



**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 <u>maximum DFT</u> table for service temperature limitations.</b> |  |                   |
| Coats   | 2 on steel<br>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)                                | 5 hours  |         |
| Pot life @ 70°F and 50% R.H.                            | 5 hours  |         |
| Environmental conditions                                |  |         |
| Temperature   | °F   | °C      |
| air   | 45 to 120  | 7 to 49 |
| surface   | See thinner recommendations  |         |
| Relative humidity during application and initial drying |  |         |
| 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.

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## 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.



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