Mixed product temperature	Pot life
50°F (10°C)	6.5 hours
70°F (21°C)	4 hours
90°F (32°C)	1.5 hours

Product Qualifications

- MIL-PRF-24635 Types V and VI
- SSPC Paint 36 Level 3 Performance
- NFPA Class A Flame Spread

SAFETY PRECAUTIONS

- 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
- See Safety Data Sheet and product label for complete safety and precaution requirements

WORLDWIDE AVAILABILITY

It is always the aim of PPG Protective & Marine Coatings to supply the same product on a worldwide basis. However, slight modification of the product is sometimes necessary to comply with local or national rules/circumstances. Under these circumstances an alternative product data sheet is used.

REFERENCES

- Information sheet | Explanation of product data sheets

WARRANTY

PPG warrants (i) its title to the product, (ii) that the quality of the product conforms to PPG's specifications for such product in effect at the time of manufacture and (iii) that the product shall be delivered free of the rightful claim of any third person for infringement of any U.S. patent covering the product. THESE ARE THE ONLY WARRANTIES THAT PPG MAKES AND ALL OTHER EXPRESS OR IMPLIED WARRANTIES, UNDER STATUTE OR ARISING OTHERWISE IN LAW, FROM A COURSE OF DEALING OR USAGE OF TRADE, INCLUDING WITHOUT LIMITATION, ANY OTHER WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR USE, ARE DISCLAIMED BY PPG. Any claim under this warranty must be made by Buyer to PPG in writing within five (5) days of Buyer's discovery of the claimed defect, but in no event later than the expiration of the applicable shelf life of the product, or one year from the date of the delivery of the product to the Buyer, whichever is earlier. Buyer's failure to notify PPG of such non-conformance as required herein shall bar Buyer from recovery under this warranty.

LIMITATIONS OF LIABILITY

IN NO EVENT WILL PPG BE LIABLE UNDER ANY THEORY OF RECOVERY (WHETHER BASED ON NEGLIGENCE OF ANY KIND, STRICT LIABILITY OR TORT) FOR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES IN ANY WAY RELATED TO, ARISING FROM, OR RESULTING FROM ANY USE MADE OF THE PRODUCT. The information in this sheet is intended for guidance only and is based upon laboratory tests that PPG believes to be reliable. PPG may modify the information contained herein at any time as a result of practical experience and continuous product development. All recommendations or suggestions relating to the use of the PPG product, whether in technical documentation, or in response to a specific inquiry, or otherwise, are based on data, which to the best of PPG's knowledge, is reliable. The product and related information is designed for users having the requisite knowledge and industrial skills in the industry and it is the end-user's responsibility to determine the suitability of the product for its own particular use and it shall be deemed that Buyer has done so, as its sole discretion and risk. PPG has no control over either the quality or condition of the substrate, or the many factors affecting the use and application of the product. Therefore, PPG does not accept any liability arising from any loss, injury or damage resulting from such use or the contents of this information (unless there are written agreements stating otherwise). Variations in the application environment, changes in procedures of use, or extrapolation of data may cause unsatisfactory results. This sheet supersedes all previous versions and it is the Buyer's responsibility to ensure that this information is current prior to using the product. Current sheets for all PPG Protective & Marine Coatings Products are maintained at www.ppgpmc.com. The English text of this sheet shall prevail over any translation thereof.



PSX® 700 SG

AVAILABILITY OF PACKAGING

Packaging

- 1-gallon and 5-gallon kits

Depending on specific country of application the following versions are available:

Product	Color
PX700SG2	F/S 26270 Haze Gray
PX700SG26	F/S 26173 Ocean Gray
PX700SG210	F/S 26008 Deck Gray
PX700SG9	Black Base
PX700-b	Hardener
PX700FD-B	Fast Dry Hardener

