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 characterized by a rapid cure at low temperature to a fuel resistance elastomer. This material has application temperature as low as +5°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 thixotropic material, which 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

<table>
<thead>
<tr>
<th>SEMKITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Content</td>
</tr>
<tr>
<td>655</td>
</tr>
<tr>
<td>654</td>
</tr>
</tbody>
</table>

**PR 1826 B** is supplied with approximate amount of **PR 1826 Adhesion promoter**.
APPLICATION PROPERTIES (typical)

- Couleur Base White
  Accelerator Black
- Mixing ratio
  Base / Accelerator 100 : 8.5 by weight
- Nonvolatile content
  (mixed compound) 97 %
- Viscosity
  (Brookfield # 7 @ 2 rpm) 1300 Pa.s
- Vertical Flow:
  Initial 3 mm
- Application Life and Cure Time
  
<table>
<thead>
<tr>
<th>Application Life (hours)</th>
<th>Tack Free Time</th>
<th>To 30 Shore A</th>
</tr>
</thead>
<tbody>
<tr>
<td>à 23°C</td>
<td>à 5°C</td>
<td></td>
</tr>
<tr>
<td>1/4</td>
<td>50 mn</td>
<td>1 h 30</td>
</tr>
<tr>
<td>1/2</td>
<td>1 h 30</td>
<td>4 h</td>
</tr>
<tr>
<td>2</td>
<td>5 h</td>
<td>10 h</td>
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</tbody>
</table>

PERFORMANCE PROPERTIES (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
  
<table>
<thead>
<tr>
<th>Material</th>
<th>Initial</th>
<th>JRF</th>
<th>Salt water</th>
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<tbody>
<tr>
<td>Alclad 2024</td>
<td>13</td>
<td>7.5</td>
<td>12</td>
</tr>
<tr>
<td>Stainless steel</td>
<td>12</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Alodine</td>
<td>11</td>
<td>65</td>
<td>7</td>
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</tbody>
</table>

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

- Shear strength (alu - alu)
  With Primer PR 1826 3.5 MPa
  100% Cohésive

- Tensile strength and elongation
  
<table>
<thead>
<tr>
<th>Condition</th>
<th>Tensile strength</th>
<th>Ultimate elongation</th>
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<tbody>
<tr>
<td>Initial</td>
<td>3.5 MPa</td>
<td>290 %</td>
</tr>
<tr>
<td>2 h at 215°C</td>
<td>1.1 MPa</td>
<td>100 %</td>
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</table>

- 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 in testing 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 area at a time, then dry with a clean cloth before solvent evaporates to prevent redeposition of oil, wax or other surface contaminants. 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 enough to cover, but not heavy enough 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.
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.

**HEALTH PRECAUTIONS**

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 or ingestion.

PR 1826 Adhesion Promoter contains methyl ethyl ketone, the maximum allowable concentration in air is 200 PPM for safe working conditions. Use adequate ventilation or air-supplied respirators during application. Avoid repeated or prolonged exposure. In case of overexposure, remove affected personnel to fresh air immediately and 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 responsibility 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 choice of materials or of certain methods of operation are of an informative character and are based on tests and experiments we believe 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.

**APPLICATION INSTRUCTIONS**

Application life is the period of time that the mixed compound remains at a consistency suitable for application with injection or extrusion guns. Application life is always based on standard conditions at 23°C and 50% relative humidity. For every 5°C rise in temperature, application life is reduced approximately by half, and for every 5°C it is approximately 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 Engineering 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 EQUIPMENT**

Wash equipment with methyl ethyl ketone solvent immediately after use or before sealant cures.