

# TECHNICAL DATA

### PR-182 Clear Water Based Adhesion Promoter

### Description

PR-182 Clear is a water-based, VOC-compliant, adhesion promoter to enhance the coupling characteristics of polysulfide sealants to a wide variety of substrates. The material is specifically formulated as a safer alternative to organic solvent-based products, thus eliminating the flammability, explosion and health hazards associated with such materials.

PR-182 Clear is a one-part compound suitable for application by brush or clean gauze. The material dries at room temperature in approximately 30 minutes.

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

## Application Properties (Typical)

Color	Colorless		
Appearance	Free of particles		
Dry time @ 77°F (25°C),			
50% RH, mins.	30		

## Performance Properties (Typical)

Specific gravity	1.0		
Flash point, PMCC	>200°F (93°C)		
Toxicity	Non-toxic		
рН	7		
Flammability	Non-flammable		
Effect on finishes	Does not soften finishes		

#### **Application Properties**

Peel strength, pli (N/25 mm), 100% cohesion using PR-182 Clear

Specification no.	MIL-S-8802		MIL-S-83430		MIL-PRF-81733
Product	PR-1422-A	PR-1422-B	PR-1750-A	PR-1750-B	P/S 870-B
Immersion conditions	JRF/NaCl-H <sub>2</sub> O	JRF/NaCl-H <sub>2</sub> O	JRF/NaCl-H <sub>2</sub> O	JRF/NaCl-H <sub>2</sub> O	Type III
	7 days @140°F	7 days @140°F	7 days @140°F	7 days @140°F	7 days @120°F
Substrate					
AMS 4901 (Titanium)	38 (169)	39 (173)	32 (142)	33 (147)	40 (178)
AMS 2471 (Alodine aluminum	n) 34 (151)	37 (165)	36 (160)	33 (147)	44 (196)
MIL-A-8625 (Anodized alumin	um) 30 (133)	37 (165)	30 (133)	28 (125)	43 (191)
MIL-PRF-23377 (Epoxy primer	) 30 (133)	37 (165)	33 (147)	31 (138)	43 (191)
AMS-C-27725 (IFT coating)	33 (147)	35 (156)	30 (133)	26 (116)	41 (182)
AMS 4045 (Aluminum)	28 (125)	37 (165)	31 (138)	28 (125)	42 (187)
AMS 4049 (Alclad)	26 (116)	37 (165)	34 (151)	30 (133)	42 (187)

**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-182 Clear Water Based Adhesion Promoter

### **Surface Preparation**

Immediately before applying adhesion promoter to substrates, the surfaces should be cleaned with solvents. Contaminants such as dirt, grease, and/or processing lubricants must be removed prior to adhesion promoter 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.

Apply a thin coat of PR-182 Clear to the solvent-cleaned surface with clean gauze and allow to dry for approximately 30 minutes at standard temperature. After drying time, wipe off excess PR-182 Clear with a clean gauze pad and start the sealant procedure. If surface becomes contaminated or sealing is not accomplished with 4 hours after application of the adhesion promoter, repeat priming procedure.

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.

### Storage Life

The storage life of PR-182 Clear is at least 6 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 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.

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.

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Issue Date: 08/09 Supersedes: 03/09

Lit: 0091