

PSX® 700

DESCRIPTION

Two-component, engineered siloxane coating

PRINCIPAL CHARACTERISTICS

- Unique, high gloss, engineered siloxane
- Can be applied directly over inorganic zinc
- Excellent color and gloss retention
- High solids, VOC compliant
- Applied by brush, roller or spray, without thinning
- Good resistance to splash and spillage of chemicals
- Can be applied as a single coat, direct-to-metal for moderately corrosive environments (ISO 12944 C1-C3)

COLOR AND GLOSS LEVEL

- Full color range
- Gloss

BASIC DATA AT 20°C (68°F)

Data for mixed product	
Number of components	Two
Mass density	1.4 kg/l (11.3 lb/US gal)
Volume solids	90 ± 2%
VOC (Supplied)	Directive 1999/13/EC, SED: max. 119.0 g/kg max. 164.0 g/l (approx. 1.4 lb/US gal) EPA Method 24: 0.7 lb/US gal (84.0 g/l)
Recommended dry film thickness	75 - 175 µm (3.0 - 7.0 mils) per coat
Theoretical spreading rate	7.2 m ² /l for 125 µm (289 ft ² /US gal for 5.0 mils)
Dry to touch	2 hours
Overcoating Interval	Minimum: 3 hours Maximum: Unlimited
Shelf life	Base: at least 36 months when stored cool and dry Hardener: at least 24 months when stored cool and dry

Notes:

- See ADDITIONAL DATA – Spreading rate and film thickness
- See ADDITIONAL DATA – Overcoating intervals
- See ADDITIONAL DATA – Curing time
- When applying more than one coat, it is recommended that the total DFT should not exceed 250 µm (10.0 mils)



PSX® 700

RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

Substrate conditions

- Steel; pretreated minimum ISO-Sa2 (SSPC SP-6) or higher with blasting profile 25 – 75 µm (1.0 – 3.0 mils)
- For touch up and repair, power tool cleaning in accordance with SSPC SP-11 is acceptable
- Galvanized steel; sweep blasted to roughen the surface to remove any zinc salts which might be present, SSPC SP-16 with blasting profile 40 – 75 µm (1.5 – 3.0 mils)
- Stainless steel and non-ferrous metal; degreased and sweep blast, SSPC SP-16 with blasting profile 40 – 100 µm (1.5 – 4.0 mils)
- Concrete / Masonry; see specific primer
- Compatible previous coat must be dry and free from any contamination
- When applied to zinc silicate primer, a mist coat and full coat technique is required. 15% thinning is recommended for mist coat
- Aged suitable coating must be dry and free from any contamination, it may require abrading prior to applying this product
- Prepare damaged areas to original surface preparation specifications, feathering edges of intact coating

Substrate temperature

- Substrate temperature during application and curing should be above 0°C (32°F)
- Substrate temperature during application and curing should be at least 3°C (5°F) above dew point
- Relative humidity during application and curing should be above 40% to obtain optimal curing properties

Note: FD hardener should be used when ambient temperature is below 5°C (40°F)

SYSTEM SPECIFICATION

- Primers: Direct to substrate, DIMETCOTE Series, AMERCOAT 68 Series, AMERLOCK 400 / 2 Series, SIGMAZINC Series, AMERCOAT Epoxies and SIGMA Epoxies

INSTRUCTIONS FOR USE

Mixing ratio by volume: base to hardener 80:20 (4:1)

- Use a power mixer powered by an air or explosion-proof electric motor

Induction time

None

Pot life

4 hours at 20°C (68°F)

Note: See ADDITIONAL DATA – Pot life

PSX® 700

Air spray

Recommended thinner

THINNER 60-12 (AMERCOAT 911) or THINNER 21-06 (AMERCOAT 65) for global, THINNER 21-25 (AMERCOAT 101) is recommended for >90°F in US only

Volume of thinner

5 - 10%, depending on required thickness and application conditions

Nozzle orifice

1.5 – 2.0 mm (approx. 0.060 – 0.079 in)

Nozzle pressure

0.3 - 0.4 MPa (approx. 3 - 4 bar; 44 - 58 p.s.i.)

