

MS-4B

280° F Cure Enhanced Modulus Compression Molding System

MS-4B is a unique hybrid carbon fiber/epoxy resin compression molding system. MS-4B compression molding compound provides good strength, high stiffness, and cost effective processing.

TYPICAL MS-4B PROCESS PARAMETERS

- Pre-weigh the desired amount of molding compound.
- Pre-heat molding compound in 160° F ± 10° F oven for 10 minutes. Form mold charge to approximately fit cavity. Charge cavity with molding compound.
- Cure temperature: 280° F - 310° F, pinch pressure: 250 psi for 15 – 30 seconds. Close mold to 2000 psi, hold 30 minutes.

MS-4B AMBIENT/DRY MECHANICAL PROPERTIES

<i>Property*</i>	<i>ASTM Method</i>	<i>Coupon Form</i>	<i>Avg. Value</i>
Tensile Strength (ksi)	D 3039	Net Molded	38
Tensile Modulus (msi)	D 3039	Net Molded	15
Compressive Strength (ksi)	D 3410	Net Molded	41
Compressive Modulus (msi)	D 3410	Net Molded	11
Flexural Strength (ksi)	D 790	Net Molded	75
Flexural Modulus (msi)	D 790	Net Molded	11
Notched Shear Strength (ksi)	D 5370	Machined	23
Notched Shear Modulus (msi)	D 5370	Machined	2
Bolt Bearing Str. (ksi) [Single Shear]	D 5961	Machined	66

* All properties normalized to 52% fiber volume.

MS-4B PHYSICAL PROPERTIES

<i>Property</i>	<i>Test Method</i>	<i>Average Value</i>
Fiber Length (inches)	N/A	1
Density (g/cm ³)		1.55
Tg (° F), Post Cured @ 350° F	DSC	327

Actual molding technique and conditions, fiber length, and part geometry will affect properties obtained.

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