PPG Amercoat

PSX® 758

Patent No. 6,639,025

Engineered Siloxane® Surfacer

Product Data/ Application Instructions

- Resists a wide range of acids, alkalies and solvents
- Easy to apply, pour and spread
- Provides a smooth, cleanable floor
- Excellent adhesion
- Provides long-lasting protection to concrete
- Abrasion resistant
- Resilient film resists cracking and lifting

Typical Uses

PSX 758 systems are used in the protection of concrete floors in chemical processing, power, sewage and waste treatment plants; pulp and paper, textile, and steel mills; mining and metal finishing operations. PSX 758 is suitable for secondary containment, however epoxy surfacers will not bridge cracks which may develop in the concrete. Therefore periodic inspection and repair of concrete cracks is recommended when used for secondary containment.

PSX 758 is internally flexibilised, reducing cure and shrinkage stress to maintain a resilient film resistant to cracking or lifting from concrete surfaces. PSX 758 is resistant to splash, spillage, and fumes of a wide range of chemicals including concentrated organic and inorganic acids, alkalies and solvents. Refer to PPG representatives for suitability in specific chemical services.

Typical Properties after 7 days @ 70°F

Mechanical

Tensile strength (ASTM C307)	3520 psi
Compressive strength (ASTM C579)	10800 psi
Flexural strength (ASTM C580)	6980 psi
Modulus of elasticity (ASTM C580)	6.7 x 10^5 psi
Abrasion resistance (ASTM D4060)	
1 kg load/1000 cycles	Weight loss
CS-17/wheel	72 mg

Chemical Resistance

PSX 758 is resistant to continuous non-immersion exposure to the following chemicals at ambient temperatures and may receive splash and spill of those chemicals up to the temperatures indicated. Discoloration of the surface may occur with some chemicals. Contact your PPG representative for recommendations concerning specific requirements.

Acetic acid 98%
Ammonium hydroxide 37% (120°F)
Butyl acetate
Chromic acid 25% (120°F)
Ethyl alcohol (120°F)
Formaldehyde (160°F)
Gasoline
Hydrochloric acid 37% (140°F)
Methyl ethyl ketone (120°F)
Methyl pyrrolidone
Methylene chloride
Nitric acid 50%
Phosphoric acid 85% (160°F)
Sodium hydroxide 50% (160°F)
Sulfuric acid 98%
Xylene

Physical Data

Finish	Matte	
Color	Medium gray	
Components	3	
Curing mechanism	Chemical reaction between components	
Volume solids (calculated)	100%	
Dry film thickness per coat	40-60 mils (1000-1500 microns)	
Coats	1	
Theoretical coverage per kit	ft^2/kit	m^2/kit
40 mils (1000 microns)	73.2	6.8

*Approximately 1.83 gallons per kit

VOC (Calculated)	lb/gal	g/L
	0.10	12.0
Flash point (SETA)	°F	°C
PSX 758 cure	280	138
PSX 758 resin	187	86
Amercoat 12	2	-17

Application Data

Applied over	Primed concrete		
Primer	Amerlock Sealer		
Method	Pour and spread with gauge rake or conventional mastic spray		
Mixing ratio (by volume)	As packaged - mix full unit only		
Environmental conditions			
Temperature	°F	°C	
air and surface	50 to 122	10 to 50	
	90/32	°F/°C 70/21	50/10
Working time (hours)	1	2	3
Initial setting time (hours)	5	10	16
Time before service (hours)			
light traffic/abrasion	18	24	48
chemical splash/spillage	48	72	168
Maximum recoat time (days)			
PSX 758 over PSX 758	2	3	5
PSX 758 over primer	7	14	28

Surface Preparation

Coating performance, in general, is proportional to the degree of surface preparation. Prior to coating, all surfaces must be clean, dry and free of all contaminant's, including salt deposits.

PSX 758 is applied to concrete floors (slabs) which have been properly prepared and primed with Amerlock Sealer. Concrete must cure a minimum of fourteen days and must have attained 80 percent of its final physical properties before application of PSX 758.

New/Bare Concrete – Refer to SSPC-SP-13/NACE No.6 Surface preparation of concrete for detailed information regarding surface preparation of concrete. In general, concrete must have sufficient profile to achieve satisfactory adhesion of primer and topcoat. Concrete must be in sound condition and free of all coatings, curing compounds, oil and other contaminents. New concrete must cure a minimum of 28 days prior to application of any coatings.