Airless spray

Recommended thinner

THINNER 60-12 (AMERCOAT 911) or THINNER 21-06 (AMERCOAT 65) for global, THINNER 21-25 (AMERCOAT 101) is recommended for >90°F in US only

Volume of thinner

0 - 5%, depending on required thickness and application conditions

Brush/roller

- The recommended DFT cannot be reached in one coat
- Use a high quality natural bristle brush and / or solvent resistant, short nap roller. Ensure brush / roller is well loaded to avoid air entrainment
- Maintain a wet edge

Cleaning solvent

THINNER 90-53, THINNER 90-58 (AMERCOAT 12) or THINNER 60-12 (AMERCOAT 911)

ADDITIONAL DATA

Spreading rate and film thickness	
DFT	Theoretical spreading rate
75 µm (3.0 mils)	12.0 m ² /l (481 ft ² /US gal)
125 µm (5.0 mils)	7.2 m ² /l (289 ft ² /US gal)
175 µm (7.0 mils)	5.1 m ² /l (206 ft ² /US gal)

PSX® 700

Overcoating interval for DFT up to 175 µm (7.0 mils) at RH 40% or above						
Overcoating with...	Interval	0°C (32°F)	5°C (41°F)	10°C (50°F)	20°C (68°F)	30°C (86°F)
itself (when PSX 700 is used)	Minimum	N/A	20 hours	9 hours	4.5 hours	3 hours
	Maximum	N/A	Unlimited	Unlimited	Unlimited	Unlimited
itself (when PSX 700FD is used)	Minimum	20 hours	12 hours	7 hours	3 hours	2 hours
	Maximum	Unlimited	Unlimited	Unlimited	Unlimited	Unlimited

Notes:

- Surface should be dry and free from any contamination
- When re-coat between dry through time and 7 days, solvent wipe surface with any of PSX 700 thinners prior to application of the second coat of PSX 700
- Hardener manufactured in Europe is fast drying version only with "PSX 700 FDE Hardener" name

Curing time for DFT up to 175 µm (7.0 mils) at RH 40% or above		
Substrate temperature	Dry to touch	Dry to handle
0°C (32°F)	9 hours	24 hours
5°C (41°F)	7 hours - 9 hours	16 hours - 24 hours
10°C (50°F)	4.5 hours - 6 hours	8.5 hours - 11 hours
20°C (68°F)	2 hours - 3 hours	4.5 hours - 6 hours
30°C (86°F)	1 hour - 1.5 hours	3 hours - 4 hours

Notes:

- Range indicates drying time with FD(fast drying) hardener and normal hardener, respectively
- 0°C data is for FD hardener only
- Hardener manufactured in Europe is fast drying version only with "PSX 700 FDE Hardener" name
- Adequate ventilation must be maintained during application and curing

Pot life (at application viscosity)	
Mixed product temperature	Pot life
10°C (50°F)	6.5 hours
20°C (68°F)	4 hours
30°C (86°F)	1.5 hours

Note: Same pot life between normal and FD hardener

PSX® 700

Product Qualifications

- SSPC Paint 36 Level 3 Performance
- NFPA Class A Flame Spread
- Compliant with USDA Incidental Food Contact Requirements
- AWWA D102-08 Outside Coating System
- Qualified for ISO 12944 C5 with several systems
- Qualified for NORSOK M501 Rev.6 System 1 with several systems

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
- For paint and recommended thinners see INFORMATION SHEETS 1430, 1431 and relevant Material Safety Data Sheets

WORLDWIDE AVAILABILITY

It is always the aim of PPG Protective and 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

• CONVERSION TABLES	INFORMATION SHEET	1410
• EXPLANATION TO PRODUCT DATA SHEETS	INFORMATION SHEET	1411
• SAFETY INDICATIONS	INFORMATION SHEET	1430
• SAFETY IN CONFINED SPACES AND HEALTH SAFETY, EXPLOSION HAZARD – TOXIC HAZARD	INFORMATION SHEET	1431
• CLEANING OF STEEL AND REMOVAL OF RUST	INFORMATION SHEET	1490
• SPECIFICATION FOR MINERAL ABRASIVES	INFORMATION SHEET	1491
• SURFACE PREPARATION OF CONCRETE (FLOORS)	INFORMATION SHEET	1496
• RELATIVE HUMIDITY – SUBSTRATE TEMPERATURE – AIR TEMPERATURE	INFORMATION SHEET	1650
• PSX® 700 SILOXANE QUALITY ASPECT APPLICATION	INFORMATION SHEET	1721

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.

PSX® 700

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.

The PPG Logo, Bringing innovation to the surface., and all other trademarks herein are property of the PPG group of companies.

