

## NSL1750-B1/2 Polythioether High Temperature Fuel Tank Sealant

### Product Description:

NSL1750-B1/2 is a high temperature, aircraft integral fuel tank and fuselage sealant. This material is designed for fillet sealing of fuel tanks and other areas requiring weather tight and fuel resistance. NSL1750-B1/2 is a two-part, epoxy cured sealant based on Permapol® P-5 polymers. When mixed NSL1750-B1/2 is a thixotropic paste that will not flow with a mixed application life of ½ hour.

### Product Features:

- Excellent adhesion to aluminum, magnesium, titanium, steel and other common aircraft materials.
- Elastomeric properties designed for prolong exposure to jet aircraft fuels and aviation gas.
- Service temperature range -65°F(-54°C) to 250°F(121°C) with intermittent excursions up to 360°F(182°C).
- Suitable for application by extrusion gun or spatula.

### Heat Accelerated Curing:

Increased temperature and relative humidity will reduce work life and speed up the cure. Reduced temperature and relative humidity will extend work life and slow the cure.

### Replacement For:

PR-1750 Class B. Tested and conforms to requirements of AMS3276 and MIL-S-83430.

### Packaging:

Available 2½ and 6 oz. cartridges. Pint, Quart and Gallon Kits. Other size packaging available upon request.

### Shelf-life:

Sealed containers 12 months when stored below 80°F. Slight changes in work life, viscosity and curing rate may occur but will not affect end performance of the product.

### Typical Properties:

#### UNCURED

|  |        |
|--|--------|
| Color: Base                              | White  |
| Curing Agent                             | Black  |
| Mixed                                    | Gray   |
| Mixing Ratio: (by weight)                | 100:10 |
| Non Volatile Content                     | 97%    |
| Viscosity, poise                         |        |
| Base                                     | 12,000 |
| Curing Agent                             | 1,000  |
| Specific Gravity                         | 1.60   |
| Consistency                              | Paste  |
| Working time, hrs. @ R.T. <sup>1</sup>   | 1/2    |
| Tack Free Time, hrs. @ R.T. <sup>1</sup> | 20     |
| Time to 35 Shore A                       | 30 hr. |

#### CURED – ROOM TEMPERATURE

|                                    |           |
|------------------------------------|-----------|
| Cured – 7 days @ R.T. <sup>1</sup> |           |
| Tensile Strength, PSI              | 500       |
| Elongation, %                      | 400       |
| Durometer, Shore A                 | 45        |
| Peel Strength, PPI                 | 45/55     |
| Corrosion Resistance               | Excellent |
| Reparability                       | Excellent |

|                   |              |
|-------------------|--------------|
| Fungus Resistance | Non-nutrient |
|-------------------|--------------|

<sup>1</sup> Conditions 77°F and 50% R.H.

## NSL1750-B2 Polythioether High Temperature Fuel Tank Sealant

### Product Description:

NSL1750-B2 is a high temperature, aircraft integral fuel tank and fuselage sealant. This material is designed for fillet sealing of fuel tanks and other areas requiring weather tight and fuel resistance. NSL1750-B2 is a two-part, epoxy cured sealant based on Permapol® P-5 polymers. When mixed NSL1750-B2 is a thixotropic paste that will not flow with a mixed application life of 2 hours.

### Product Features:

- Excellent adhesion to aluminum, magnesium, titanium, steel and other common aircraft materials.
- Elastomeric properties designed for prolong exposure to jet aircraft fuels and aviation gas.
- Service temperature range -65°F(-54°C) to 250°F(121°C) with intermittent excursions up to 360°F(182°C).
- Suitable for application by extrusion gun or spatula.

### Heat Accelerated Curing:

Increased temperature and relative humidity will reduce work life and speed up the cure. Reduced temperature and relative humidity will extend work life and slow the cure.

### Replacement For:

PR-1750 Class B. Tested and conforms to requirements of AMS3276 and MIL-S-83430.

