



# HexBond™ EA9833.1 STRUCTIL Adhesive Film



## Product Data Sheet

### Description

HexBond™ EA9833.1 50MIL is a 180°C/356°F cure modified bismaleimide foaming core splice adhesive.

### Features

- High service temperature
- Expansion: 100% to 150%
- Storage life: 1 year minimum at or below -18°C/0°F + 3 weeks at room temperature ( $\leq 25^{\circ}\text{C}/73^{\circ}\text{F}$ )

### Applications

- Core splice bonding
- Sandwich construction

### Form

	Form	Weight (g/m <sup>2</sup> )	Thickness (mm)	Color	Package
EA9833.1 50MIL	Sheet of 305mm x 610mm	1655( $\pm 200$ )	1.27	Green	Box of 3.72m <sup>2</sup> (20 sheets)

### Instructions For Use

Refer to the Safety Data Sheet before handling.

- To avoid any moisture, allow the adhesive to warm at room temperature before opening the waterproof polyethylene bag
- Bonding surfaces should be clean, dry and properly prepared
- Remove protective papers before bonding
- Typical cure cycles:
  - 1h at 177°C/350°F
  - Heat up rate: 0.5°C to 2.5°C/min
  - Post cure: 2h to 6h at 204°C/400°F to 246°C/475°F for optimum properties



### Mechanical Properties

Test	Test Temperature (°C/°F)	EA9833.1 50MIL Typical Result (MPa/psi)
Tube shear strength <sup>(1)</sup>	-55 / -67	14.5 / 2100
	23 / 73	12.5 / 1800
	150 / 300	10.5 / 1500
	210 / 410	10.0 / 1450
	23 / 73 after WA <sup>(3)</sup>	14.5 / 2100
	150 / 300 after WA <sup>(3)</sup>	11.0 / 1600
	210 / 410 after WA <sup>(3)</sup>	6.0 / 870

Test	Conditioning	EA9833.1 50MIL T <sub>g</sub> Onset Storage Modulus (°C/°F)
Glass transition temperature by DMA <sup>(2)</sup>	Initial	293 / 559
	WA <sup>(3)</sup>	280 / 536

(1) According to prEN 2667-2, on aluminum 5052 treated with sulfo-chromic acid etch, cure<sup>(4)</sup>

(2) According to prEN 6032, cure<sup>(4)</sup>

(3) Wet ageing: 1000 hours at 70°C/158°F and 85% relative humidity

(4) Cure cycle:

2.5°C/min from ambient 10 177°C/350°F +1h at 177°C/350°F +  
2.2°C/min from 177°C/350°F to 225°C +2h at 225°C/437°F (post cure)  
-1.7°C/min from 225°C/427°F to ambient

### For more information

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- HexForce® reinforcements
- HiMax™ multiaxial reinforcements
- HexPly® preprints
- HexAM™ additive manufacturing
- HexMC® molding compounds
- HexFlow® RTM resins
- Redux® adhesives
- HexTool® tooling materials
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- Acousti-Cap® sound attenuating honeycomb
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