Concrete can be abrasive blasted (ASTM D4259) or mechanically abraded to achieve a profile equal to 60 grit sandpaper or coarser. Moisture vapor transmission should be 3lbs. or less over a 1000 sq.ft. area during a 24 hour period, measured and confirmed through a calcium chloride test. Concrete should have a minimum surface tensile strength of 300 PSI verified by a pull-off adhesion test. Should concrete not meet moisture vapor transmission or tensile strength requirements, contact your local PPG representative for guidance. Always follow the following ASTM methods, ASTM 4263 - plastic sheet method for checking moisture in concrete. ASTM 4258 standard practice for cleaning concrete. ASTM 4259 standard practice for abrading concrete. ASTM 4260 standard practice for etching concrete.

Application Equipment

The following equipment is recommended, but other equipment may be used:

Gauge rake – Such as, Silikal gauge rake in 24 or 32-inch lengths.

Roller – ⅜ inch lint free roller with phenolic core for back-rolling, and 7/16 inch sharp-tipped spiked roller for air release and leveling, available from manufactures such as Midwest Rake Co.

Squeegee – Flat or notched rubber squeegee (depending on DFT required) with EPDM rubber blade, available from manufacturer such as Midwest Raker Co.

Environmental Conditions

Temperature	°F	°C
air and surface	50 to 122	10 to 50

Surface temperatures must be at least 5°F (3°C) above dew point to prevent condensation during application and initial dry through.

Shipping Data

Packaging	28.2lb unit
cure (liquid)	2.2lb in qt. can
resin	8.0 lbs in 5-gal can
powder	18 lbs in 3-gal can

Shipping weight (approx)	lb	kg
cure	2.5	1.1
resin	11.5	5.2
powder	20.5	9.3

Shelf life when stored indoors at 40 to 100°F (4 to 38°C)
resin, cure, and powder 1 year from shipment date

Numerical values are subject to normal manufacturing tolerances, color and testing variances. Allow for application losses and surface irregularities.

Mixing Procedure - for horizontal applications only

3 components resin, cure and powder

PSX 758 is supplied in a 28.2 pound unit as follows: cure in a 1-qt can, resin in a 5-gallon can and powder in a 3 gallon can. Mix only full units. Make no additions or deletions. Any deviations of resin and cure will inhibit curing and alter final physical properties. PSX 758 is ready for use immediately after mixing; no induction time is required. Do not mix more material than can be used within the working time; 2 hours at 70°F (21°C). Material which has begun to set is unsatisfactory and must be discarded.

1. Add cure to resin and stir thoroughly.
2. **Do not mix at high speed, air entrainment will occur.**
3. Continue to stir resin/cure mixture while adding powder. Mix thoroughly using a power mud mixer with explosion-proof power drill.

Application Procedure

3 components resin, cure and powder

Pour and Spread

Gauge rake – PSX 758 can be applied using a gauge rake.

1. Pour mixed material, then spread evenly over concrete flooring using the gauge rake.
2. Eliminate bubbles by rolling material with a metal pin roller.
3. Surface may vary in appearance which will not affect chemical resistance.
4. Immediately after use, clean application and mixing equipment with Amercoat® 12.

Safety Precautions

Read each component's material safety data sheet before use. Mixed material has hazards of each component. Safety precautions must be strictly followed during storage, handling and use.

CAUTION – Improper use and handling of this product can be hazardous to health.

Do not use this product without first taking all appropriate safety measures to prevent property damage and injuries. These measures may include, without limitation: implementation of proper ventilation, use of proper lamps, wearing of proper protective clothing and masks, tenting and proper separation of application areas. Consult your supervisor. Proper ventilation and protective measures must be provided during application and drying to keep vapor concentrations within safe limits and to protect against toxic hazards. Necessary safety equipment must be used and ventilation requirements carefully observed, especially in confined or enclosed spaces, such as tank interiors and buildings.

This product is to be used by those knowledgeable about proper application methods. PPG makes no recommendation about the types of safety measures that may need to be adopted because these depend on application environment and space, of which PPG is unaware and over which it has no control.

If you do not fully understand these warnings and instructions or if you cannot strictly comply with them, do not use the product.

Note: Consult Code of Federal Regulations Title 29, Labor, parts 1910 and 1915 concerning occupational safety and health standards and regulations, as well as any other applicable federal, state and local regulations on safe practices in coating operations.

This product is for industrial use only. Not for residential use.

PPG Protective & Marine Coatings
www.ppgpmc.com
One PPG Place, Pittsburgh, PA 15272 • Tel: (800) 441-9695