### Packaging:

Available 2½ and 6 oz. cartridges. Pint, Quart and Gallon Kits. Other size packaging available upon request.

### Shelf-life:

Sealed containers 12 months when stored below 80°F. Slight changes in work life, viscosity and curing rate may occur but will not affect end performance of the product.

### Typical Properties:

#### UNCURED

|  |        |
|--|--------|
| Color: Base                              | White  |
| Curing Agent                             | Black  |
| Mixed                                    | Gray   |
| Mixing Ratio: (by weight)                | 100:10 |
| Non Volatile Content                     | 97%    |
| Viscosity, poise                         |        |
| Base                                     | 12,000 |
| Curing Agent                             | 1,000  |
| Specific Gravity                         | 1.60   |
| Consistency                              | Paste  |
| Working time, hrs. @ R.T. <sup>1</sup>   | 2      |
| Tack Free Time, hrs. @ R.T. <sup>1</sup> | 20     |
| Time to 35 Shore A                       | 72 hr. |

#### CURED – ROOM TEMPERATURE

|                                    |           |
|------------------------------------|-----------|
| Cured – 7 days @ R.T. <sup>1</sup> |           |
| Tensile Strength, PSI              | 500       |
| Elongation, %                      | 400       |
| Durometer, Shore A                 | 45        |
| Peel Strength, PPI                 | 45/55     |
| Corrosion Resistance               | Excellent |
| Reparability                       | Excellent |

|                   |              |
|-------------------|--------------|
| Fungus Resistance | Non-nutrient |
|-------------------|--------------|

<sup>1</sup> Conditions 77°F and 50% R.H.

## **General Instruction Sheet** for **NSL1750 Class B Materials**

### **SURFACE PREPARATION:**

To obtain good adhesion, all traces of oil, wax, grease, dirt or other contamination must be removed. Wiping the surface to be sealed with a clean oil free solvent, such as MIL-C-38736, MEK, Toluene or the like, and cleaning and wiping, with a clean cloth, a small area at a time before the solvent evaporates is usually sufficient. Maintain a clean solvent supply by pouring the solvent on the washing cloth. This material will adhere to most substrates, provided the area to be sealed is clean and dry.

### **MIXING INSTRUCTIONS:**

Do not thin this material with solvents when mixing pre-measured kits. The entire amount of the Part A and Part B material should be used. Thoroughly mix Part B in its container until a smooth paste is obtained. For mixing bulk materials or smaller quantities, stir into 100 parts of Part A, 10 parts of Part B, by weight. Mix thoroughly for (7) seven to (10) ten minutes to obtain an even, streakless, uniform gray color. Scrape the sides and bottom of the mixing container and also the mixing tool several times to insure proper mixing. When using a mechanical mixer, use low speeds to avoid generating additional heat, thereby reducing the application life. Violent stirring or high speed mixing may also entrap air in the mixed material.

### **CLEANING OF EQUIPMENT:**

Tools and equipment may be cleaned prior to cure by using MIL-C-38726 cleaner or equivalent. Cured sealant may be removed by soaking in Epoxy and/or Polysulfide stripper.

### **SAFETY:**

The uncured combined components may produce irritation following the contact with skin. When handling this material avoid ingestion and all contact with the body, especially open breaks or cuts in the skin. Always wash hands before eating or smoking. Obtain medical attention in case of extreme exposure or ingestion. For additional information see the Material Safety Data Sheet (MSDS). For industrial use only. KEEP OF REACH OF CHILDREN.

## **FAA PMA Approved Product**

Approved Eligibility for ALL Pratt & Whitney, Canadair, Engines and  
CFM Engines

when used per the Airworthiness Approvals for these Models

### **DISCLAIMER:**

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/her own information and tests to determine suitability of the product for the intended use and user assumes all risk and liability resulting from his/her use of the product. Sellers and manufacturers 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 the use of, or inability to use the product. Recommendations of 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.