



Product Data Sheet & General Processing Conditions

RTP 1307 UP Polyphenylene Sulfide (PPS) Glass Fiber Ultra Performance

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE STANDARD

Primary Additive	40 %	
Density	1.68 g/cm ³	ISO 1183

MECHANICAL

Impact Strength, Izod		
Notched, 4 mm thickness	9 kJ/m ²	ISO 180/1A
Unnotched, 4 mm thickness	60 kJ/m ²	ISO 180/1U
Tensile Strength	185 MPa	ISO 527
Tensile Elongation	2.0 %	ISO 527
Tensile Modulus	16500 MPa	ISO 527
Flexural Strength	285 MPa	ISO 178
Flexural Modulus	15000 MPa	ISO 178

ELECTRICAL

Dielectric Strength, S/T, in air	13.8 kV/mm	IEC 60243-1
Dielectric Constant, 1 MHz, Dry	3.8	IEC 60250
Dissipation Factor, 1 MHz, Dry	0.00200	IEC 60250
Arc Resistance	120 s	ASTM D 495
Volume Resistivity	> 1E12 ohm.cm	IEC 60093

THERMAL

Heat Deflection Temperature		
@ 1.80 MPa	510 °C	ISO 75
Ignition Resistance*		
Flammability**	V-0 @ 1.5 mm	ISO 1210

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

Injection Pressure	70 - 105 MPa
Injection Pressure	680 - 1030 bar
Melt Temperature	305 - 330 °C
Mold Temperature	135 - 175 °C
Drying	6 hrs @ 150 °C
Moisture Content	0.04 %
Dew Point	-25 °C

PROCESSING NOTES

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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