



**Product Data Sheet &
General Processing Conditions**

**RTP 2187
Polyetherimide (PEI)
Carbon Fiber**

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Primary Additive	40 %	40 %	
Specific Gravity	1.43	1.43	D 792
Molding Shrinkage 1/8 in (3.2 mm) section	0.0005 in/in	0.05 %	D 955
Water Absorption, 24 hrs @ 23°C	0.180 %	0.180 %	D 570

MECHANICAL

Impact Strength, Izod notched 1/8 in (3.2 mm) section	1.2 ft-lbs/in	64 J/m	D 256
unnotched 1/8 in (3.2 mm) section	11.0 ft-lbs/in	587 J/m	D 4812
Tensile Strength	35000 psi	241 MPa	D 638
Tensile Elongation	1.3 %	1.3 %	D 638
Tensile Modulus	4.40 x 10 ⁶ psi	30338 MPa	D 638
Flexural Strength	50000 psi	345 MPa	D 790
Flexural Modulus	3.90 x 10 ⁶ psi	26890 MPa	D 790

ELECTRICAL

Volume Resistivity	< 1E3 ohm.cm	< 1E3 ohm.cm	D 257
--------------------	--------------	--------------	-------

THERMAL

Deflection Temperature @ 264 psi (1820 kPa)	405 °F	207 °C	D 648
@ 66 psi (455 kPa)	410 °F	210 °C	D 648
Ignition Resistance*			
Flammability**	V-0 @ 1/16 in	V-0 @ 1.5 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	12000 - 18000 psi	83 - 124 MPa
Melt Temperature	670 - 750 °F	354 - 399 °C
Mold Temperature	275 - 350 °F	135 - 177 °C
Drying	4 hrs @ 300 °F	4 hrs @ 149 °C
Moisture Content	0.04 %	0.04 %
Dew Point	-20 °F	-29 °C

PROCESSING NOTES

Desiccant Type Dryer Required.