

PR-2870 Sprayable non-chromate corrosion inhibitive sealant

Description

PR-2870 Sprayable is a corrosion inhibitive sealant and elastomeric coating. It has a service temperature range from -80°F (-62°C) to 250°F (121°C), with intermittent excursions up to 300°F (149°C). This material acts as an effective barrier against the common causes of corrosion on aluminum alloys or between dissimilar metals.

PR-2870 Sprayable is a two-part, epoxy cured polythioether compound. The uncured material is suitable for application by spray. It cures at room temperature to form a resilient sealant having excellent adhesion to common aircraft substrates.

The following tests are in accordance with MIL-PRF-81733 Type III-1 specification test methods.

Application properties (typical)

Color		
Part A		black
Part B		beige
Mixed		gray
Thinner (optional)		blue-green
Mixing ratio	Part A:Part B	
by weight		15.5:100
Base viscosity		
(Brookfield #5 @ 10 rpm),		
Poise (Pa-s)		75 (7.5)
Application life and cure time @ 77°F (25°C), 50% RH		
		cure time
application	tack free	to 30 A
life	time	durometer
(hours)	(hours)	(hours)
1	6	24

Performance properties (typical)

Cured 14 days @ 77°F (25°C), 50% RH	
Cured specific gravity	1.42
Nonvolatile content, %	82
Ultimate cure hardness,	
Durometer A	45
Recommended thickness, mils (dry)	5 - 8

Low temperature flexibility @ -80°F (-62°C) - No cracking, checking or loss of adhesion.

Flexibility - No cracks after bending 180 degrees over 0.125 inch (3.18 mm) mandrel.

Repairability to itself - Excellent to both freshly cured as well as fuel aged and abraded fillets.

Corrosion resistance - No corrosion to base substrate or deterioration of sealant.

Fungus resistance	Non-nutrient
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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.

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-2870 Sprayable is supplied in two-part kits and Semco® cartridges. An optional thinner component is also available with certain kits.

Please contact customer service to verify packaging options.

Mixing instructions

PR-2870 Part B has a tendency to settle out during storage; therefore, proper mixing and correct proportions are extremely important if maximum results are to be obtained.

Thoroughly stir or paint shake Part B for approximately 5 minutes to obtain a uniform consistency before addition of Part A.

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The recommended mixing method is with a paint shaker. Add all the Part A to the Part B being sure to scrape the sides and bottom of the container. Replace the lid on the Part B container. For mixing pint, quart, or gallon kits, use a standard gallon capacity paint shaker. Vibrate the shaker at 1350 vibrations/minute for 5 minutes. Longer paint shaking will decrease application time and tack free time.

For ease in spray applications, the material may be thinned by the addition of the optional PR-2870 Thinner Component. Thinning of the mixed material must be accomplished only after mixing of Part B and Part A components. Therefore, immediately after mixing, transfer the mixed material to a self-stirring pressure pot. Depending on the spraying equipment and technique employed, thin up to 20 percent by volume (five parts mixed PR-2870 Sprayable, one part PR-2870 Thinner Component) and mix in the pressure pot for two minutes at 70 rpm.

Movement of air past the surfaces after application of PR-2870 Sprayable facilitates removal of solvents and speeds up the tack free time.

Storage life

The storage life of PR-2870 Sprayable is at least 9 months when stored at temperatures between 40°F (5°C) and 80°F (27°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 Safety Data Sheet (SDS), which provides information on health, physical and environmental hazards, handling precautions and first aid recommendations. An SDS 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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