

RPU 60

RPU 60 is a tough, abrasion-resistant material that is a good choice for parts that require rigidity, strength, and durability.

Tensile Properties ASTM D638, Type V, 10 mm/min	Metric	U.S.
Tensile Modulus	1600 ± 100 MPa	230 ± 15 ksi
Ultimate Tensile Strength	48 ± 8 MPa	7.0 ± 1.2 ksi
Tensile Strength at Yield	42 ± 2 MPa	6.1 ± 0.3 ksi
Elongation at Yield	6 ± 1 %	
Elongation at Break	130 ± 10 %	

Flexural Properties ASTM D790	Metric	U.S.
Flexural Strength	42 ± 2 MPa	6.1 ± 0.3 ksi
Flexural Modulus	1450 ± 500 MPa	210 ± 73 ksi

Impact Properties	Metric	U.S.
Notched Izod (Machined), 23 °C, ASTM D256	29 ± 1 J/m	0.54 ± 0.02 ft-lb/in
Notched Izod (Machined), -30 °C, ASTM D256	20 ± 4 J/m	0.37 ± 0.07 ft-lb/in
Unnotched Izod, ASTM D4812	933 ± 85 J/m	17.5 ± 1.6 ft-lb/in
Notched Charpy, ISO 179-1/1eA	2.06 ± 0.11 kJ/m ²	0.980 ± 0.052 ft-lb/in ²

Thermal Properties	Metric	U.S.
Heat Deflection Temperature @ 0.455 MPa/66 psi, ASTM D648	58 °C	136 °F
Heat Deflection Temperature @ 1.82 MPa/264 psi, ASTM D648	49 °C	120 °F
Coefficient of Thermal Expansion (-40, 40 °C), ASTM E831	100 ppm/°C	56 ppm/°F

General Properties	Metric
Hardness, ASTM D2240	80, Shore D
Density, ASTM D792	1.076 g/cm ³
Density (liquid resin)	1.02 g/cm ³

NOTES—Results in this data sheet are representative of specific sample generation and testing processes and may vary if the established protocols are not followed. Contact Carbon for the specific process used to generate the test samples to determine each of these values. Tensile and flexural data are average ± 1 standard deviation from 16 specimens; impact data used 10 specimens. The U.S. values are converted from Metric measurements and are for reference only.

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