



# PSX 1001



Single pack acrylic polysiloxane

(1001 Series)

## Product Data/ Application Instructions

- Single component
- Non-isocyanate
- Outstanding weather resistance with excellent colour and gloss retention
- Resists soil pick up - easily cleanable
- Cures through a wide temperature range
- Easily recoated with itself with an unlimited recoat window
- Brush/roll/spray application

As a finish coat where an attractive appearance and excellent weathering resistance is required for chemical plants, pulp and paper mills, petroleum refineries, offshore platforms, marine equipment, ship topsides and other equipment.

PSX 1001 provides a polyurethane-like finish, in one component without the isocyanate, as well as better weathering than standard aliphatic polyurethane.

Used with Amercoat 185 HS or Amercoat 5105 primer to give a high performance maintenance system with the ease of single pack application.

### Systems Using PSX 1001

| First coat   | Finish coat |
|--|-------------|
| Amerlock 2C  | PSX 1001    |
| Amercoat 185HS or Amercoat 5105                      | PSX 1001    |
| Amercoat 182ZP HB or Amercoat 71 primer              | PSX 1001    |
| Amercoat 370   | PSX 1001    |
| Amercoat 229 Series, 450 Series, PSX 700, Amershield | PSX 1001    |

PSX 1001 should not be used with Amercoat 385.

### Physical Data

|                                 |   |                      |
|---------------------------------|---|----------------------|
| Finish .....                    | High gloss  |                      |
| Colour.....                     | RAL and BS colours*                                 |                      |
| Components .....                | 1   |                      |
| Mixing ratio (volume).....      | NA  |                      |
| Curing mechanism .....          | solvent evaporation and reaction between components |                      |
| Volume solids.....              | 55% (ISO 3233)**                                    |                      |
| VOC.....                        | 28% by weight                                       |                      |
|                                 | 384 g/l   | 3.2 lb/gal           |
| Dry film thickness .....        | 50-75 microns                                       |                      |
|                                 | 2- 3 mils   |                      |
| Number of coats .....           | 1**   |                      |
| Theoretical coverage.....       | m <sup>2</sup> /L                                   | ft <sup>2</sup> /gal |
| at 50 microns / 2 mils dft..... | 11  | 456                  |
| at 75 microns / 3 mils dft..... | 7.3   | 304                  |
| Temperature resistance          | °C  | °F                   |
| Continuous.....                 | 93  | 200                  |
| Intermittent.....               | 120   | 250                  |
| Flashpoints                     | °C  | °F                   |
| PSX 1001.....                   | 19  | 66                   |
| Amercoat 911 .....              | 27  | 81                   |
| Amercoat 12 .....               | 24  | 75                   |
| Thinners .....                  | Amercoat 911  |                      |
| Cleaner.....                    | Amercoat 12   |                      |

\* On tanks and other large structures previously coated with contrasting primer or intermediate coats, uniform appearance may require two coats of PSX 1001. Use only a light colour primer or intermediate coat when only one finish coat of PSX 1001 in a light colour is specified.

\*\* Volume solids is measured in accordance with ISO 3233. Slight variations ±3% may occur due to colour and testing variances.

\*\*\* Brush or roller application may require additional coats.



## Chemical Resistance Guide

(when applied over suitable primer or intermediate coat)

| Environment        | Splash and Spillage | Fumes and Weathering |
|--------------------|---------------------|----------------------|
| Acidic             | No                  | Yes                  |
| Alkaline           | Yes                 | Yes                  |
| Petroleum products | Yes                 | Yes                  |
| Solvents           | No                  | No                   |
| Salt solutions     |                     |                      |
| Acidic             | Yes                 | Yes                  |
| Neutral            | Yes                 | Yes                  |
| Alkaline           | Yes                 | Yes                  |
| Water              | Yes                 | Yes                  |

This chart is only a guide to show typical resistances of PSX 1001 your Ameron representative will help you evaluate your particular corrosion protection needs and make the correct recommendation for your specific requirements.

PSX 1001 is not recommended for immersion service.

## Surface Preparation

**STEEL** - Prepare surface in accordance with application instructions for the specific primer being used. Be sure primer is clean and dry when PSX 1001 is applied.

## Application Equipment

The following equipment is listed as a guide and suitable equipment from other manufacturers may be used. Adjustments of pressure and change of tip size may be needed to obtain the proper spray characteristics.

**AIRLESS SPRAY** - Standard airless spray equipment, such as Graco, DeVilbiss, Nordson-Bede, Spee-Flo or others having a fluid tip with a 0.33 to 0.43 mm (0.013 to 0.017 inch) orifice.

**CONVENTIONAL SPRAY** - Industrial equipment such as DeVilbiss MBC or JGA gun with 78 or 765 air cap and "E" fluid tip and heavy mastic spring or Binks No. 18 or 62 with a 66 x 63 PB nozzle setup. Separate air and fluid pressure regulators, mechanical pot agitator and a moisture and oil trap in the main air supply line are recommended.

