

Product Data Sheet & General Processing Conditions

RTP 2387 C Rigid Thermoplastic Polyurethane (RTPU) Carbon Fiber

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

			ASTM
PERMANENCE	English	SI Metric	TEST
Primary Additive	40 %	40 %	
Specific Gravity	1.36	1.36	D 792
Molding Shrinkage			2.02
1/8 in (3.2 mm) section	0.0001 - 0.0008 in/in	0.01 - 0.08 %	D 955
MECHANICAL			
Impact Strength, Izod			
notched 1/8 in (3.2 mm) section	1.8 ft-lbs/in	96 J/m	D 256
unnotched 1/8 in (3.2 mm) section	13.5 ft-lbs/in	721 J/m	D 4812
Tensile Strength	32500 psi	224 MPa	D 638
Tensile Elongation	1.5 - 2.5 %	1.5 - 2.5 %	D 638
Tensile Modulus	3.75 x 10^6 psi	25856 MPa	D 638
Flexural Strength	49000 psi	338 MPa	D 790
Flexural Modulus	3.60 x 10^6 psi	24822 MPa	D 790
THERMAL			
Ignition Resistance*		_	
Flammability**	HB @ 1/16 in	HB @ 1.5 mm	D 635

PROPERTY NOTES

Data herein is typical and not to be construed as specifications.

Unless otherwise specified, all data listed is for natural or black colored materials. Pigments can affect properties.

GENERAL PROCESSING FOR INJECTION MOLDING

	English	SI Metric
Injection Pressure	10000 - 15000 psi	69 - 103 MPa
Melt Temperature	460 - 500 °F	238 - 260 °C
Mold Temperature	200 - 250 °F	93 - 121 °C
Drying	4 - 6 hrs @ 270 °F	4 - 6 hrs @ 132 °C
Moisture Content	0.01 %	0.01 %
Dew Point	-40 °F	-40 °C
PROCESSING NOTES		

Desiccant Type Dryer Required.

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This information is intended to be used only as a guideline for designers and processors of modified thermoplastics. Because design and processing is complex, a set solution will not solve all problems. Observation on a "trial and error" basis may be required to achieve desired results.

Data are obtained from specimens molded under carefully controlled conditions from representative samples of the compound described herein.

Properties may be materially affected by molding techniques applied and by the size and shape of the item molded. No assurance can be implied that all molded articles will have the same properties as those listed.

No information supplied by RTP Company constitutes a warranty regarding product performance or use. Any information regarding performance or use is

^{*} This rating is not intended to reflect hazards of this or any other material under actual fire conditions.

^{**} Values per RTP Company testing.

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