PR-1428 Class A access door sealant

Description

PR-1428 Class A is a low adhesion 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). The material is designed for use as an access door sealant or in the fabrication of form-in-place (FIP) gaskets.

PR-1428 Class A is a two-part, manganese dioxide cured, polysulfide compound. The uncured material is suitable for application by brush in thickness up to 25 mils. It cures at room temperature to form a removable seal to common aircraft substrates.

The following tests are in accordance with MIL-S-8784 Class A and other OEM specification test methods.

Application properties (typical)

Color	
Part A	Black
Part B	Red
Mixed	Dark red
Mixing ratio	Part A:Part B
By weight	10:100
Base viscosity (Brookfield #6 @ 10 rpm), Poise (Pa-s)	400 (40)

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)
A-1/2	1/2	<6	10
A-2	2	<10	16

Performance properties (typical)

Cured 14 days @ 77°F (25°C), 50% RH	
Cured specific gravity	1.49
Nonvolatile content, %	92
Ultimate cure hardness, Durometer A	50
Peel strength, pli (N/25 mm), Positive adhesion with 100% adhesive mode of failure	
JRF immersion, 7 days @ 140°F (60°C)	
AMS 2471 (Anodized aluminum)	<1 (<4.44)
AMS 4901 (Titanium)	<1 (<4.44)
AMS 5516 (Stainless steel)	<1 (<4.44)
BMS 10-11 (Epoxy primer)	<1 (<4.44)
BMS 10-20 (Epoxy primer)	<1 (<4.44)
MIL-C-5541 (Alodine aluminum)	<1 (<4.44)
MIL-C-27725 (IFT coating)	<1 (<4.44)
QQ-A-250/12 (Aluminum)	<1 (<4.44)
QQ-A-250/13 (Alclad)	<1 (<4.44)
JRF/NaCl-H_2O immersion, 7 days @140°F (60°C)	
AMS 2471 (Anodized aluminum)	<1 (<4.44)
AMS 4901 (Titanium)	<1 (<4.44)
AMS 5516 (Stainless steel)	<1 (<4.44)
BMS 10-11 (Epoxy primer)	<1 (<4.44)
BMS 10-20 (Epoxy primer)	<1 (<4.44)
MIL-C-5541 (Alodine aluminum)	<1 (<4.44)
MIL-C-27725 (IFT coating)	<1 (<4.44)
QQ-A-250/13 (Alclad)	<1 (<4.44)
Dry, 14 days @ 77°F (25°C)	
AMS 2471 (Anodized aluminum)	<1 (<4.44)
AMS 4901 (Titanium)	<1 (<4.44)
AMS 5516 (Stainless steel)	<1 (<4.44)
BMS 10-11 (Epoxy primer)	<1 (<4.44)
BMS 10-20 (Epoxy primer)	<1 (<4.44)
MIL-C-5541 (Alodine aluminum)	<1 (<4.44)
MIL-C-27725 (IFT coating)	<1 (<4.44)
QQ-A-250/12 (Aluminum)	<1 (<4.44)
QQ-A-250/13 (Alclad)	<1 (<4.44)

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PR-1428 Class A access door sealant

Low temperature flexibility @ -65°F (-54°C) - No cracking or checking.

Resistance to hydrocarbons - 7 days @ 140°F (60°C) immersed in JRF.

Weight loss, %	5.0

Flexibility - No cracks after bending 180 degrees over 0.125 inch (3.18 mm) mandrel.

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-1428 Class A 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-1428 Class A 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 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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