



**Product Data Sheet &
General Processing Conditions**

**ESD A 2180
Polyetherimide (PEI)
Carbon Fiber
ESD Protection
Static Dissipative**

PROPERTIES & AVERAGE VALUES OF INJECTION MOLDED SPECIMENS

PERMANENCE	English	SI Metric	ASTM TEST
Specific Gravity	1.31	1.31	D 792
Molding Shrinkage 1/8 in (3.2 mm) section	0.0020 - 0.0030 in/in	0.20 - 0.30 %	D 955

MECHANICAL

Impact Strength, Izod notched 1/8 in (3.2 mm) section	0.8 ft-lbs/in	43 J/m	D 256
unnotched 1/8 in (3.2 mm) section	10.0 ft-lbs/in	534 J/m	D 4812
Tensile Strength	21000 psi	145 MPa	D 638
Tensile Elongation	2.5 %	2.5 %	D 638
Tensile Modulus	1.10 x 10 ⁶ psi	7584 MPa	D 638
Flexural Strength	32700 psi	225 MPa	D 790
Flexural Modulus	1.10 x 10 ⁶ psi	7584 MPa	D 790

ELECTRICAL

Volume Resistivity	1E1 - 1E4 ohm.cm	1E1 - 1E4 ohm.cm	D 257
Surface Resistivity	1E5 - 1E10 ohm/sq	1E5 - 1E10 ohm/sq	D 257
Surface Resistance	1E4 - 1E9 ohm	1E4 - 1E9 ohm	ESD STM11.11
Static Decay MIL-PRF-81705D, 5kV to 50 V, 12% RH	< 2.00 s	< 2.00 s	FTMS101C 4046.1

THERMAL

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.