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Generic (ABS, ...)
 Trade Name

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Polyester (thermoplastic) [List of Suppliers](#)

State: wholly aromatic (liquid crystal)
Additives: 30% carbon fiber reinforced

Material Properties

Mechanical Properties		Conditions		
		State 1	State 2	ASTM
Elastic Modulus (MPa)	33120	compressive		D638
	37260	tensile		D638
Flexural Modulus (MPa)	31740	23 °C		D790
Tensile Strength (MPa)	242	at break		D638
Compressive Strength (MPa) at yield or break	238			D695
Flexural Strength (MPa) at yield or break	317			D790
Elongation at break (%)	1			D638
Hardness	99	Rockwell M		D638
Izod Impact (J/cm of notch) 1/8" thick specimen unless noted	0.7			D256A

Thermal Properties		Conditions		
		Pressure	State	ASTM
Coef of Thermal Expansion (10 ⁻⁶ /°C)	3			D696
Deflection Temperature (°C)	227	1.82 MPa		D648

Physical & Electrical Properties		Conditions	
		State	ASTM
Specific Gravity	1.49		D792
Water Absorption (% weight increase)	0 - 0.1	after 24 hrs	D570

Processing Properties		Conditions	
		Type	ASTM
Melting Temperature (°C)	280	T _m , crystalline	
Processing Temperature (°C)	291 - 316	general	
Molding Pressure (MPa)	7 - 96		
Compression Ratio	2.5 - 4		
Linear Mold Shrinkage (cm/cm)	0 - 0.002		D955

Suppliers

RTP Co.	Winona, MN	800-433-4787
Ticona	Summit, NJ	800-526-4960

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Polycarbonate - Shapes

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