



Materials Data Sheet

Critical parts
making THE difference

PRECISE FIT LIFETIME CONFIDENCE



Property Description	Degrees	Units	Aerospace Grade		Performance Bearing Materials			Insulating
			HyComp® 310	SMC	WearComp®	WearComp® 200	FibreComp®	
Raw Material Type				SMC	SMC	SMC	BMC	SMC
Specific Gravity		g/cm		1.55	1.55	1.59	1.50	1.88
Mechanical Properties								
Tensile Strength	23 °C	MPa	338	220	138	83	234	
	260 °C	Mpa	283	186	117	55	179	
Tensile Modulus	23 °C	Mpa	39300	33784	29648	15858	18616	
	260 °C	MPa	35853	32405	27580	11032	13100	
Flexural Strength	23 °C	MPa	552	345	209	103	434	
	260 °C	MPa	517	310	172	83	372	
Flexural Modulus	23 °C	MPa	38611	33784	28407	14479	21374	
	260 °C	MPa	35853	32405	27028	10342	19305	
Compressive Strength	23 °C	MPa	717	517	296	248	331	
	260 °C	MPa	476	345	193	172	228	
Izod Impact, Notched	23 °C	J/m	640.00	640.00	320.00	160.00	1333.00	
Thermal Properties								
Thermal Expansion	Perpendicular	m/m/°C	27 X 10 ⁻⁶	27 X 10 ⁻⁶	27 X 10 ⁻⁶	18 X 10 ⁻⁶	43.2 X 10 ⁻⁶	
	Parallel	m/m/°C	3.6 X 10 ⁻⁶	3.6 X 10 ⁻⁶	3.6 X 10 ⁻⁶	18 X 10 ⁻⁶	14.4 X 10 ⁻⁶	
Temperature Range			315 °C	315 °C	315 °C	315 °C	315 °C	315 °C
Wear Characteristics								
Co-efficient of Friction			0.15-0.20	0.15-0.20	0.15-0.20	0.10-0.20	N/A	
Limiting PV (unlubricated)		MPa·m/s	2.8	2.8	3.5	4.2	N/A	
General								
Reinforcing Materials			Carbon Fiber	Carbon Fiber	Carbon Fiber/ Graphite	Carbon Fiber/ Graphite	Glass Fiber	
Resin Matrix			Polyimide	Polyimide	Polyimide	Polyimide	Polyimide	
Chemical Compatibility								
Sea Water			Recommended	Recommended	Recommended	Recommended	Recommended	Recommended
Dilute Acids			Recommended	Recommended	Recommended	Recommended	Recommended	Recommended
Weak Bases			Recommended	Recommended	Recommended	Recommended	Recommended	Recommended
Alcohol			Recommended	Recommended	Recommended	Recommended	Recommended	Recommended
Hydrocarbons			Recommended	Recommended	Recommended	Recommended	Recommended	Recommended
Strong Bases (ph>10)			Not Recommended	Not Recommended	Not Recommended	Not Recommended	Not Recommended	Not Recommended
Water Absorption		% by Wt	<0.5%	<0.5%	<0.5%	<0.5%	<0.5%	<0.5%

Measured by standard ASTM on machined, compression-molded test specimens.

Registered trademark of HyComp Inc. – Patents issued and pending.

The information is based on our experience to date and we believe it is 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.

WearComp®, HyComp® and FibreComp® are trademarks of Saint-Gobain

Scenic® is an authorized Saint-Gobain distributor.

www.scenic-seals.com

Scenic® Technical distribution service

SCENIC PRECISE ELEMENT INC.

No.5, Sin-Jhan Rd., Chian-Jhen District, Kaohsiung City 80672, Taiwan

Tel : +886-7-811-1359 Fax : +886-7- 822-1033

Email: scenic@scenic-seals.com