



**AMERON**  
INTERNATIONAL

Performance Coatings & Finishes

# PSX<sup>®</sup> 738

Engineered Siloxane<sup>®</sup> coating

Patent No. 4, 113, 665

**PSX Advantage:** PSX 738 is a patented siloxane product that can withstand high temperatures without the need for heat curing before service.

## Product Data

- Protects stainless steel from chloride attack under insulation
- Continuous heat resistance to 1112°F (600°C) on stainless steel
- Resistant to severe acid conditions and moisture
- Chemical resistant
- Excellent adhesion
- Suitable to protect steel under thermal insulation at high temperatures
- Cures at room temperature, no bake required before service
- Applied direct to metal
- High solids and low VOC

**Caution:** PSX 738 may not be suitable for use in rapid or repetitive thermal cycling service conditions.

## Typical Uses

- Under insulation, on equipment and pipe exteriors
- Power plants
- Continuous elevated temperature
- Exhaust ducts and stacks
- Refineries
- Exteriors of reactors
- Chemical facilities

## Application Data Summary

See Application Instructions for complete information on surface preparation, equipment, environmental conditions and application procedures. For conditions outside the requirements or limitations described, contact your Ameron representative.

### Maximum DFT (mils)

	Thinner	No. of Coats	Service Temperature °F/°C		
			1112/600	750/399	500/260
Stainless steel	15/101	2	10	14	20
Steel or Dimetcote 9 and 9HS	15/101	1	----	10	15

**Important:** Exceeding maximum DFT may result in PSX 738 surface cracking.

## Physical Data

Finish	Flat	
Color*	Deep gray (approx ANSI-33), gray (approx GR-3)	
Components	2	
Curing mechanism	Chemical reaction and solvent release	
Volume solids (ASTM D2697 modified)	84% ± 3%	
Dry film thickness per coat	4 - 6 mils (100 - 150 microns)	
<b>Refer to maximum DFT table for service temperature limitations.</b>		
Coats	2 on steel 1 on Dimetcote	
Theoretical coverage	ft <sup>2</sup> /gal	m <sup>2</sup> /L
1 mil (25 microns)	1347	33.0
5 mils (125 microns)	270	6.6
VOC	lb/gal	g/L
mixed	0.8	96
mixed/thinned (1/2 pt/gal)	1.2	144
Temperature resistance, dry continuous service	°F	°C
carbon steel	750	400
stainless steel	1112	600
over Dimetcote 9 or 9HS	750	400
Flash point (SETA)	°F	°C
liquid	55	13
Amercoat 935	208	98
Amercoat 101	145	63
Amercoat 15	106	41
Amercoat 12	2	-17

## Application Data

Applied over	Prepared or primed steel, stainless steel types 304 & 316, concrete or Dimetcote 9 and 9HS	
Surface preparation	Abrasive blast SSPC-SP10 ASTM D4258	
steel or stainless steel types 304 & 316	Clean, dry surface	
concrete	Conventional spray	
Dimetcote 9 or 21-9	1 part liquid to 1.9 parts powder	
Method	5 hours	
Mixing ratio (by weight)	Pot life @ 70°F and 50% R.H.	
	Environmental conditions	
Pot life @ 70°F and 50% R.H.	°F	°C
Environmental conditions	45 to 120	7 to 49
Temperature	See thinner recommendations	
air surface	Relative humidity during application and initial drying	
Relative humidity during application and initial drying	minimum	
minimum	40%	
maximum	Avoid condensation	

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

**\*Note- color will lighten at high temperatures**

**Formerly Amercoat 738**

## Surface Preparation

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

## 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.

*This product is for professional use only. Not for residential use.*

## Warranty

Ameron warrants its products to be free from defects in material and workmanship. Ameron's sole obligation and Buyer's exclusive remedy in connection with the products shall be limited, at Ameron's option, to either replacement of products not conforming to this Warranty or credit to Buyer's account in the invoiced amount of the nonconforming products. Any claim under this Warranty must be made by Buyer to Ameron 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, or one year from the delivery date, whichever is earlier. Buyer's failure to notify Ameron of such nonconformance as required herein shall bar Buyer from recovery under this Warranty.

**Ameron makes no other warranties concerning the product. No other warranties, whether express, implied, or statutory, such as warranties of merchantability or fitness for a particular purpose, shall apply. In no event shall Ameron be liable for consequential or incidental damages.**

Any recommendation or suggestion relating to the use of the products made by Ameron, whether in its technical literature, or in response to specific inquiry, or otherwise, is based on data believed to be reliable; however, the products and information are intended for use by Buyers having requisite skill and know-how in the industry, and therefore it is for Buyer to satisfy itself of the suitability of the products for its own particular use and it shall be deemed that Buyer has done so, at its sole discretion and risk. Variation in environment, changes in procedures of use, or extrapolation of data may cause unsatisfactory results.

## Limitation of Liability

Ameron's liability on any claim of any kind, including claims based upon Ameron's negligence or strict liability, for any loss or damage arising out of, connected with, or resulting from the use of the products, shall in no case exceed the purchase price allocable to the products or part thereof which give rise to the claim. **In no event shall Ameron be liable for consequential or incidental damages.**

## Drying time\*\* (ASTM D1640)(hours)

	°F/°C				
	120/49	90/32	70/21	50/10	40/4
Touch @ 50% R.H.					
unthinned	1/2	1	1 1/2	2	3
thinned w/15 or 101***	1/2	2	3	4	6
Through @ 50% R.H.					
unthinned	14	20	28	48	72
thinned w/15 or 101***	14	26	36	60	80
Through @ 75% R.H.					
unthinned	7	10	14	24	36
thinned w/15 or 101***	7	15	18	30	40
Recoat @ 50% R.H.					
unthinned	1	2	3	5	7
thinned***	2	4	6	10	14
Recoat @ 75% R.H.					
unthinned	1	1	2	3	4
thinned***	1 1/2	3	5	8	10

## Cure\*\* (days)

Service temp. up to 1000°F – same as Dry Through time

Service temp. above 1000°F  
(thinned or unthinned)

@ 50% R.H.	4	8	13	30	50
@ 75% R.H.	2 1/2	4	7	19	32

## Chemical resistance (days)

@50% R.H.

unthinned	6	10	15	40	80
thinned***	10	15	25	60	NR

@ 75% R.H.

unthinned	3	6	10	21	40
thinned***	6	10	15	36	72

NR = Not Recommended

**\*\*Note** – at 10 mils total DFT Drying and Cure times will increase by 30 %.

**\*\*\*Note** – Thinned material at 2 coats will increase cure times.

## Thinners

Amercoat 15 (45 to 100°F surface temperature)  
Amercoat 101 (45 to 140°F surface temperature)

Equipment cleaner                      Thinner or Amercoat 12

## Shipping Data

Packaging units	1-gal	5-gal
Shipping weight (approx)	lb	kg
1-gal unit		
liquid	6.1	2.8
powder	11.1	5.1
5-gal unit		
liquid	30.4	13.8
powder	52.9	24.1

Shelf life when stored indoors at 40 to 100°F (4 to 38°C)

liquid	8 months from manufacture date
powder	2 years from shipment date

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

The mixed product is nonphotochemically reactive as defined by the South Coast Air Quality Management District's Rule 102 or equivalent regulations.



Ameron U.S.A. • 13010 Morris Rd, Suite 400, Alpharetta, GA 30004 • (678) 393-0653

Ameron B.V. • J.F. Kennedylaan 7, 4191 MZ Geldermalsen, The Netherlands • (31) 345-587-587