

# CarbonResin RPU 60

Polyurethane

Carbon3D, Inc.

## Message:

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

General Information			
Features	Good Rigidity		
	Good strength		
	Good wear resistance		
	Durability		
	Good toughness		
Forms	Liquid		
Processing Method	3D Printing, Continuous Liquid Interface Production (CLIP)		
Physical	Nominal Value	Unit	
Density <sup>1</sup>	1.02	g/cm <sup>3</sup>	
Viscosity (25°C)	5.00 - 6.00	Pa · s	
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	1500 - 1700	MPa	ASTM D638
Tensile Strength			ASTM D638
Yield	40.0 - 44.0	MPa	ASTM D638
Fracture	40.0 - 56.0	MPa	ASTM D638
Tensile Elongation			ASTM D638
Yield	5.0 - 7.0	%	ASTM D638
Fracture	120 - 140	%	ASTM D638
Flexural Modulus	950 - 1950	MPa	ASTM D790
Flexural Strength	40.0 - 44.0	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact <sup>2</sup>	28 - 30	J/m	ASTM D256
Unnotched Izod Impact	730 - 810	J/m	ASTM D4812
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
0.45 MPa, not annealed	58.0	°C	ASTM D648
1.8 MPa, not annealed	49.0	°C	ASTM D648
Glass Transition Temperature			DMA
-- <sup>3</sup>	64.0	°C	DMA
-- <sup>4</sup>	100	°C	DMA
CLTE - Flow	1.8E-4	cm/cm/°C	ASTM E228
NOTE			

1.	Liquid
2.	Machined Notch
3.	E'
4.	tan(d)

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

#### Recommended distributors for this material

### Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

