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**Polyester (thermoset)** [List of Suppliers](#)

Additives: glass fiber reinforced  
 Application: BMC, TMC

**Material Properties**

Mechanical Properties		Conditions		
		State 1	State 2	ASTM
Elastic Modulus (MPa)	10350 - 17250	tensile		D638
Flexural Modulus (MPa)	10350 - 12420	23 °C		D790
Tensile Strength (MPa)	21 - 90	at break		D638
Compressive Strength (MPa) at yield or break	97 - 207			D695
Flexural Strength (MPa) at yield or break	76 - 228			D790
Elongation at break (%)	1 - 2			D638
Hardness	50 - 65	Barcol		D638
Izod Impact (J/cm of notch) 1/8" thick specimen unless noted	1.1 - 9.8			D256A

Thermal Properties		Conditions		
		Pressure	State	ASTM
Coef of Thermal Expansion (10 <sup>-6</sup> /°C)	20			D696
Deflection Temperature (°C)	160 - 280	1.82 MPa		D648
Thermal Conductivity (W/m-°C)	0.752 - 0.920			C177

Physical & Electrical Properties		Conditions	
		State	ASTM
Specific Gravity	1.72 - 2.1		D792
Water Absorption (% weight increase)	0.1 - 0.45	after 24 hrs	D570
Dielectric Strength (V/mil); 1/8" thick specimen unless noted	300 - 390		D149

Processing Properties		Conditions	
		Type	ASTM
Melting Temperature (°C)	thermoset	T <sub>m</sub> , crystalline	
Processing Temperature (°C)	138 - 193	compression molding	
	138 - 160	transfer molding	
	138 - 188	injection molding	
Molding Pressure (MPa)	3 - 8		
Compression Ratio	1		
Linear Mold Shrinkage (cm/cm)	0.0003 - 0.007		D955

**Suppliers**

<a href="#">BP Chemicals, Inc.</a>	Cleveland, OH	800-272-4367
<a href="#">Budd Co.</a>	Troy, MI	
<a href="#">Bulk Molding Compounds, Inc.</a>	West Chicago, IL	
<a href="#">Cytec Fiberite, Inc.</a>	Tempe, AZ	
<a href="#">Epic Resins</a>	Palmyra, WI	800-242-6649
<a href="#">Glastic Corp.</a>	Cleveland, OH	
<a href="#">Haysite Reinforced Plastics</a>	Erie, PA	
<a href="#">Jet Moulding Compounds, Ltd.</a>	Ajax, Ontario, Canada L1S 1R8	
<a href="#">Plaslok Corp.</a>	Buffalo, NY	800-828-7913
<a href="#">Polyply Composites, Inc.</a>	Grand Haven, MI	
<a href="#">Premix, Inc.</a>	North Kingsville, OH	
<a href="#">Rostone</a>	Lafayette, IN	

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