



Typical Properties of

Bearing Grade Ryton®

PPS filled with 10% Carbon, 10% Graphite, 10% PTFE

Process: Compression Molded

Property	Test Method	Unit	Value
Specific Gravity	D792	--	1.52
Tensile Strength	D638	psi	10,000
Tensile Modulus	D638	psi	980,000
Elongation	D638	%	1
Flexural Strength	D790	psi	10,000
Flexural Modulus	D790	psi	820,000
Compressive Strength	D695	psi	15,000
Compressive Modulus	D695	psi	800,000
Hardness, Rockwell	D785	--	M93 (R126)
Hardness Durometer	--	--	D86
Izod Impact (notched)	D256	ft. lb of notch	1
Coeff. of Friction (Dynamic)	--	dry v.s steel	0.2
Coeff. of Linear Therm. Expan.	E831/ D696	in./in./°F	1.7×10^{-5}
Continuous Use Temperature	--	°F	450
Heat Deflection Temperature	D648	°F	490
Glass Transition Temperature	D3418	°F	230
Melting Point	D3418	°F	450
Thermal Conductivity	E1530-11	BTU in/hr ft ² °F	2.2
Dielectric Strength	D149	Volts/mil	N / A
Surface Resistivity	EOS/ESD 511.11	ohm/square	$<10^5$
Flammability	UL94	--	V-0
Water Absorption, 24 hrs.	D570	% by weight	0.02
Water Absorption, Saturation	D570	% by weight	0.03
Limiting PV (4:1 Safety Factor)	--	--	25,000
K-Factor	--	--	800
FDA Compliance	--	--	No

Note: The data provided is for reference purposes only. Additional testing may be required for design specifications or quality control.
All values at 73 F unless otherwise stated.