



Materials Data Sheet

Property Description	Degrees	Units	Aerospace Grade	Bearing Materials			Insulating Material
			HyComp ^o 310	WearComp ^o	WearComp ^o 200	FibreComp ^o	HyComp ^o 320
Specific Gravity		g/cm	1.55	1.55	1.50	1.59	1.88
Mechanical Properties							
Tensile Strength	23°C	MPa	338	220	138	83	235
	260°C		283	186	117	55	179
Tensile Modulus	23°C	GPa	40	34	30	16	19
	260°C		36	32	28	11	13
Flexural Strength	23°C	MPa	552	345	209	104	435
	260°C		518	310	173	83	373
Flexural Modulus	23°C	GPa	39	34	28	14	21
	260°C		36	32	27	10	19
Compressive Strength	23°C	MPa	718	518	297	248	331
	260°C		476	345	193	173	228
Thermal Properties							
Thermal Expansion	parallel	m/(m,°C)	27 x 10 ⁻⁶	27 x 10 ⁻⁶	27 x 10 ⁻⁶	18 x 10 ⁻⁶	43 x 10 ⁻⁶
	perpendicular	m/(m,°C)	3.6 x 10 ⁻⁶	3.6 x 10 ⁻⁶	3.6 x 10 ⁻⁶	18 x 10 ⁻⁶	14 x 10 ⁻⁶
Izod Impact, Notched	23°C	J/cm	6.41	6.41	3.20	7.60	13.00
Wear Characteristics							
Coefficient of Friction			.15 -.20	.15 -.20	.15 -.20	.10 -.20	N/A
Limiting PV (unlubricated)		MPa·m/s	2.80	2.80	4.00	4.80	N/A
General							
Reinforcing Materials			Carbon Fiber	Carbon Fiber	C.F./Graphite	C.F./Graphite	Glass Fiber
Resin Matrix			Polyimide	Polyimide	Polyimide	Polyimide	Polyimide
Temperature Range			260°C	260°C	260°C	260°C	260°C
Chemical Compatibility							
Sea Water			Recommended	Recommended	Recommended	Recommended	Recommended
Dilute Acids			Recommended	Recommended	Recommended	Recommended	Recommended
Weak Bases			Recommended	Recommended	Recommended	Recommended	Recommended
Alcohols			Recommended	Recommended	Recommended	Recommended	Recommended
Hydrocarbons			Recommended	Recommended	Recommended	Recommended	Recommended
Strong Bases (pH>10)			Not Recommended	Not Recommended	Not Recommended	Not Recommended	Not Recommended
Water Absorbtion			0	0	0	0	0

Measured by standard ASTM methods on machined, compression-molded test specimens.
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This information is based on our experience to date and we believe it to be reliable. It is intended only as a guide for use at your discretion and risk. None of this information is to be taken as a license to operate under, or a recommendation to infringe, any patents.

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