



Product Data Sheet & General Processing Conditions

RTP 1387 UP Polyphenylene Sulfide (PPS) Carbon Fiber Ultra Performance

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Primary Additive	40 %	40 %	
Specific Gravity	1.48	1.48	D 792

MECHANICAL

Impact Strength, Izod			
notched 1/8 in (3.2 mm) section	1.3 ft-lbs/in	69 J/m	D 256
unnotched 1/8 in (3.2 mm) section	9.0 ft-lbs/in	481 J/m	D 4812
Tensile Strength	33000 psi	228 MPa	D 638
Tensile Elongation	0.8 %	0.8 %	D 638
Tensile Modulus	5.50 x 10 ⁶ psi	37922 MPa	D 638
Flexural Strength	53000 psi	365 MPa	D 790
Flexural Modulus	5.00 x 10 ⁶ psi	34475 MPa	D 790

THERMAL

Deflection Temperature			
@ 264 psi (1820 kPa)	515 °F	268 °C	D 648
Ignition Resistance*			
Flammability**	V-0 @ 1/32 in	V-0 @ 0.8 mm	D 3801

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.

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

** Values per RTP Company testing.

GENERAL PROCESSING FOR INJECTION MOLDING

	English	SI Metric
Injection Pressure	10000 - 15000 psi	69 - 103 MPa
Melt Temperature	585 - 625 °F	307 - 329 °C
Mold Temperature	275 - 350 °F	135 - 177 °C
Drying	6 hrs @ 300 °F	6 hrs @ 149 °C
Moisture Content	0.04 %	0.04 %

PROCESSING NOTES

18 Dec 2017 JMB

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.

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