

P<sup>2</sup>SI<sup>®</sup> DS77 is a 500-550°F (260-288°C) service temperature structural adhesive with a versatile cure temperature range of 620°F (327°C) to 700°F (371°C). P<sup>2</sup>SI<sup>®</sup> DS77 is well suited for bonding wide areas. It is also compatible with PMR-15, Avimid<sup>®</sup> R, RP46, and Avimid<sup>®</sup> RB, as it can be fully cured at lower temperatures than P<sup>2</sup>SI<sup>®</sup> DS6N. P<sup>2</sup>SI<sup>®</sup> DS77 is thermosetting, does not contain MDA, and the only volatiles are ethanol and water. P<sup>2</sup>SI<sup>®</sup> DS77 is available in a paste form or a film prepreg. P<sup>2</sup>SI<sup>®</sup> DS77 film has very good tack and drape properties.

**SURFACE PREPARATION**

For composite laminate surface preparation, we recommend grit blasting both bonding surfaces with 50 µm alumina grit, followed by washing with soapy water (typical dish detergent), washing with distilled water, rinsing with ACS certified acetone, and drying at 230°F (110°C) for 4-8 hours prior to bonding. For metal surface preparation, please contact P<sup>2</sup>SI<sup>®</sup> to discuss your application. P<sup>2</sup>SI<sup>®</sup> N18G primer may be required for bonding certain metallic surfaces.

**SUPPORTED FILM ADHESIVE PROPERTIES**

PROPERTY	VALUE	TEST METHOD
<b>Overlap Shear Strength, psi (MPa)</b>		<b>ASTM D5868</b>
75°F (23°C)	<b>2700 (19)</b>	
550°F (288°C)	<b>1600 (11)</b>	
<b>Aging: 550°F (288°C) / 1000h</b>		
75°F (23°C)	<b>1600 (11)</b>	
500°F (260°C)	<b>1800 (13)</b>	
<b>Aging: Moisture Saturated</b>		
500°F (260°C)	<b>1400 (10)</b>	
<b>In-Plane Shear Strength, psi (MPa)</b>		<b>ASTM D3846</b>
75°F (23°C)	<b>4600 (32)</b>	
550°F (288°C)	<b>2200 (15)</b>	
<b>Aging: 550°F (288°C) / 1000h</b>		
550°F (288°C)	<b>2500 (17)</b>	
<b>Aging: Moisture Saturated</b>		
75°F (23°C)	<b>3500 (24)</b>	
500°F (260°C)	<b>1700 (12)</b>	

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