

Aerospace Products





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PR 1826 Class B

FUEL TANK SEALANT QUICK REPAIR

USE

PR 1826 Class **B** is a rapid curing integral fuel tank sealant designed for use at temperature between -60°C to +150°C, with intermittent use to +215°C. **PR 1826** Class **B**has excellent low temperature curing characteristics.

DESCRIPTION

PR 1826 Class **B** is a two-part, chemically curing **Permapol P-3** polythioether polymer based sealant characterizedby a rapid cure at low temperature to a fuel resistance elastomer.

This material has application temperature as low as $+5^{\circ}$ C.

When used with primer**PR 1826** Adhesion Promoter, the sealant adheres to alclad, titanium, stainless steel, coated surfaces and sealant.

PR 1826 Adhesion Promoter will promote adhesion of PR 1826 Class B to itself and to materials and treatments commonly used for aircraft fasteners.

The mixed compound is a thix otropic material, wich can be readily applied by extrusion or injection gun.

SPECIFICATION

The following tests have been run in accordance with the test methods of: AMS-3277.

Standard conditions:

23°+/-1°C and 50+/-5% RH

PURCHASING

PRODUCT DESIGNATION

When ordering this product, designate PR number, class letter, and dash number as follows :

 PR 1826 B-1/4
 (application life: 1/4 h.)

 PR 1826 B-1/2
 (application life: 1/2 h.)

 PR 1826 B-2
 (application life: 2 h.)

STANDARD PACKAGING

DESIGNATION

SEMKITS:

	<u>Total</u> <u>Content</u>	<u>Number</u> <u>per Case</u>
655	55 cc	24
654	100 cc	24

PR 1826 B is supplied with approximate amount of PR 1826 Adhesion promoter

^{® RH} LE JOINT FRANCAIS SEALANTS ADHESIVES & COATINGS

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APPLICATION PROPERTIES (typical)

-Couleur	Base Accelerator	Wh Bla	
-Mixing ratio Base / Accelerator		100:8,5	by weight
-Nonvolati		97	%

-Viscosity

(Brookfield # 7 @ 2 rpm) 1300 Pa.s

- Vertical Flow:

Initial 3 mm

- Application Life and Cure Time

Application Life	Tack Free Time	To 30 Shor	re A
(hours)		(hours)	
		<u>à 23°C</u>	<u>à5°C</u>
1/4	50 mn	1 h 30	5 h
1/2	1 h 30	4 h	8 h
2	5 h	10 h	36 h

PERFORMANCE PROPRERTIES (typical)

- Color	Black
- Specific Gravity	1,47
- Hardness, Shore A	50
-Low temperature flexibility	- 65° C

- Adhesion - Peel strength (N/mm)

with Primer PR 1826

	<u>Initial</u>	<u>JRF</u>	Salt water
Alclad 2024	13	7,5	12
Stainless steel	12	7	8
Alodine	11	6,5	7

100% cohesive, after 7 days immersion at 60°C

- Shear strength (alu - alu)

With Primer **PR1826** 3,5 MPa 100% Cohésive

-Tensile strength and elongation

<u>Tensile</u>	<u>Ultimate</u>
strength	elongation

- Initial 3,5 MPa 290 %

- 2h at 215°C 1,1 MPa 100 %

- Réparability

Excellent with Primer **PR 1826** to both fresh sealant and heat/fuel abraded fillets.

on PR 1422 B	4,5 N/mm
on PR 1750 B	5,9 N/mm
on PR 1826 B	5,5 N/mm
100% cohesive	

- Fungus Resistance Non-nutrient

NOTE: The above application and performance property values are typical for the material, but are not intended for use in specifications or for acceptance inspection criteria because of variations intesting methods, conditions and configurations.

SURFACE PREPARATION

To obtain good adhesion the surface must be cleaned with an oil-free solvents which will dissolve to remove dirt, grease, and processing lubricants used in manufacturing.

Wash one small aera at a time, then dry with a clean cloth before solvent evaporates to prevent redeposition of oil, wax or other surface contaminents. To maintain a clean solvant supply, always pour the solvent on the washing cloth.

After the surface has been cleaned apply **PR 1826** Adhesion Promoter with a clean brush or by wiping on with a gauze pad. Care must be taken with either a brush or gauze to obtain a uniform thin coat-one that is thin enought to cover, but not heavy enought to run.

