



PR-1425 Class B windshield and canopy sealant

Description

PR-1425 Class B is an aircraft windshield and canopy sealant. It has a service temperature range from -65°F (54°C) to 250°F (121°C), with intermittent excursions up to 275°F (135°C). This material is designed for fillet sealing of properly prepared glass, polycarbonate, acrylic and other aircraft sealing applications. This product is specifically formulated not to craze substrates. The cured sealant exhibits excellent resistance to UV and weather exposure.

PR-1425 Class B is a two-part, dichromate cured polysulfide compound. The uncured material is a low sag, thixotropic paste, suitable for application by extrusion gun or spatula.

PR-1425 Class B is available in preformed parts using PPG's proprietary Ambient Reactive Extrusion (PPG ARE™) additive printing technology.

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	Black		
Mixed	Black		
Mixing Ratio		Part A:Part B	
By weight		10:100	
Base viscosity, Poise (Pa-s)		16,000 (1,600)	
(Brookfield #7 @ 2 rpm)			
Slump, inches (mm)			
	Initial	50 minutes	90 minutes
B-1/2	0.20 (5.08)	---	---
B-1	0.15 (3.81)	---	---
B-2	0.20 (5.08)	0.25 (6.35)	0.25 (6.35)
Application life and cure time @ 77 °F (25 °C), 50% RH			
			Cure time to 30
	Application life (hours)	Tack free time (hours)	Durometer A (hours)
B-1/2	1/2	< 8	24
B-1	1	< 24	48
B-2	2	< 24	48

Performance properties (typical)

Cured 14 days @ 77 °F (25 °C), 50% RH	
Cured specific gravity	1.49
Nonvolatile content, %	93
Ultimate cure hardness, Durometer A	55
Peel strength, pli (N/25 mm), 100% cohesion, 14 days @ 77 °F (25 °C)	
No exposure	
AMS-G-25667 (glass)	50 (222)
MIL-PRF-8184 (acrylic)*	48 (214)
AMS-P-83310 (polycarbonate)*	46 (205)
AMS5516 (stainless steel)	46 (205)
AMS4911 (titanium comp. C)	46 (205)
AMS4045 (aluminum)	46 (205)

*Abraded with 220 grit sandpaper and primed with PR-142 Adhesion Promoter

Thermal rupture resistance – retains pressure of 10 psi with only negligible deformation, both before and after immersion in JRF.

Low temperature flexibility @ -65 °F (-54 °C) – no cracking, checking or loss of adhesion.

Corrosion resistance – no corrosion, adhesion loss, softening, or blistering after 20-day immersion in 2-layer saltwater/JRF @ 140 °F (60 °C).

Flexibility – no cracks after bending 180 degrees over 0.125 inch (3.18 mm) mandrel.

Repairability to itself – excellent to both fresh cured as well as fuel-aged and abraded fillets.

Resistance to other fluids – excellent resistance to water, alcohols, petroleum-base and synthetic lubricating oils, and petroleum-based hydraulic fluids.

Fungus resistance non nutrient

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.

PR-1425 Class B windshield and canopy sealant

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. (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-1425 Class B is supplied in two-part can kits, Semkit® injection kits, and pre-mixed and frozen Semco® cartridges.

PR-1425 Class B is also available in preformed parts using *PPG ARE technology*.

Storage life

The storage life of PR-1425 Class B stored in two-part can kits and *Semkits* is at least 9 months when stored at temperatures between 40 °F (4.5 °C) and 80 °F (27 °C) in original, unopened containers.

The storage life of PR-1425 Class B in pre-mixed and frozen *Semco* cartridges is at least 28 days when stored at temperatures below -40 °F (-40 °C).

Permapol, ARE, Semkit, and Semco are registered trademarks of PRC-DeSoto International Inc., registered with the U.S. Patent Office.

IN NO EVENT WILL PPG BE LIABLE UNDER ANY THEORY OF RECOVERY (WHETHER BASED ON NEGLIGENCE OF ANY KIND, STRICT LIABILITY OR TORT) FOR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES IN ANY WAY RELATED TO, ARISING FROM, OR RESULTING FROM ANY USE MADE OF THE PRODUCT. The information in this sheet is intended for guidance only and is based upon laboratory tests that PPG believes to be reliable. PPG may modify the information contained herein at any time as a result of practical experience and continuous product development. All recommendations or suggestions relating to the use of the PPG product, whether in technical documentation, or in response to a specific inquiry, or otherwise, are based on data, which to the best of PPG's knowledge, is reliable. The product and related information is designed for users having the requisite knowledge and industrial skills in the industry and it is the end user's responsibility to determine the suitability of the product for its own particular use and it shall be deemed that Buyer has done so, at its sole discretion and risk. PPG has no control over either the quality or condition of the substrate, or the many factors affecting the use and application of the product. Therefore, PPG does not accept any liability arising from any loss, injury or damage resulting from such use or the contents of this information (unless there are written agreements stating otherwise). Variations in the application environment, changes in procedures of use, or extrapolation of data may cause unsatisfactory results. This sheet supersedes all previous versions and it is the Buyer's responsibility to ensure that this information is current prior to using the product. The English text of this sheet shall prevail over any translation thereof.

This document has been reviewed by the PPG Aerospace Export Control Department and has been determined to contain only EAR99 controlled data.

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 upon 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**

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

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

PRC-DeSoto International, Inc.
12780 San Fernando Road
Sylmar, CA 91342
Telephone (818) 362-6711
Toll Free (800) AEROMIX
www.ppgaerospace.com

Issue Date: 3/25
Supersedes: 03/24
Lit: 0161