PPG Aerospace
PRC-DeSoto

# TECHNICAL DATA

## PR-1198 Secondary Fuel Barrier Coating

### Description

PR-1198 is a sprayable, polyurethane coating designed for use as a secondary fuel barrier on aircraft integral fuel tanks. The product is typically applied to the exterior surfaces of the center wing box tank. Should a leak occur in the tank's primary seal system, PR-1198 will aid in containment of the leak and prevent fuel migration.

PR-1198 cures at room temperature to form a resilient transparent coating with high elongation and tensile strength properties.

The following tests are in accordance with BMS 5-81 Type II Class 3.

### Application Properties (Typical)

| | |
|---|---|
| Color | |
| Part A | Translucent Brown |
| Part B | Clear Straw |
| Mixing ratio | Part A:Part B |
| By weight | 55:100 |
| By volume | 50:100 |
| Viscosity | |
| Part A (Brookfield #4 @ 10 rpm), Poise (Pa-s) | 10 (1) |
| Part B (Brookfield #2 @ 10 rpm), Poise (Pa-s) | 15 (1.5) |
| Mixed (Brookfield #5 @ 20 rpm), Poise (Pa-s) | 15 (1.5) |
| Application life (<10,000 cps), min | 45 - 75 |

| | Tack free time, hrs 0.010-0.020 inch (0.25-0.50mm) wet film | Cure time, hrs 0.010-0.020 inch (0.25-0.50mm) wet film |
|---|---|---|
| 77°F (25°C) | 3 | 24 |
| 150°F (66°C) | 1 1/2 | 2 |

| | |
|---|---|
| Weight Per Gallon, lbs/gal (kg/l) | |
| Part A | 9.8 (1.18) |
| Part B | 8.8 (1.06) |

### Performance Properties (Typical)

Cured 7 days @ 77°F (25°C), 50% RH

| | |
|---|---|
| Nonvolatile content, % | |
| Part A | 55 |
| Part B | 91 |
| Ultimate Cure Hardness | 80 |
| Tensile Strength, psi (MPa) | |
| Standard Cure | 2000 (13) |
| 24 hours at 250°F (121°C) | 4000 (27) |
| Elongation, % | |
| Standard Cure | 400 |
| 24 hours at 250°F (121°C) | 430 |

Surface Appearance of Cured Film - No streaks, blisters, inclusions, undispersed materials, or other surface irregularities.

Environmental Resistance - No loss of adhesion. No blistering or other film failure.

Note: The application and performance property values above are typical for the material, but not intended for use in specifications or for acceptance inspection criteria because of variations in testing methods, conditions and configurations.

### Surface Preparation

Immediately before applying sealant to primed substrates, the surfaces should be cleaned with solvents. Contaminants such as dirt, grease, and/or processing lubricants must be removed prior to sealant application.

A progressive cleaning procedure should be employed using appropriate solvents and a new lint-free cloth conforming to AMS 3819. (Reclaimed solvents or tissue paper should not be used.) Always pour solvent on the cloth to avoid contaminating the solvent supply. Wash one small area at a time.

It is important that the surface is dried with a second clean cloth prior to the solvent evaporating to prevent the redeposition of contaminants on the substrate.

Substrate composition can vary greatly. This can affect sealant adhesion. It is recommended that adhesion characteristics to a specific substrate be determined prior to application on production parts or assemblies.

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For a more thorough discussion of proper surface preparation, please consult the SAE Aerospace Information Report AIR 4069. This document is available through SAE, 400 Commonwealth Avenue, Warrendale, PA 15096-0001.

## Packing Options

PR-1198 is supplied in two-part can kits.

## Mixing Instructions

PR-1198 is supplied in a two-part kit. Mix according to the ratios indicated in the application properties section. Mix Part A and Part B separately to uniformity, then thoroughly mix entire contents of both parts of the kit together taking care to avoid leaving unmixed areas around the sides or bottom of the mixing container.

## Application Instructions

To obtain maximum performance properties, PR-1198 should be applied without thinning by brush or airless spray. Though this product may be sprayable, once applied it has moderate thixotropic properties which permit a 10-20 mil (0.25-0.50 mm) wet film build on vertical surfaces.

If thinning is necessary, technical/urethane grade (dried) acetone can be used at an amount not to exceed 40% by weight of the mixed components. However, dilution with solvent will decrease thixotropy, lengthen pot life, and lengthen cure.

## Storage Life

The storage life of PR-1198 is at least 6 months when stored at temperatures below 90°F (32°C) in original, unopened containers.

## Health Precautions

This product is safe to use and apply when recommended precautions are followed. Before using this product, read and understand the Material Safety Data Sheet (MSDS), which provides information on health, physical and environmental hazards, handling precautions and first aid recommendations. An MSDS is available on request. Avoid overexposure. Obtain medical care in case of extreme overexposure.

For industrial use only. Keep away from children.

Additional information can be found at:
www.ppgaerospace.com

For sales and ordering information call
1-800-AEROMIX (237-6649).



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