**MIXER** - Use power mixer powered by an air motor or an explosion proof electric motor.

## Application Data

Substrates ..... Prepared and primer steel coated with Amercoat 71, 182ZP HB, 185HS, 370, 5105, PSX 700 or Amerlock 2C

Surface preparation..... Refer to Typical Systems for specific primer or intermediate coatings recommended.

Application method..... Airless or conventional spray, brush or roller.

### Environmental conditions

Air temperature ..... 4 - 43 °C            40 - 110 °F  
 Surface temperature..... 4 - 43 °C            40 - 110 °F

Surface temperature must be at least 3°C / 5°F above the dew point to prevent moisture condensation on the surface.

### Drying Times at 60% Relative Humidity average

|                      |        |       |        |        |
|----------------------|--------|-------|--------|--------|
| Drying times (°C/°F) | 49/120 | 32/90 | 21/70  | 10/50  |
| Dry to touch .....   | ½ hr   | 1 hrs | 2 hrs  | 3 hrs  |
| Dry through.....     | 3 hrs  | 8 hrs | 12 hrs | 24 hrs |

### Recoat times (°C/°F)

|                      |        |       |       |       |
|----------------------|--------|-------|-------|-------|
|                      | 49/120 | 32/90 | 21/70 | 10/50 |
| Minimum times (hrs)  |        |       |       |       |
| Amercoat 185HS ..... | 1      | 2     | 2 ½   | 4     |
| Amercoat 370 .....   | ¼      | ½     | 1     | 3     |
| Amerlock 2C .....    | 3      | 7     | 14    | 28    |

### Maximum time (days)

|                      |             |
|----------------------|-------------|
| PSX 1001 .....       | not limited |
| Amercoat 185HS ..... | not limited |
| Amercoat 370 .....   | 30 days     |
| Amerlock 2C .....    | 30 days     |

Thinner ..... Amercoat 911

Equipment cleaner ..... Amercoat 911 or Amercoat 12

## Application Procedure

PSX 1001 is packaged 20 l in 20 l can

The product is reactive with moisture. Keep containers dry and tightly sealed when not in use for mixing or application.

1. Flush equipment with recommended cleaner before use.
2. Stir to a uniform consistency with a power mixer.
3. For spray application, thin only as needed for workability with no more than 10 vol % of recommended thinner. For application at temperatures below 10°C, more thinner may be required to ensure proper atomising. NOTE: For brushing and rolling, normally no thinning is required.
4. Apply a wet coat in even, parallel passes. Overlap each pass 50% to avoid bare areas, pinholes or holidays.
5. Double coat all welds, rough spots, sharp edges and corners, rivets, bolts, etc.
6. Application at 90 µm wet film thickness will normally provide 50 µm dry film.
7. Check thickness of dry coating with a non-destructive dry film thickness gauge, such as Mikrotest or Elcometer. If less than specified thickness, apply additional material as needed.
8. Small damaged or bare areas and random pinholes or holidays can be touched up by brush. Repair larger areas by spray.
9. In confined areas ventilate with clean air during application and drying until all solvents are removed. Temperature and humidity of ventilating air must be such that moisture condensation will not form on surface.
10. Clean all equipment with recommended cleaner immediately after use or at least at the end of each working day or shift. When left in spray equipment, PSX 1001 may cause clogging.

## Repair

For repair, or application of additional thickness, PSX 1001 may be overcoated with itself unlimited. Ensure surface is clean prior to application.

## Shipping data

### Packaging

|             |                  |
|-------------|------------------|
| Large ..... | 20 L in 20 L can |
| Small.....  | 5 L in 5 L can   |

### Shipping weight

|             | kg         | lb |
|-------------|------------|----|
| Large ..... | approx. 29 | 64 |
| Small.....  | approx. 7  | 16 |

### Shelf life

|                      |   |
|----------------------|---|
| Resin and cure ..... | 1 year from shipment date when stored indoors in unopened, original containers at 5 to 40°C (41 to 104°F) |
|----------------------|---|

## **Safety**

Since improper use and handling can be hazardous to health and cause of fire or explosion, safety precautions included with application instructions must be observed during all storage, handling, use and drying periods.

To avoid any confusion that may arise through translation into other languages, the English version of the Product Data/Application Instructions will be the governing literature and must be referred to in case of deviations with product literature in other languages.

## **Warranty**

Ameron warrants its products to be free from defects in material and workmanship. Ameron's sole obligations and Buyer's exclusive remedy in connection with the products shall be limited, at Ameron's option, to either replacement of products not conforming this warranty or credit to Buyer's account in the invoiced amount of the non-confirming 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 non-conformance as required herein shall bar Buyer from recovery under this warranty.

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