Technical Data Sheet

Aerospace Sealants



P/S 700 firewall sealant

Description

P/S 700 is a high temperature primerless firewall sealant. It has a service temperature range from -65 °F (-54 °C) to 400 °F (204 °C), and will withstand flash temperatures of 2000 °F (1093 °C). The material is designed for sealing firewall structures against the passage of air and vapors.

P/S 700 is a two-part, synthetic rubber compound. The uncured material is a low sag paste suitable for application by extrusion gun or spatula. It cures at room temperature to form a resilient sealant to common aircraft substrates.

The following tests are in accordance with AMS3381 specification test methods.

Application properties (typical)

Color	
part A	brown
part B	black
mixed	black
Mixing ratio	part A: part B
by weight	2.5:100

Base viscosity (Brookfield #7 @ 10 rpm),

Poise (Pa-s) 18,500 (1,850)

Slup, inches (mm) 0.20 (5.08)

Application life and cure time @ 77 °F (25 °C), 50% RH

Application	Tack free	Cure time
life (hours)	time	to 30 A
	(hours)	Durometer (hours)
2	<4	48

Performance properties (typical)

Cured 14 days @ 77 °F (25 °C), 50% RH		
Cured specific gravity	1.36	
Nonvolatile content, %	70	
Ultimate cure hardness, Durometer A	75	
Peel strength, pli (N/25 mm)		
dry (no exposure)		
AMS2471 (anodized aluminum)	25 (112)	
AMS4911 (titanium)	24 (108)	
AMS5517 (stainless steel)	30 (134)	
72 hours at 400°F in air		
AMS2471 (anodized aluminum)	19 (85)	
AMS4911 (titanium)	12 (54)	
AMS5517 (stainless steel)	17 (76)	

Thermal rupture resistance - Retains pressure of 5 psi with only negligible deformation, both before and after flame test @ 2000 °F (1093 °C).

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 3% salt water solution @ 140 °F (60° C).

Resistance to other fluids - Excellent resistance to water, alcohols, petroleum-base and synthetic lubricating oils

Flame resistance - No flame penetration after 15 minutes $@ 2000 \degree F (1093 \degree C)$.

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.

P/S 700 firewall 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 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.

Packaging options

P/S 700 is supplied in a two-part can kit and two-part SEMKIT[®] injection kits.

Mixing instructions

Mix according to the instructions listed on the container taking care to avoid leaving unmixed areas.

Storage life

The storage life of P/S 700 is at least 12 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 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.

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).

All recommendations, statements, and technical data contained herein are based on tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty, either expressed or implied. User shall rely on his own information and tests to determine suitability of the product for the intended use and assumes all risks and liability resulting from his use of the product. Seller's and manufacturer's sole responsibility shall be to replace that portion of the product of this manufacturer which proves to be defective. Neither seller nor manufacturer shall be liable to the buyer or any third person for any injury, loss, or damage directly or indirectly resulting from use of, or inability to use, the product. Recommendations or statements other than those contained in a written agreement signed by an officer of the manufacturer shall not be binding upon the manufacturer or seller.

© 2022 PPG Industries, Inc., All Rights Reserved

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

> Issue Date: 07/22 Supersedes: 04/10 Lit: 0104