

PR-812 firewall sealant

Description

PR-812 is a high temperature primerless firewall sealant. It has a service temperature range from -54°C (-65°F) to 204°C (400°F), and will withstand flash temperatures of 1093°C (2000°F). The material is designed for sealing firewall structures against the passage of air and vapours.

PR-812 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.

This product is qualified to several manufacturers' specifications. Please contact PRC-DeSoto Europe for further information.

The following tests are in accordance with MIL-S-38249 Type I specification test methods.

Application properties (typical)

Colour	
Part A	Brown
Part B	Black
Mixed	Black
Mixing ratio	
By weight	Part A:Part B 2.5:100
Base viscosity	
(Brookfield #7 @ 2 rpm),	
Pa-s (Poise)	1200 (12,000)
Slump, mm (inches)	5.08 (0.20)
Application life and cure time @ 25°C (77°F), 50% RH	

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

Performance properties (typical)

Cured 14 days @ 25°C (77°F), 50% RH	
Cured specific gravity	1.36
Nonvolatile content, %	70
Ultimate cure hardness,	
Durometer A	75
Peel strength, N/25 mm (pli), 100% cohesion	
Dry, 14 days @ 25°C (77°F), 50% RH	
QQ-A-250/4 (Aluminium)	53 (12)
MIL-S-5059 (Stainless steel)	53 (12)
Dry, 72 hours @ 204°C (400°F),	
QQ-A-250/4 (Aluminium)	67 (15)
MIL-S-5059 (Stainless steel)	67 (15)
Thermal rupture resistance - Retains pressure of 5 psi with only negligible deformation, both before and after flame test @ 1093°C (2000°F).	
Low temperature flexibility @ -54°C (-65°F) - 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 @ 60°C (140°F).	
Resistance to other fluids - Excellent resistance to water, alcohols, petroleum-base and synthetic lubricating oils.	
Flame resistance - No flame penetration after 15 minutes @ 1093°C (2000°F).	

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

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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.

Mixing instructions

PR-812 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.

Storage life

The storage life of PR-812 is at least 12 months when stored at temperatures below 27°C (80°F) 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 sales, ordering and technical information, please contact PRC-DeSoto Europe, Ltd.

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.