

PR-1429 Class B low weight floor board sealant

Description

PR-1429 Class B is a low cohesive strength sealant. It has a service temperature range from -65°F (-54°C) to 250°F (121°C), with intermittent excursions up to 300°F (149°C). This material is designed for butt sealing between aircraft interior floor boards or for depression filling and smoothing applications. The cured sealant maintains excellent elastomeric properties after prolonged exposure to both jet fuel and aviation gas.

PR-1429 Class B is a two part, manganese dioxide cured, Permapol® P-5 polysulfide compound. The uncured material is a low sag, thixotropic paste suitable for application by extrusion gun or spatula. This sealant has excellent adhesion to common aircraft substrates.

The following tests are in accordance with PRC-DeSoto International and other OEM specification test methods.

Application properties (typical)

Color			
Part A	Black		
Part B	Green		
Mixed	Grayish green		
Mixing ratio			
By weight	Part A:Part B 10:100		
Base viscosity			
(Brookfield #7 @ 2 rpm),			
Poise (Pa-s)	15,000 (1500)		
Slump, inches (mm)			
	Initial	50 Minutes	90 Minutes
B-1/2	0.05 (1.27)	—	—
B-2	0.05 (1.27)	0.05 (1.27)	0.05 (1.27)
Application life and cure time @ 77°F (25°C, 50% RH)			
	Application life (hours)	Tack free time (hours)	Cure time to 30 A Durometer (hours)
B-1/2	1/2	<8	24
B-2	2	<24	48

Performance properties (typical)

Cured 14 days @ 77°F (25°C), 50% RH	
Cured specific gravity	0.95
Nonvolatile content, %	95
Ultimate cure hardness,	
Durometer A	50
Peel strength, pli (N/25 mm), 100% cohesion	
JRF immersion, 7 days @ 140°F (60°C)	
MIL-A-8625 (Anodized aluminum)	22 (98)
MIL-C-27725 (IFT coating)	22 (98)
QQ-A-250/13 (Alclad)	20 (89)
JRF/NaCl-H ₂ O immersion, 7 days @ 140°F (60°C)	
MIL-A-8625 (Anodized aluminum)	22 (98)
MIL-C-27725 (IFT coating)	23 (102)
QQ-A-250/13 (Alclad)	23 (102)
Tensile strength, psi (KPa)	
Standard cure, 14 days @ 77°F (25°C), 50% RH	
	252 (1738)
14 days immersion in JRF @ 140°F (60°C)	
	181 (1248)
7 days @ 250°F (121°C)	
	340 (2344)
72 hours immersion in JRF @ 140°F (60°C), + 72 hours @ 120°F (49°C), + 7 days @ 250°F (121°C)	
	340 (2344)
24 hours @ 250°F (121°C), + 7 days immersion in JRF @ 140°F (60°C)	
	192 (1324)
Elongation, %	
Standard cure, 14 days @ 77°F (25°C), 50% RH	
	230
14 days immersion in JRF @ 140°F (60°C)	
	188
7 days @ 250°F (121°C)	
	108
72 hours immersion in JRF @ 140°F (60°C), + 72 hours @ 120°F (49°C), + 7 days @ 250°F (121°C)	
	100
24 hours @ 250°F (121°C), + 7 days immersion in JRF @ 140°F (60°C)	
	158
Low temperature flexibility @ -65°F (-54°C) - No cracking, checking or loss of adhesion.	
Resistance to hydrocarbons - 7 days @ 140°F (60°C) immersed in JRF.	
Weight loss, %	4.4

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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.

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

To obtain uniform release of the cured 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 the appropriate solvents and new lint free cloth (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.

Mixing instructions

PR-1429 Class B 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 kit together taking care to avoid leaving unmixed areas around the sides or bottom of the mixing container.

Storage life

The storage life of PR-1429 Class B is at least 9 months when stored at temperatures below 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 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.

For emergency medical information call 1-800-228-5635.

For sales and ordering information call 775-323-7542

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