



**Product Data Sheet &
General Processing Conditions**

**RTP 2102
Polyetherimide (PEI)
Glass Fiber**

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Specific Gravity	1.37	1.37	D 792
Molding Shrinkage 1/8 in (3.2 mm) section	0.0030 in/in	0.30 %	D 955
Water Absorption, 24 hrs @ 23°C	0.220 %	0.220 %	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	12.0 ft-lbs/in	641 J/m	D 4812
Tensile Strength	20000 psi	138 MPa	D 638
Tensile Elongation	3.5 %	3.5 %	D 638
Tensile Modulus	1.00 x 10 ⁶ psi	6895 MPa	D 638
Flexural Strength	29000 psi	200 MPa	D 790
Flexural Modulus	0.80 x 10 ⁶ psi	5516 MPa	D 790
Compressive Strength	23000 psi	159 MPa	D 695

ELECTRICAL

Dielectric Strength, S/T, in oil	500 VPM	19.7 kV/mm	D 149
Dielectric Constant, 1 MHz, Dry	3.6	3.6	D 150
Dissipation Factor, 1 MHz, Dry	0.0050	0.0050	D 150
Volume Resistivity	> 1E12 ohm.cm	> 1E12 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
Coefficient of Linear Thermal Expansion Flow Direction	1.7 x 10 ⁻⁵ /°F	3.1 x 10 ⁻⁵ /°C	E 831
Thermal Conductivity Through-plane	1.60 (BTU.in)/(hr.ft².°F)	0.23 W/(m.K)	E 1530

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