At standard temperature, allow the adhesion promoter to dry 30 minutes. At lower temperature allow a proportionally longer time to dry.

The sealant may be applied up to 8 hours after the application of the adhesion promoter. After 8 hours, the surface should be recleaned and adhesion promoter reapplied. The surface should show a slight gloss adhesion promoter when it is done properly. **PR 1826 B** applied over cured **PR 1826 B** does not require a coat of adhesion promoter. The appearance of the adhesion promoter can be clear yellow to hazy. The adhesion promoter should not have particles or precipitate in it.

MIXING INSTRUCTIONS

Proper mixing and correct proportions are extremely important if optimum results are to be obtained. Mixing by experienced personnel at a central location is recommended.

3/3 PR 1826 B

SEMKITTWO-PART SEALANT CARTRIDGES

1° Wear safety glasses.

2° Hold cartridge and pull back dasher rod one fourth.
3° Pull back the dasher rod as injecting as proportionnaly as possible the contents accelerator into the base.

 4° Mix material, rotate dasher rod 90° in aspiral clockwise motion; with each stroke turn the dasher rod 90° .

5° When two-parts are mixed thoroughly, pull dasher rod back to the neck of cartridge, grasp cartridge firmly at neck, unscrew dasher rod counterclockwise and remove.

6° Screw nozzle into cartridge, material is ready for extrusion.

APPLICATION INSTRUCTIONS

Application life is the period of time that the mixed compound remains at a consistency suitable for application withinjection or extrusion guns. Application life is always based on standard conditions at 23° C and 50 % relative humidity. For evry 5°C rise in temperature, application life is reduced approximately by half, and for evry 5°C it is approximatly doubled. Apply the sealant with an extrusion gun equipped with 3 to 6 mm tip. Hold gun nearly perpendicular so that extruded sealant will be forced into the lip of seam. On most application, the fillet should be 3 to 5 mm thick, but heavier fillets can be applied in a single operation, if necessary.

For all informations, consult the Engeneering Services of LE JOINT FRANCAIS.

CURING

PR 1826 B cures rapidly at room temperature and at lower temperatures. The sealant will cure at temperatures as low as +5°C. The cure of PR 1826 is solely dependant upon the temperature. Humidity has no effect on the cure sealant. The cure of PR 1826 B will be halved or doubled for each 5°C, up or down respectively, from the standard 23°C

CLEANING EQUIPEMENT

Wash equipment with methylethylketone solvent immediatly after use or before sealant cures.

Use commercial stripping compounds to remove cured sealant.

STORAGE LIFE

The storage life of **PR 1826 B** is 12 months when stored in the original, unopened containers at temperature below 25°C.

HEALTHPRECAUTIONS

PR 1826 B is a safe material to handle when reasonable care is observed. Ordinary hygienic principles, such as washing the compound from hands before eating or smoking, should be observed. Avoid prolonged contact with skin, contact with open breaks in the skin, and ingestion. In case of contact with skin, wipe off excess then wash with soap and water. Obtain medical attention in case of extreme exposure oringestion.

PR 1826Adhesion Promoter contains methylethyl ketone, the maximum allowable concentration in air is 200 PPM for safe working conditions.

Use adaquate ventilation or air-supplied respirators during application. Avoid repeated or prolonged exposure. In case of overexposure, remove affected personnel to fresh air immediatly an obtain medical attention.

For additional health and safety information consult a

Material Safety Data Sheet

which is available upon request

GUARANTEED

We guarantee all our products against faulty materials or preparation. Our sole responsability shall be to replace, free of charge, those products which prove to be defective, the user being entitled to no indemnity for any reason whatsoever. All recommendations contained herein as to the choise of materials or of certain methods of operation are of an informative character and are based on tests and experiments we belive to be reliable and correct, but accuracy and completeness of such tests are not guaranteed and are not to be construed as a warranty, either express, or implied.

Neither our company, nor any of its collaborators shall be liable to the user for any injury, loss or damage directly or indirectly resulting from the use of, or inability to use, the products, which does not comply with the application instructions as specified in our information manual.

Recommendations or statements other than those contained in a written document signed by an officer of our company shall not be binding upon the company.

